

**PUBLIC PARTICIPATION IN THE PROCUREMENT
PROCESS FOR SUSTAINABLE PROJECT
PROCUREMENT OF SOUTH-EASTERN KENYA
ECONOMIC BLOCK COUNTIES**

EUNICE GITIRI NJAGI

DOCTOR OF PHILOSOPHY

(Supply Chain Management)

JOMO KENYATTA UNIVERSITY

OF

AGRICULTURE AND TECHNOLOGY

2023

**Public Participation in Procurement Process for Sustainable Project
Procurement in the South-Eastern Kenya Economic Block Counties**

Eunice Gitiri Njagi

**A thesis Submitted in Partial Fulfillment of the Requirements for the
Degree of Doctor of Philosophy in Supply Chain Management of the
Jomo Kenyatta University of Agriculture and Technology**

2023

DECLARATION

This thesis is my own original work and has not been presented for a degree in any other university.

Signature..... Date

Eunice Gitiri Njagi

This thesis has been submitted for examination with our approval as the University Supervisors

Signature..... Date

Prof. Gregory S. Namusonge, PhD

JKUAT, Kenya

Signature..... Date

Dr. Noor Ismail Shale, PhD

JKUAT, Kenya

DEDICATION

This piece of work is dedicated to my family; my dear husband Dr. Jackson Ndolo for his financial and moral support, my pretty daughter Sydney Ndolo and my handsome sons Adreano Ndolo aka “Mzito” and PrinceCarlos Ndolo aka “The BigMan” for their moral support and encouragement.

AKNOWLEDGEMENT

I am greatly indebted to my supervisors Prof. Gregory Simiyu Namusonge and Dr. Noor Ismail Shale for their invaluable assistance and patience in shaping this research project. Above all things, I am eternally grateful to God almighty for the opportunity, health and gift of life.

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS	v
LIST OF TABLES	xii
LIST OF FIGURES	xv
LIST OF APPENDICES	xvi
ACRONYMS AND ABBREVIATIONS	xvii
DEFINITION OF TERMS	xix
ABSTRACT	xxii
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of Study.....	1
1.1.3 Global Perspective on Public Participation in Procurement Process for Sustainable Procurement	9
1.1.3 Regional Perspective on Public Participation in Procurement Process for Sustainable Procurement	13

1.1.4 Public Participation in Procurement Process for Sustainable Procurement in Kenya	17
1.2 Statement of the Problem	20
1.3 Research Objectives	21
1.3.1 General objective	21
1.3.2 Specific Objectives	21
1.4 Research Hypothesis	22
1.5 Justification of the study.....	22
1.6 The Scope of the Study	23
1.7 Limitation of the Study.....	24
CHAPTER TWO	25
LITERATURE REVIEW.....	25
2.1 Introduction	25
2.2 Theoretical Framework	25
2.2.1 Sustainable Development Theory.....	25
2.2.2 Rational Choice theory	27
2.2.3 Stakeholder Theory.....	28
2.2.4 Social Capital Theory	30

2.3 Conceptual Framework	31
2.3.1 Procurement Planning.....	32
2.3.2 Risk Management	34
2.3.3 Contract Award and implementation	36
2.3.4 Project Procurement Monitoring	38
2.3.5 Sustainable Procurement.....	39
2.4 Empirical Review	42
2.4.1 Procurement Planning and Sustainable Procurement	42
2.4.2 Contract Award and Implementation and Sustainable Procurement	44
2.4.3 Risk Management and Sustainable Procurement.....	46
2.4.4 Project Procurement Monitoring and Sustainable Procurement.....	49
2.4.5 Public Participation in Procurement Process and Sustainable Procurement ...	52
2.5 Critique of the Existing Literature.....	56
2.6 Research Gaps	58
2.7 Summary	59
CHAPTER THREE	60
RESEARCH METHODOLOGY	60
3.1 Introduction	60

3.2 Research Design	60
3.2.1 Research Philosophy	61
3.3 Target Population	61
3.4 Sample and Sampling Technique	62
3.5 Data Collection Method	64
3.6 Pilot Study	65
3.6.1 Instrument Reliability	65
3.6.2 Instrument Validity	66
3.7 Data Analysis and Presentation	66
3.8 Operationalization of study variables	68
CHAPTER FOUR.....	69
RESULTS AND DISCUSSION	69
4.1 Introduction	69
4.2 Response Rate	69
4.2.1 Pilot Study Results.....	69
4.3 Demographic Information	70
4.3.1 Distribution of the Respondents by Level of Education.....	70
4.3.2 Community Involvement in County Infrastructure Projects.....	71

4.3.3 Community Awareness on Procurement Opportunities in the Counties.	72
4.4 Descriptive Analysis of Study Variables.....	73
4.4.1 Procurement Planning.....	73
4.4.2 Risk Management	76
4.4.3 Contract Award and Implementation	77
4.4.4 Project Procurement Monitoring	79
4.5 Diagnostics Tests.....	81
4.5.1 Multicollinearity test.....	82
4.5.2 Normality Test	82
4.5.3 Test for Normality using Shaphiro-Wilk Test	84
4.5.4 Heteroscedasticity Test.....	85
4.5.5 Linearity Test.....	86
4.5.6 Correlation Analysis	89
4.6 Test of Hypothesis.....	90
4.6.1 Procurement Planning and Sustainable Procurement	90
4.6.2 Procurement Risk Management and Sustainable Procurement	94
4.6.3 Contract Award and Implementation and Sustainable Procurement	97
4.6.4 Project Procurement Monitoring and Sustainable Procurement.....	100

4.6.5 Regression Analysis of Overall Model	103
CHAPTER FIVE.....	107
SUMMARY, CONCLUSION AND RECOMMENDATIONS.....	107
5.1 Introduction	107
5.2 Summary	107
5.2.1 Influence of Procurement Planning on Sustainable Procurement	108
5.2.2 Influence of Procurement Risk Management on Sustainable Procurement ..	108
5.2.3 Influence of Contract Award and Implementation on Sustainable Procurement	109
5.2.4 Influence of Project Procurement Monitoring on Sustainable Procurement in Devolved Systems of Government in Kenya	109
5.3 Conclusion.....	110
5.3.1 Influence of procurement planning on Sustainable Procurement in Devolved Systems of Government in Kenya.....	110
5.3.2 Influence of Procurement risk management on Sustainable Procurement in Devolved Systems of Government in Kenya	110
5.3.3. Influence of contract Award and Implementation on Sustainable Procurement in Devolved Systems of Government in Kenya	110
5.3.4 Influence of Project Procurement Monitoring on Sustainable Procurement in Devolved Systems of Government in Kenya	111

5.4 Recommendations 111

5.5 Areas for Further Research..... 113

REFERENCES..... 114

APPENDICES 126

LIST OF TABLES

Table 3.1: Target Population.....	62
Table 3.2: Sample Size.....	63
Table 3.3: Sample Size Per County.....	64
Table 3.4: Operationalization of study variables	68
Table 4.1: Reliability Analysis for Constructs	70
Table 4.2: Community Involvement in County Infrastructure Projects.....	72
Table 4.3: Descriptive statistics for Procurement Planning	75
Table 4.4: Descriptive Statistics for Risk Management.....	77
Table 4.5: Descriptive Statistics for Contract Administration	79
Table 4.6: Descriptive Statistics for Project Monitoring.....	81
Table 4.7: Test of Multicollinearity	82
Table 4.8: Shaphiro-Wilk Test.....	85
Table 4.9: Breusch-Pagan and Koenker Test Statistics and Sig-values.....	85
Table 4.10: Test for linearity for the relationship between Procurement planning and Sustainable procurement.....	86
Table 4.11: Test for linearity for the relationship between Risk management and Sustainable procurement.....	87

Table 4.12: Test for linearity for the relationship between Contract Administration and Sustainable procurement.....	88
Table 4.13: Test for linearity for the relationship between Project Monitoring and Sustainable Procurement.....	89
Table 4.14: Correlation Analysis for Variables	90
Table 4.15: Model Summary for Procurement Planning on Sustainable Procurement ..	91
Table 4.16: ANOVA for Procurement Planning on sustainable procurement.....	91
Table 4.17: Coefficients for Procurement Planning on sustainable procurement.....	94
Table 4.18: Model Summary for risk management on sustainable procurement.....	95
Table 4.19: ANOVA for risk management on sustainable procurement	96
Table 4.20: Coefficients for risk management on sustainable procurement	97
Table 4.21: Model Summary for contract administration on sustainable procurement ..	98
Table 4.22: ANOVA for contract administration on sustainable procurement	99
Table 4.23: Regression Coefficients for contract administration on sustainable procurement	99
Table 4.24: Model Summary for Project Monitoring on sustainable procurement	101
Table 4.25: ANOVA for Project Monitoring on sustainable procurement management	101
Table 4.26: Coefficients for Project Monitoring on sustainable procurement.....	103
Table 4.27: Regression of Overall Model	104

Table 4.28: ANOVA of Overall Model 104

Table 4.29: Coefficients of Overall Model 106

LIST OF FIGURES

Figure 2.1: Conceptual Framework	32
Figure 2.2: Performances Management Process	39
Figure 4.1: Distribution of Respondents by Level of Education	71
Figure 4.2: Community awareness of procurement opportunities in the County	73
Figure 4.3: Normal Q-Q plot of Procurement planning.....	83
Figure 4.4: Normal Q-Q plot of Risk management	83
Figure 4.5: Normal Q-Q plot of Contract management.....	83
Figure 4.6: Normal Q-Q plot of Project monitoring.....	84
Figure 4.7: Normal Q-Q plot of sustainable procurement	84

LIST OF APPENDICES

Appendix I: Introduction Letter	126
Appendix II: Questionnaire	127
Appendix III: NACOSTI Permit	132
Appendix IV: Letter of approval	133

ACRONYMS AND ABBREVIATIONS

AfriCOG	African Centre for Open Governance
APCC	Australian Procurement and Construction Council
BIRRFQ	Budget Implementation Review Report First Quarter
BPS	Board of Post Graduate Studies
CDF	County Development Fund
CEC	County Executive Committee
CIPS	Chartered Institute of Purchasing and Supply
CoK	Constitution of Kenya
CPAR	County Procurement assessment Report
CRECO	Constitution and Reform Education Consortium
CSR	Corporate Social Responsibility
EIPP	European institute for public participation
EU	European Union
GDP	Growth Domestic Product
GoK	Government of Kenya
ICPAK	Institute of Certified Public Accountants of Kenya
MEAT	Most Economic Award Tender
NACOSTI	National Council of Science, Technology and Innovations
PDEs	Procurement and Disposal Entities
PMC	Project Management Committee

PME	Participatory Monitoring and Evaluation
PP	Public participation
PPC	Public participation coordinator
PPDA	Public Procurement and Disposal Act
PPDAA	Public procurement and Disposal of Public Assets Authority
PPOA	Public Participation and Oversight Authority
RBM	Results Based Management
SCP	Sustainable Consumption and Production
SEKEB	South Eastern Kenya Economic Block
TBL	Triple Bottom line
UNEP	United Nations Environment Programme
WHO	World Health Organization
WPPF	Ward Public Participation Facilitators

DEFINITION OF TERMS

- Constitution** is as an organization of offices in a state, by which the method of their distribution is fixed, the sovereign authority is determined, and the nature of the end to be pursued by the association and all its members is prescribed (GoK, 2010).
- Contract Administration** is the enforcement of contract terms while giving attention to achievement of stated output and outcome of the contract (Davidson & Sebastian, 2009).
- Contract Award** Process of awarding a contract to a bidder after selecting the tender/offer that is determined to be substantially responsive to the tender documents and is the most advantageous (Organization of America states, 2013)
- Open Government** A culture of governance based on innovative and sustainable public policies and practices inspired by the principles of transparency, accountability, and participation that fosters democracy and inclusive growth (OECD, 2017).
- Policy Making** is the process of making important organizational decisions, including the identification of different alternatives such as programs or spending priorities, and choosing among them on the basis of the impact they will have (GoK, 2010).
- Procurement management** The strategic approach to managing and optimizing organizational spend and it involves acquiring quality goods and services from preferred vendors within a

stipulated budget, on or before the deadline where the process includes sourcing, requisitioning, ordering, expediting, inspection, and reconciliation.

Procurement Planning Procurement planning is the process used by companies or public institutions to plan purchasing activity for a specific period of time (David & Mburu, 2014)

Procurement Process Successive stages in the procurement cycle including planning, choice of procedure, measures to solicit offers from bidders, examination and evaluation of such offers, award of contract and contract management, (Organization of America states, 2013)

Procurement Project Management A strategy that aims to handle the process of sourcing, requisitioning, ordering, expediting, inspecting and reconciling procurement(for projects) efficiently (Kennedy, 2022).

Project Procurement Monitoring The analysis of a contracting authority's compliance with public procurement legislation during conducting of a procurement procedure, conclusion of a contract and its performance aimed to prevent violations of public procurement legislation, (PMBOK, 2017).

Project Procurement The process of buying goods and services for the project externally (Kennedy, 2022)

Project Risk Management The process of identifying, analyzing and responding to any risk that arises over the life cycle of a project to help the project remain on track and meet its goal, (Ray, 2021)

Public Participation	Is a means to convey individual and the society's personal interests and concerns with regard to the development plans, given that these planning activities would consequently affect the public generally and certain groups specifically (Azizan & Marzuki, 2015).
Public Procurement	Acquisition of goods, services, contracting of works, purchasing, and buying, renting or leasing and the management the of, in accordance with specific methods and procedure, by government (Organization of America states, 2013)
Sustainable Procurement	It is a process whereby public organizations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life-cycle basis in terms of generating benefits not only to the organization, but also to society and the economy, while remaining within the carrying capacity reducing of the environment (CIPS & NI, 2012).

ABSTRACT

The study intended to assess the influence of public participation in the procurement process for sustainable procurement of infrastructural projects in the South Eastern Economic Block counties of Kenya. The specific objectives of the study were; To evaluate the influence of public participation in procurement planning on sustainable procurement, to establish the influence of public participation in risk management on sustainable procurement, to assess the influence of public participation in contract award and implementation on sustainable procurement and to establish the influence of Public participation in project Procurement monitoring on sustainable procurement. The study adopted descriptive study design. The study target population was 1146 while 297 respondents were sampled through stratified sampling method from Makueni, Machakos, and Kitui Counties. Primary data was collected by use of semi structured questionnaires with closed ended questions while secondary data was from books, articles and published thesis. Semi-structured questionnaires were used to collect data and t-test, Pearson correlation as well as multiple regression analysis used to analyze the data. The F-test was used to test the hypothesis of the study. SPSS aided in the data analysis. The findings of the study show a positive and linear relationship between public participation (procurement planning, risk management, contract award and Implementation and project procurement monitoring) and sustainable procurement. Project Procurement Monitoring had the highest positive and significant influence on sustainable procurement ($\beta=0.487$, $p=0.000$). The study is likely to influence on the future policies on sustainable procurement by providing the key roles that public participation may impact positively on identification, selection, implementation and monitoring of the procurement process. The study recommends that county governments need to engage the citizens more in Procurement monitoring of community projects since through citizen monitoring governments become more responsive to citizen demands hence achieving sustainable procurement objectives. The study further recommends that both national Government and county governments need to stipulate and implement policies that would improve on public participation so as to achieve sustainable procurement in devolved systems of government. The study proposes that other counties be investigated in order to have a holistic picture of the entire country on the subject matter. Studies using other additional variables, such as organization culture, government regulation as moderators or mediators may also be carried out to gain further insights into this relationship.

CHAPTER ONE

INTRODUCTION

The chapter highlights the background of the study by briefly discussing the key concepts of the study, linkages of the key concepts, the statement of the problem, objectives of the study, the research hypothesis, justification of the study, the scope of the study and the limitation of the study.

1.1 Background of Study

The concept of sustainable development is based on the concept of development (socio-economic development in line with ecological constraints), the concept of needs (redistribution of resources to ensure the quality of life for all) and the concept of future generations (the possibility of long-term usage of resources to ensure the necessary quality of life for future generations) Tomislav, (2018). He further asserts that the essence of the concept of sustainable development derives from the Triple bottom line concept, which implies the balance between three pillars of sustainability; environmental sustainability focused on maintain the quality of the environment necessary for conducting the economic activities and quality of life of people, social sustainability which strives to ensure human rights and equality, preservation of cultural identity, respect for cultural diversity, race and religion, and economic sustainability necessary to maintain the natural, social and human capital required for income and living standards.

Governments procure large amounts of goods and services to help them implement policies and deliver public services, (OECD, 202). Furthermore, Public procurement expenditure as a percentage of GDP increased slightly across the Organization for Economic Cooperation and Development (OECD) over the last decade, from 11.8% of GDP in 2008 to 12.6% of GDP in 2019. Moreover, COVID-19 pandemic led to a spike in public procurement relative to GDP in 2020 where among 22 OECD-EU countries for which data is available, public procurement increased from 13.7% of GDP in 2019 to 14.9% of GDP in 2020.

UNCTAD, 2020 reports that Public procurement represents, on average 12% of GDP in the OECD countries and up to 30% of GDP in developing countries. Hence, integrating sustainable development in public procurement and national trade policy will help attain sustainable development. Thus, many government initiatives locally or globally depend on public procurement. The government will influence the design of public development policies by using its buying power to promote the manufacture and marketing of products and services that are more socially, environmentally, and economically appropriate (SELA, 2017). In other words, public policy determines the distribution and utilization of significant public funds. The role of procurement to foster economic growth is further emphasized by (world bank, 2021) that says Governments are increasingly turning to public procurement as a strategic tool for economic growth hence uniquely capable of promoting social inclusion, environmental sustainability, and economic development by selecting and contracting works, goods, and services

Considering the spending power of government procurement, countries that manage to achieve efficiency gains in procurement spending stand to achieve considerable savings to create greater fiscal space for economic and social policies (OECD, 2021). The high relevance of public procurement for economic outcomes and sound public governance, as implied by its large volume, makes governments use public procurement as a strategic policy lever for achieving additional policy goals, which aim to address environmental, economic and social challenges according to national priorities, (OECD, 2017). Therefore for any country to attain its sustainable development goals, public procurement becomes a dominant determinant among others. Thus the need to incorporate public procurement in attaining sustainable development.

Public procurement is defined as an important government system for spending public money on acquisition of goods, works, and services needed for public programs and projects, (Naushad,2018). In Kenya, public procurement is defined as the acquisition by purchase, rental, lease, hire purchase, license, tenancy, franchise, or by any other contractual means of any type of works, assets, services or goods including livestock or any combination and includes advisory, planning and

processing in the supply chain system by procuring entities using public funds, (GOK, 2015). Naushad (2018) explains that the main objective of these activities is delivery of quality and timely services to citizens through public programs and projects, implementation of which is supported by public procurement. The African development bank (2020) states that; given the level of expenditure involved in funding project by member states, if adequately and strategically managed through a sound procurement process, can produce greater economic and social outcomes and impact.

According to Quinot (2013) governments have long used public procurement (PP) as a tool to promote socio-economic objectives which are sometimes referred to as 'horizontal' or 'collateral' because they are ancillary to the primary purpose of PP which is acquiring goods and services for the government. This emphasizes the importance of the principle of long-term procurement. Further Emphasis is given by Oracle (2015) who states that; the spotlight of the procurement function today has shifted from minimizing costs to maximizing value. He goes on to asserts that as part of this shift from a tactical to a more strategic focus, procurement policies are leveraging sourcing and procurement functions to drive supply chains' sustainability performance for long term success by analyzing products' environmental features, or lack thereof, in the upstream supply chain. Therefore, Sustainability has now become a dominant topic of discussion among purchasing and supply professionals, along with traditional metrics such as cost, quality, and delivery time, (CIPS, 2009). Thus , the need to incorporate the essence of long term procurement that balances between the scarce resources, the prevailing social conditions and preservation of the environment which brings in the concept of sustainable procurement.

Sustainable procurement (SP) is a mechanism by which organizations fulfill their needs for products, facilities, works, and utilities in a way that provides long-term value for capital, providing benefits not only to the organization, but also to society and the economy, thus minimizing environmental harm (Australasian Procurement and Construction Council (APCC), 2013). World Bank (2019) further describes Sustainable procurement as a process which incorporates sustainability considerations throughout the procurement process in order to achieve optimal value

for money in delivering development objectives. It is also worth noting that sustainable procurement goes by many different names: green procurement, environmental procurement, affirmative procurement, responsible procurement, socially responsible procurement etc (CIPS, 2012). Hence, Sustainable procurement helps to secure the acquisition of goods and services in a way that ensures that there is the least impact on society and the environment throughout the full life cycle of the product (Meehan & Bryde, 2011). It considers products and suppliers which includes issues such as: resource extraction and consumption; manufacturing and production; transport and logistics; product and asset design; use and maintenance; recycling and disposal options; employee rights and conditions, corruption, unfair competition and ethical behavior (APCC, 2013). According to the (Asian Development Bank, 2021) Sustainable public procurement is a strategic approach that promotes the integration of the pillars of sustainable development, i.e., economic development, social development, environmental protection, and quality institutional governance.

World Bank (2019) explains that there are many reasons to practice sustainable procurement which include five key business drivers such as; Financial; Reduce total operating costs by procuring more efficient and sustainable goods, works or services that: develop the market's capacities to deliver sustainable solutions; increase demand for sustainable solutions which in turn increases market competitiveness; strive for innovative and more sustainable outcomes; cost savings on a long-term basis by applying life-cycle costing; and minimize disposal costs and sustainable impacts of products at their end of life. Risk management; Engage in the mapping of economic, legal, environmental and social sustainability threats and opportunities, and develop approaches to manage them. Commitments and goals; reflect the purchasing agency's organizational culture, values, and ethics in accordance with relevant policies. This could include developing sustainable procurement policies that are in harmony with a country's overall strategy; that is, commitments and priorities ought to be clearly stated in the policy and the operational implementation ought to be reflected in procurement practices. Responses to increasing stakeholder expectations; It is important to take account of social responsibility and sustainability issues. It further states that Beyond the requirements established by the Bank in its other policies (e.g.: environmental and social), these can be further enhanced by

using sustainable procurement approaches. Attractiveness; Performance in terms of social responsibility and sustainability may impact a Borrower's or project's image, enhance competition and provide organizations greater competitive advantage. Implementing sustainable procurement may attract other financial investors, boost labor markets, attract the best organizations to bid, and further drive development goals.

Though countries and organisations have appreciated the benefits of implementing sustainable procurement (SP) there are various identified challenges facing the same. Cao, Yuying and Fen (2012) documented the challenges facing the implementation of SP in China as follows; First, the means to implement SP being limited to that of the energy Conservation Products List for Government Procurement (ECP List) and Environment labeled Products List for Government Procurement only and the implementing effect of the systems themselves is doubtful. Secondly, the compulsory procurement system has too strong an effect of exclusion and has a problem of legitimacy under the Chinese laws on government procurement and accreditation. Thirdly, the parallel legal framework for the Chinese public procurement may present some problems for wider application of the green procurement policy; fourth, the existing procuring function and its organization is weak and uncertain greatly weaken the possibility for the whole procurement links to consider sustainable factors. Finally, the inherent conflicts between sustainable procurement objective and other objectives may also bring difficulties for implementation of this policy, setting challenges for the implementing capability and development of professionalism.

Belfitt et al. (2011) argues that SP could be challenged by the fact that sometimes the returns of adopting sustainable procurement decisions may not be received by those that experience the additional cost. For instance, while the end user may benefit from lower energy demand or the final owner may benefit from the design of a construction, the client or the person who constructed may not even benefit from any of this. In case of any adjustments on the cost to the higher side, the organization would not have the requisite motivation to adopt a new approach as opposed to the traditional capital cost based one. Morgan (2010) noted that conflict of incentives is

indeed a challenge to sustainable procurement. Staff Members involved may feel compelled to make decisions that are not in line with sustainable procurement strategy. This therefore implies that they are uncomfortable and they would rather hold more to their traditional strategy. Interestingly enough is the degree to which these strategies have on the procurement decisions within an organization, while the real business decisions would be based on the number of divergent pressures and on the way in which they connect will be instrumental to the final decision making.

Although change is inevitable, more often motivation of individual employees as well as community may prove a challenge and impediment to adoption of new methods to improve sustainability. Primary to this is unraveling and understanding the structure of the organization and how that structure influences procurement decisions. This understanding would be key if new practices are to be accepted and successfully implemented. Mensah and Ameyaw (2012) identify absence of internal management structures as a barrier towards sustainable procurement. Without proper structures, organizations will face complications in making its business more sustainable, since sustainability demands elaborate and updated structural systems within the supply chain like quality control systems. Rice et al. (2005) assert that although returns from supply chain investment could be massive, challenges are colossal too. Helmsing and Knorringa (2008) identified lack of social drive as a challenge arguing that private actors act in solitude and neither are they involved in the development of NGO's policies nor do they influence monitoring and evaluation systems. This absence of private efforts (an external force) that would demand for quality and traceability and mount market pressure on the relevant institutions to ensure sustainability in the procurement of construction works, which will in turn fulfill corporate social responsibility breeds laxity in the implementation of sustainable procurement management.

Naushad (2018) states that during the past two decades, public procurement has evolved from being considered as just the simple purchasing of goods, works, and services to be handled by store clerks and purchasing officers to a complex government activity, inclusive of multiple stakeholders, to be conducted, managed, and supervised by qualified and competent public procurement professionals.

Furthermore Thai (2001)) acknowledges that the basic principles of good procurement practice include accountability, where effective mechanisms must be in place in order to enable procuring entities spend the limited resources carefully, knowing clearly that they are accountable to members of the public; competitive supply, which requires the procurement be carried out by competition unless there are convincing reasons for single sourcing; and consistency, which emphasizes the equal treatment of all bidders irrespective of race, nationality or political affiliation. State of Queensland (2014) guidance on sustainable procurement also outlines that sustainable procurement in the public sector is dependent on incorporating an appreciation of the wider goals of society into procurement. It further proposes that by using procurement to promote the goals of sustainability; social, environment and economic government can help to foster a better society, composed of sustainable communities, more able to respond to the global economic market.

UNICEF (2020) explain that the principles of good procurement are generally built around elements related to transparency, economy, efficiency and fairness, which governments and organizations have developed to provide clarity and guidance on specific procurement aspects according to their own priorities and needs. Hence a clear understanding by all procurement stakeholders of the principles that apply to public procurement is a pre-requisite for building a quality procurement system. The meaningful and effective engagement of citizens and other actors, including stakeholders in public decision-making processes is one of the key issues facing public organizations, (Beach, 2008). According to Centre for Governance and Development and National taxpayers association (CGDNTA), 2009) one of the characteristics of good procurement is participatory which implies that the suppliers, citizens and other stakeholders effectively contribute to the operations of public procurement and in the preparation of the essential legislation as and when necessary. In other words, the allocation and use of sizeable public funds is decided by public procurement, and with it, many of the key decisions associated with public policies and services in the region materialize, becoming in themselves a privileged tool for promoting social, economic and environmental policies (Inter-American Development Bank, 2016). In order to achieve then sustainable procurement there is

need to have public participation on matters cutting across all aspects of procurement.

The World Bank (2004) considers public participation as a process through which stakeholders' influence and share control over development initiatives, and the decisions and resources which affects them. Stakeholders are people, groups, or institutions, which are likely to be affected by a proposed project (either negatively or positively), or those which can affect the outcome of the project. Citizens get most involved in this process when the issue at stake relates directly to them (Monastyrski, 2002). According to GOK (2010) public participation has been poised to help in priority setting and providing feedback on government funded projects. UNDP (2016) states that Sustainable development tries to establish synergies between environmental balance, social progress and economic feasibility under the principle of good governance. They further link this to procurement where they explain that Sustainable Public Procurement (SPP) is the process whereby public organizations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life cycle basis in terms of generating benefits not only to the organization, but also to society and the economy, whilst significantly reducing negative impacts on the environment. More so, interactions with stakeholders have provided a means of improving the quality of policy development by harnessing different ideas and perspectives, and improving service delivery by exerting pressure on bureaucracies through direct engagement in planning and delivery of services (Martin, 2003). It is also worth noting that Social sustainability can be achieved by systematic community participation and strong civil society, cohesion of community, cultural identity, diversity, sodality, comity, tolerance, humility, compassion, patience, forbearance, fellowship, fraternity, institutions, love, pluralism, commonly accepted standards of honesty, laws, discipline etc. constitute the part of social capital (APCC, 2013). Purchasing and supply management professionals can only deliver sustainable procurement through ongoing engagement and collaboration with internal stakeholders, budget holders and key suppliers to reach the most effective solution (CIPS, 2009). Therefore, public participation is likely to play a key role in meeting the objective of sustainable procurement.

1.1.1 Global Perspective on Public Participation in Procurement Process for Sustainable project Procurement

Brac institute of Governanace and development (2022) acknowledges that Public procurement affects virtually all aspects of our lives; health, education, economic opportunities and overall quality of life, therefore, about a third of government budget and 70% of the developmental budget is spent on public procurement and so, efficient, effective and economical (3Es) public procurement is instrumental in building a prosperous and equitable society. (Ahamed, 2016) states that Public procurement activities aim to use public money efficiently by providing quality services hence citizen engagement is a potential mechanism to ensure this efficiency by allowing citizens' participatory role in different stages of the public procurement process. Though procurement is often seen as a highly technical process, there are ample evidences now available on how opening up spaces for citizens to get engaged at the various stages of the procurement process (Gopakumar & Manolete, 2022).

OECD (2017) states that, countries are acknowledging the role of open government reforms as catalysts for democracy, inclusive growth and more efficient public governance. It further elaborates that the open government principles of transparency, accountability and participation have the potential to change the relationship between public officials and citizens, making it more dynamic, mutually beneficial and based on reciprocal trust. Sustainable public procurement is a strategic approach that promotes the integration of the pillars of sustainable development, i.e., economic development, social development, environmental protection, and quality institutional governance (ADB, 2021). Sustainable procurement represents an opportunity to provide more value to an organization by improving productivity, assessing value and performance, enabling communication between purchasers, suppliers and stakeholders, and by encouraging innovation (Australian government, 2018). CIPS (2009) argues that management of the supply base is one of the best value adding activities to engender innovative solutions for customers. In addition CIPS (2008), presents the following potential benefits sustainable procurement practices may have for an organization adopting such practices in its operations as; the existence of a defined procurement strategy and the value outcomes, the

improved social environmental and economic impacts, compliance with national and international sustainability standards and regulations, to have a better understanding of risks in the supply chain , contributes to the sustainable organisational strategy and better commercial/economic decisions from understanding of issues that impact on the procurement decision (whole life cycle), potential benefits in a long term relationship, innovation, better materials, alternatives, technical advice, emerging technologies, if the objective is `grab the cash` it's not sustainable, build a more sustainable platform and achieve savings year on year ,better quality of purchasing staff with more satisfying goals and improved performance, education of suppliers ,much more proactive internal dialogue and challenge with demand side, more effective evaluation of proposals and bids and more `sustainable` source of supply.

Sustainable development is a multi-functional element with varied stakeholder. For any country to claim to be working towards sustainable development then the various stakeholders must play their roles. Public procurement being one of the key areas that government spend huge chunk of money, helps Governments in attaining of sustainable development goals. Sustainable public procurement is based on the pillars of sustainable development for public procurement to become a sub system in the larger sustainable development system. Therefore, in order to achieve and balance the three pillars of sustainability; economic, social and environment the public have a great influence.

Naushad (2018) acknowledges that Public procurement systems across countries are all based in most part on the same basic principles of economy, efficiency, transparency, and fairness. He further explains, public procurement is a complex subject which is multidisciplinary and cuts across all sectors of economy and society and has a multitude of stakeholders with differing interests in and influence over procurement. Due to growing of technology and wide spread of data the public is becoming more informed hence exerting pressure on their governments for timely, quality, and cost-efficient delivery of services. Many national and international bodies have emphasized on need for a proper transparent, accountable, non-discriminatory and a corruption- free procurement system among member countries (Gumisiriza, 2019). He illustrates this by quoting the following bodies; United

Nations Convention against Corruption that calls upon member states to take the necessary steps to establish appropriate systems of procurement based on transparency, competition, and objective criteria in decision-making that are effective in preventing corruption by articulating specific issues which the public procurement system should address including public distribution of information relating to procurement procedures and contracts/tenders, giving tenderers enough time to respond to the bid invitations; establishment of appropriate procedures and conditions for participation, using objective and predetermined criteria for public procurement decisions to facilitate the subsequent verification of the correct application of the rules or procedures; establishment of an effective mechanism of domestic review; and regulation of personnel responsible for procurement so that they pursue ethical, fair, and impartial procurement procedures in application of legislation, tendering rules during procurement. Also the African Union Convention on Preventing and Combating Corruption calls for parties to establish mechanisms to encourage participation by the private sector in the fight against unfair competition and respect of the tender procedures and property rights, while calling for state parties to adopt measures to prevent companies from paying bribes to win tenders. Furthermore, the United Nations Commission on International Trade Law established the Model Law on Public Procurement that aimed at achieving value for money and avoiding abuses in the procurement and has been used by various governments to shape national public procurement legislation. From this illustrations it is imperative to note that most governments have embraced the element of public participation on various Government procurement initiatives as described by the following few case studies.

In Europe public participation is intended to complement conventional modes of policy-making in which elected representatives take decisions based in part on their perception of their constituents' preferences (European institute of public participation (EIPP), 2009). Public Participation was established as a popular alternative for making routine decisions and resolving conflicts in European public life. In most European states citizens are allowed to directly participate in policy making in areas such as urban development, planning and environmental questions or science policy (EIPP, 2009). Such participation is set at local or community level.

Participation ranges from surveys, through hearings, public meetings, to referenda, citizen juries, consensus conferences or scenario workshops.

In the United Kingdom, the government policy is to give citizens a much stronger voice in decision-making and even, where appropriate, transfer control of assets to citizen group. In the UK (as in Austria) the government has taken on public participation as an explicit policy, particularly at local level, in an attempt to re-engage the public with political processes and improve the quality of political decision-making. Participation is interpreted broadly and includes simply giving the population more information (EIPP, 2009). The policy context concerning public procurement in the United Kingdom is based on a set of guiding principles, including transparency, competitiveness, accountability, efficiency, legality, and integrity, that have the ultimate aim of supporting the delivery of best value for money in public procurement (Mayi, Oginda, & Biraori, 2016). Erridge (2009) states that “We are now in the era of a multi-stakeholder procurement environment”. This implies that public procurement can no longer be conceived of as a dyadic relationship between buyer and supplier but needs also take account of the users of public services, communities affected by procurement decisions and taxpayers in general (Flynn, 2014).

In the UK Walker and Bramme (2014), carried out a research to investigate sustainable procurement in the public sector. A total of 160 procurement officers were given questionnaires. The findings of the research were; cost was found to be a leading barrier in sustainable procurement implementation and top management support leading facilitators. From the above findings an assumption can be made that, if organizations balance the three aspects of sustainability in implementing sustainable procurement, cost can no longer be a barrier in implementing SP since the role of SP is to reduce cost if the right balance is achieved. In England, Lutz (2012) carried out a study to explore ways in which the local government authorities used their procurement function to foster sustainable development. The researcher reviewed existing literature using exploratory approach and the findings were: Local government had adopted wide range initiatives that address all three aspects of sustainability: Economic, Environmental and Social. They concluded that local

government had managed to perform because the three aspects of sustainability were rightly balanced and other local governments are using England as a benchmark. This is a clear indication that sustainable procurement will only play its roles: cost reduction, minimal impact to the environment, quality and service delivery, in organization if the economic, environmental and social aspects sustainable are rightly balanced and integrated in the procurement process.

Users are the start and end points of the procurement process hence are directly involved in a number of activities and decisions such as adequate definition of the user's requirements/needs relating to materials to be purchased for example; estimated requirements/quantities, specifications, identifying minimum and desirable elements and ensuring that there is adequate in consultation with users and their representative bodies (Scottish Police Authority, 2008). Procurement teams also have to be able to listen to the stakeholders whom they are engaging with, and then be ready to sell back ideas as a result of those conversations (Dressler, 2015). Some of the benefits of involving users in the procurement process are: safety of stock, lesser prices, reduced risk, improved quality, greater added worth, increased efficacy and invention.

1.1.2 Regional Perspective on Public Participation in Procurement Process for Sustainable Procurement

Regionally there has been great efforts by governments and institutions to embrace sustainable procurement for the benefits of the citizens. The influence of procurement in South Africa is recognized by Section 217 of the Constitution of the Republic of South Africa which provides the manner in which public procurement should be executed and provides for allocation of preferences with a view to afford economic opportunities to historically disadvantaged groups and transform the economic landscape (Republic of South Africa, 1996). The Preferential Procurement Policy Framework Act 5 of 2000 and its associated regulations embody the government's commitment towards achieving economic development through the procurement function (Republic of South Africa, 2017). In south Africa, apart from the desire to be good environmental stewards, metropolitan municipalities are now

pressed to do the right thing as global consumers now demand greener products that lead to low organisational and product carbon footprints (Preuss, 2007; Nhamo, 2009). Although the public procurement laws in South Africa are rather silent on green procurement, global trends aimed at addressing the challenges arising from general environmental decay and climate change in particular present a number of risks for metropolitans that are not embracing the green agenda fast.

Although the Public Finance Management Act 1999 (PFMA) of Republic of South and the Preferential Green procurement, 2000 (PPPPFA) in South Africa are both the overarching framework for procurement in national and provincial governments, the Acts do not make provision for the inclusion of environmental considerations in procurement (Bolton 2008) hence many metropolitan municipalities in South Africa have started grappling with the notion of green procurement from the perspective of public participation. According to Turley and Perera (2014), the existing legal environment in South Africa is conducive to advancing socioeconomic priorities through public procurement. In addition, the South African landscape is suitable for pursuing social and economic objectives, as well as environmental considerations, using the leverage that exists in the public procurement system (Turley & Perera, 2014). Bolton (2006) argues that positioning procurement as a policy instrument for government in South Africa may be considered a means to redistribute economic wealth and foster the development of small enterprises whilst contributing to economic development. The South African government, in 2008, introduced the South Africa National Framework for Sustainable Development (NFSD). This signalled the highest level of commitment to driving sustainable development objectives and to creating an enabling environment for economic, environmental and social advancement through national and local systems (The Department of Environmental Affairs, 2011). The strategy to implement key initiatives that emanated from the NFSD was rolled out in 2011 and, amongst others, asserts significant enablers for promoting sustainable development such as building sustainable societies through responsible sourcing and local economic development interventions.

In Nigeria, between 1999 and 2000, there was a Country Procurement Assessment Report (CPAR) which indicated that prior to 1999, Nigeria lost \$10 billion on a yearly basis to corruption via award of contracts (CPAR, 2000). As a result of this, Nigerian government identified the need to have a comprehensive public procurement policies and practices as essential recipes for good governance. Despite the existence of a Public Procurement Act (PPA) enacted in 2007, which seeks to ensure the attainment of value-for-money, accountability, equal opportunity and transparency in the award of public sector contracts, there is in general an absence of GPP in the legal regime and in practice (Akenroye, Sabitu & Eyo, 2013). The studies identify lack of government commitment as a major barrier to the adoption of sustainable procurement while the best strategy for integrating sustainability into the system is through total compliance to sustainability.

Public participation in Ghana is intended to enhance accountability, transparency and oversight capacities of duty-bearers at the local government level, to promote increased public confidence, participation in elections and to promote the increased participation of women and youth in decision making processes. According to Afrobarometer (2014), as active members of the democratization process, Ghanaians have the responsibility of holding their leaders to account as well as helping to improve the mechanisms by which citizens hold their leaders accountable. He further asserts that increased transparency in the use of public resources and other government initiatives involves ensuring that citizens have easy access to information, which also showed a positive impact on the demand for accountability. Public procurement utilizes public resources hence becomes one of the key areas where accountability is highly required. It is evidenced that as national literacy rate improves, Ghana citizens become more aware of their rights and are able to ask public officials to account for their stewardship (Afrobarometer, 2014).

Similar to Kenya's public procurement systems, Ghana's public procurement is regulated by an Act of Parliament which was passed into law in December 2003, Act 633. Section 59 of Ghana's Public Procurement Act, 2003 (Act 663) includes some economic and social sustainable issues (Adjei, 2013). In Ghana, government procurement constitutes over 50% of the government budget. It's therefore presumed

the government may make a difference and contribute to sustainable development if it buys goods and services that have been designed, produced and supplied having factored in the environment and social risks (Government of Ghana, 2013). Mathew (2012) revealed that if implemented effectively, sustainable procurement has the potential to cut costs, shorten timescales, enhance stakeholder relationships, increase sales, reduce risks, enhance reputation and improve margins.

In Uganda public procurement is also an important and influential activity since it accounts for over 70% of public spending. The Public Procurement and Disposal of Public Assets Authority (PPDA) sets standards and regulates procurement and disposal activities of PDEs (procurement and disposal entities), which are government ministries, districts and municipal local government authorities, and other public bodies engaged in the procurement and disposal activities in Uganda. The law takes into considerations such as value for money, transparency and accountability (Karyeija 2012).

Despite of the government's efforts in instituting an enabling legal and institutional framework governing public procurement, the entire process and practices still face massive challenges including procurement corruption which is estimated over US\$ 300 million per year, non adherence to prescribed procurement practices, influence peddling and political interference in the procurement processes both at the central and local government levels in small and huge contracts, failure or delays in delivering of executed contracts, poor documentation and record keeping, limited awareness of procurement laws and procedures by key stakeholders, limited citizen participation, and involvement in procurement processes including planning, award, implementation, and closure (Gumisiriza, 2019). Shoddy work from incompetent contractors who get contracts through corruption, influence peddling, poor supervision, and monitoring by man-dated officials is also a huge public procurement challenge in Uganda. Poor consultation, inadequate planning, and failure to put serious attention on the needs and priorities of beneficiaries who are the key target of procured goods, services, and works have resulted in the lack of trust, ownership of the provided goods and services by the beneficiaries, and consequent wastage of

public resources (Bukenya and Muhumuza 2017). It is also worth noting that most countries apart from the EU integrate reservations for marginalized groups and other aspects of public procurement that incorporate social aspects beyond labor laws, such as human rights, into regulation and practices, as is the case in many SSA countries such as South Africa, Kenya, Zimbabwe, Namibia, Uganda, and Botswana, as well as in the USA and Canada (Cravero, 2017). This implies another way of public participation in procurement undertakings by different governments.

1.1.3 Public Participation in Procurement Process for Sustainable Procurement in Kenya

Kenyan promulgated a new Constitution in August 2010 which ushered in a new system of governance with two levels of government; Central Government and 47 County Governments, which are distinct and interdependent (GoK, 2010). The creation of County Governments was meant to devolve governance to the grass root level which has been under implementation since the general elections on March 2013. Devolution in Kenya is meant to foster public participation in management of public affairs; a system that seeks to facilitate greater citizen involvement and control in public affairs including planning, budgeting and resource allocation among others (CoK, 2010). Devolution is founded on grounds of ensuring strong civilian oversight and engagement that calls for the involvement of citizens in key County Government processes (CoK, 2010). Beyond being a constitutional requirement, public participation and civilian oversight remains one of the most powerful tools in demanding for increasing transparency, accountability and efficiency in public procurement (Muriungi, 2014).

Kenya constitution, 2010 envisaged improved democracy and governance through public participation which will result in delivering better services to the common Mwananchi at reduced cost by assuring them value for their public resource in the project that are important and required at any given time. (Samuel & Josphat, 2014) stated that Public organizations exist to offer services to the public and therefore, they should be able to satisfy all their stakeholders for them to be sustainable. In order to ensure transparency and accountability, there is need for the provision of the

required relevant, timely and accurate information to be given to the members of the public to enhance their participation. This is meant to ensure faster development in line with the citizen's expectations and well thought projects that will meet their needs. Procurement has been recognized as a subject of immense strategic importance that has high impact on organizational performance, since it is guided by principles of transparency, accountability and value for money as stipulated in the Public Procurement Asset and Disposal Act (PPDA) (GoK, 2015).

In Kenya, the government has put in place a wide range of policy, institutional and legislative policies to govern all business activities in a move towards sustainability in procurement processes. These include; Environmental Management and Coordination Act (EMCA) 2015 (Republic of Kenya, 2015), Kenya Solid Waste Management by laws of 2014 (Republic of Kenya, 2014), the Environmental Management and Coordination Regulations, (Republic of Kenya, 2014) and ISO (14001) environmental standards certification. According to GoK (2015) guidelines are given to various institution mostly public institutions to enhance accountability by involving different stakeholders at different levels of any procurement proceedings.

The Kenyan constitution, 2010 states that public participation is a key issue so as to enhance democracy, accountability and transparency of government projects. This is further elaborated in the county government Act, 2012 that stresses on the need for devolution where members of public become the greater focus of devolution. The Act also elaborates on various policies and mechanism that should be put in place to encourage public participation in procurement issues. To sum it all, the public procurement regulations, 2020 includes, community participation has one of the methods of procurement for public entities. This is a clear indication that well involvement of stakeholders has a great impact in balancing act of sustainability. The Public Procurement and Regulatory Authority (PPRA) (GoK, 2015) has a green procurement clause, which entails practices that encourage organizations to safeguard the environment. These practices include; products made by recyclable materials, low energy consuming products, use bio-degradable materials and non-ozone layer depleting substances to increase organizational performance.

The County Government's Policy frameworks for public participation are based on the principles of inclusivity, accountability, diversity, building community participation, transparency, flexibility, accessibility, trust, commitment, respect and integration (GoK, 2012). The County Government Act 2012, article 91 acknowledges that particular structures for participation should be set up by the County Governments that allow public invitation to engage in county hall meetings, notice boards, vacancy announcement, job appointments, tenders and procurement awards, development sites and establishment of citizen's forum at county and decentralized units (CRECO, 2014). In Makueni County public participation mechanisms and institutional framework was established soon after the County government was established. According to Makueni County Government public participation framework (2013) the county seeks to utilize the various levels of participation promoting consultation, placation and partnership and citizens models of participation. The framework further clarifies that the government will adopt forms of public participation such as informing by providing information to help them understand the issues, options and solutions, consulting with the public to obtain their feedback on alternatives or decisions, involving the public to ensure their concerns are considered throughout the decision making process especially in development of decisions criteria and options, collaborating with the public to develop decision criteria and alternatives and identify the preferred solutions and empowering the public by placing final decision making authority in their hands.

The Public Participation framework states clearly that public participation is not meant to convey decisions already made but to generate and confirm decisions. Borrowing from the County Government Act (2012), the Makueni, Kitui and Machakos County Government Public Participation frameworks (2013), state that Public Participation is not a political process but a non-partisan process that involves the agent going to take instruction and direction from the public. Under this PP frameworks, stakeholders participate in community based infrastructure projects through involvement in procurement planning, monitoring and evaluating project performance, risk management and policy making process.

1.2 Statement of the Problem

Public procurement is a fundamental, crucial component of democratic governance, poverty reduction, and sustainable development since Governments around the world spend an estimated US\$9.5 trillion in public contracts every year, which in many developing countries represents approximately 15-22 percent of GDP on areas such as building roads and power stations, to purchasing pharmaceuticals and securing trash-collection services, efficient use of public resources contributes to better delivery of services (World Bank, 2020). Developing countries face the highest challenges in achieving the SDGs due to their limited resources, (Santiago & Ralf Peters, 2020) as well their public procurement having been identified as the government activity most vulnerable to corruption (Gopakumar & Manolete, 2020).

The Constitution of Kenya 2010 paved way for devolution with intention to bring leadership close to the people (Transparency International Kenya, 2014). Public participation is one of the ways that the constitution has allowed the citizenry to engage the government. Citizens may participate in: the identification of community needs, development planning for the county; county budget preparation and validation; implementation of development projects at the local level and in the actual monitoring and evaluation of projects or programs being implemented through public funds in the county (GoK, 2010). A devolved Public procurement that embraces public participation can have a key role in: purchasing the goods, works and services which customers or residents demand; shaping relationships with the local business community; creating efficiency savings; supporting economic growth and development; and addressing wider societal challenges (Michael, 2013). Well established public participation structures ensure timely and accurate sharing of information across the county for the enhancement of transparency and accountability (Oduor, Wanjiru, & Kisamwa, 2015). A county shall deliver services while observing the principles of equity, efficiency, accessibility, nondiscrimination, transparency, and accountability, sharing of data and information, and subsidiarity (Lubale, 2012).

Currently there is no law to effect the constitutional provisions on public participation by public institutions other than a policy on the requirement developed by the Attorney General's office in September 2018 for taxpayer-funded bodies to follow, (Rogg Kenya, 2022). Given the large amounts of money involved in government procurement, it is in the citizens' interests that the procurement process promotes prudent use of resources, integrity and fairness, ensuring value for money in the acquisition of goods and services. In view of the above facts, it is clear that public participation may have far reaching benefits in ensuring transparency and accountability in procurement process and that most County Governments have not fully enjoyed the benefits the public participation brings with it, therefore the study intended to establish the influence of public participation in procurement process for sustainable project procurement in devolved systems of Government in Kenya to fill this gap.

1.3 Research Objectives

1.3.1 General objective

The general objective of the study was to establish the influence of public participation in procurement process for sustainable project procurement in devolved system of governments in Kenya.

1.3.2 Specific Objectives

- i. To evaluate the influence of Public Participation in Procurement Planning on Sustainable Project Procurement in devolved system of governments in Kenya.
- ii. To establish the influence of Public Participation in Risk Management on Sustainable Project Procurement in devolved system of governments in Kenya
- iii. To assess the influence of Public Participation in Contract Award and Management on Sustainable Project Procurement in devolved system of governments in Kenya

- iv. To determine the influence of Public Participation in Project Procurement Monitoring on Sustainable Project Procurement in devolved system of governments in Kenya

1.4 Research Hypotheses

- H0₁:** Public Participation in Procurement planning does not significantly influence sustainable procurement in devolved system of governments in Kenya.
- H0₂:** Public Participation in Risk management does not significantly influence sustainable procurement in devolved system of governments in Kenya
- H0₃:** Public Participation in Contract Award and management does not significantly influence sustainable procurement in devolved system of governments in Kenya
- H0₄:** Public Participation in Project Procurement Monitoring does not significantly influence sustainable procurement in devolved system of governments in Kenya.

1.5 Justification of the study

1.5.1 Policy Makers

The research will be of great help to the county government as it highlights the influence stakeholders may play to assist them on acquiring sustainable materials that will help to cut on cost and provide what the citizens in general need with minimal resistance. This will help the policy makers in making better future policies on improving public procurement and to make public procurement sustainable.

It will also assist the stakeholders in knowing the role they can play and how to play this role in ensuring sustainable procurement is enhanced resulting into achievement of value for money. This may be through understanding the role and responsibilities

of the various stakeholders, passing the right, adequate and timely information to the right recipients hence improving public procurement.

The research will also be of great importance to National Government of Kenya and policy makers as it will be able to highlight challenges county governments face in implementation of sustainable procurement igniting the laying down of policies that will assist in improvement of service delivery in county governments.

1.5.2 Academicians and Researchers

The research will also be of great help to academicians and researchers for it provides an insight and a better understanding of the subject matter. It also provides a basis and acts as a reference material for further research on related areas.

1.6 The Scope of the Study

The research intended to establish the influence public participation in procurement process has on sustainable procurement in South Eastern Economic Block (SEKEB) counties in Kenya which includes the counties of Machakos, Kitui and Makueni County Governments. The research collected information from those directly involved in public participation in the procurement process within the County Governments comprising of Public Participation Coordinators (PPCs), project coordinators (PCs), Procurement Officers (POs) and Project Management Committee members (PMCMs). The three counties form the proposed South Eastern Economic Block (SEKEB) where there was interaction and joint forums that addressed common issues affecting the three counties and more specifically sustainability issues given the counties are part of the semi-arid regions in Kenya with scarcity of resources. Their proximity to one another is also another advantage of carrying out the study in the counties for there is a high possibility of citizen interaction in different forums promoting the sharing of information more specifically on procurement governance issues.

1.7 Limitation of the Study

Community involvement has been viewed differently by different sectors. Further, the selection of those to be involved varies and its affected by several factors including and not limited to the good will of the leadership. In order to get the right information from the right people the study limited itself to the people who were directly involved in public participation in the procurement process within the County Governments comprising of Public Participation Coordinators (PPCs), project coordinators (PCs), Procurement Officers (POs) and Project Management Committee members (PMCMs). Public Procurement in Kenya is sensitive and raises eye brows on its mention and hence most respondents raised concern of the confidentiality of the information they were disclosing. The challenges were mitigated by use of permit from NACOSTI and the JKUAT BPS introduction letter as well as student identity card, which were attached to each questionnaire given. Respondents were also assured that all the collected data was only going to be used for academic purposes only. Time constraint was also another challenge especially when distributing questionnaires and hence the researcher purposed to limit the research within the three South Eastern counties in Kenya (Kitui, Machakos and Makueni).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter contains literature in relation to public participation and sustainable procurement under the following subtitles; theoretical review which discusses various theories in relation to public participation and sustainable procurement, conceptual framework which highlights the variables considered in the study then conceptualizes the variables in form of diagram showing the relationship of these variables, empirical review and lastly outlines the research gaps the study intended to address.

2.2 Theoretical Framework

2.2.1 Sustainable Development Theory

This theory by Worldwide Conference of Environmental Development (WCED, 2012), stipulates that organizations can only be declared sustainable if and only if the three aspects of sustainability notably environmental, economic and social are rightly balanced and integrated in the organizational processes together (procurement processes). Sustainable development theory highlights its efforts of sustainability to be economic growth, environmental protection and social aspects. This theory defines sustainable procurement as forms of progress that meet the needs of the present without compromising the ability of future generations to meet their needs. This definition of sustainability stresses the importance of future orientation as a basic requirement (UN, 2013). The concept of sustainability owes its origin to forestry and was originally used for the first time by the then mining governor Hans Carl von Carlowitz when he was referring to a situation of not cutting down more trees in a forest than can grow back (Brundtland & World Commission on Environment and Development, 1987). Brundtland Commission explained sustainability to be how biological systems remain diverse and productive giving examples of long-lived and healthy wetlands and forests for sustainable biological

systems. The commission further developed the sustainability concept to sustainable development which became one of the most successful approaches and concepts to be introduced in many years in the world. The commission defined sustainable development as “development which meets the needs of current generations without compromising the ability of future generations to meet their own needs”. This definition has as well been endorsed by the International Institute for Sustainable Development and many other authorities in sustainable development. The argument presented was that economic and social well-being cannot be improved with measures that destroy the environment and that all developments had to take into account their impact on the opportunities for the future generations. The focus on future impacts suggests prudent undertaking and use of natural resources and the environmental footprint. It can be acknowledged that the three aspects of sustainability if well balanced they will ensure minimal impact of the environment, quality goods/services and customer satisfaction hence organizations achieving competitive edge. Sustainable procurement sits under the umbrella of sustainability which refers to making decisions that maintain the right balance between the environment, society and economy to ensure long-term organizational success.

Given the roles of sustainable procurement in organizational performance, it is imperative that organizations start to view sustainable procurement(SP) as strategic in value and that SP will not only change the future of organizations but will also impact positively on the environment, economy and the society at large. To address sustainability issues, organizations need a big change in their culture by managing and seeking to improve environmental, social and economic performance throughout procurement process (sustainable balancing act), organizations act in their own interests, the interests of their stakeholders and the interests of society (employees and customers).

Since sustainable procurement is a component of the broad concept of sustainable development, although its focus is far wider than just the development as it also aims at meeting the varied needs of all people in the current as well as future communities, promoting personal wellbeing, social cohesion and inclusion, and creating equal opportunity. Sustainability in procurement is based on the sustainable development

theory of the Worldwide Conference of Environmental Development (WCED, 2012), which gained more prominence during RIO declaration in Brazil, 2012 and 3rd United Nation conference on environment and development in Johannesburg South Africa. This theory highlights the efforts of sustainability as economic growth, environmental protection and social equality. This effort forms the pillars/aspects of sustainable procurement practices.

2.2.2 Rational Choice theory

The theory was developed by William Riker, (1962) who applied economic and game-theoretic approaches to develop increasingly complex mathematical models of politics. He stated that rational choice theory identified or rediscovered at least two major explanatory factors that some political scientists had neglected: that politicians are endlessly opportunistic and that all decisions take place in some type of institutional setting. Rational choice theorists argued that political institutions structure the opportunities available to politicians and thus help to explain their actions. The theory was later applied in other fields to explain the need for maximization. Rational theories rest on the ideal of optimization where optimization means the calculation of the maximum (or minimum) of some variable across a number of alternatives or values, (Gigerenzer, 2001). This was further clarified by ((Jonathan & Paul, 2004) that rational choice is the process of determining what options are available and then choosing the most preferred one according to some consistent criterion. Steven Green (2002) explains that rational choice means only that an agent's choices reflect the most preferred feasible alternative implied by preferences that are complete and transitive. The rational choice theory informs on choosing on preference so as to maximize on the utilization of resources for the common good of "Mwananchi". The Constitution of Kenya, 2010 states that democracy is emphasized and in line with the spirit of devolved government and is geared towards common good for the majority citizens to foster growth bearing in mind the procedures and regulations provided for in the constitutions and government rules and regulation constraint the annual budget allocation (GoK, 2010).

In rational choice theories, individuals are seen as motivated by the wants or goals that express their 'preferences' and they act within specific, given constraints and on the basis of the information that they have about the conditions under which they are acting (Scott, 2000). This theory is applicable in the study since the requirement by the Kenyan constitution, 2010 calls for public participation in policy making and choice of projects to be undertaken by the county governments. These policies and projects must be written in consultation with members of public through public participation forums and the last decision reached based on such consultation since citizens are the key beneficiary of all activities to be carried out by these governments. The choices to be made should be based on preferences and choice of the members of the public which are intended to result to greater good to majority.

2.2.3 Stakeholder Theory

The stakeholder theory was by freeman in 1983 who states that all stakeholders are important for a corporation widening the focus to a more socially-conscious stakeholder management theory. According to Freeman (1994) stakeholder theory is articulated in two core questions, first, it asks, what is the purpose of the firm? This calls for managers to articulate the shared sense of the value they create, and what brings its core stakeholders together in order to push organization forward and generate outstanding performance. Secondly, stakeholder theory asks, what responsibility does management have to stakeholders? This pushes managers to articulate how they want to do business, the kinds of relationships they want and need to create with their stakeholders to deliver on their purpose. A stakeholder approach is very much concerned about active management of the business environment, relationships and the promotion of shared interests in order to develop business strategies (Fontaine, 2006). According to Davenport (2000) corporate social responsibility (CSR) is one area in which the stakeholder theory has been commonly applied because the changing nature of the business environment created a demand for firms to acknowledge their responsibility to a broader constituency than their shareholders/owners and to help solve important social problems especially those they have helped to create.

From an instrumental perspective firms that consider their stakeholders' interests are said to be more successful than those that do not (Wittke, 2014). The county government purpose is to deliver services to the citizens and are managed to ensure they establish good relationship with the members of the public who form the larger and more important part of their stakeholders. County Governments are established on the ground to serve the public better since they are at close range with them so their purpose is based on public service. According to Nwanji and Howel (2006) the major purpose of stakeholder theory is to help board of directors and managements understand their stakeholders' environments and manage more effectively within the terms of the relationships that exist for their companies. It is also the purpose of stakeholder theory to help directors and managers improve the value of the consequences of their actions, and minimize the harms to stakeholders. Relationships according to stakeholder thinking do not occur in a vacuum of dyadic ties, but as a network of influences involving multiple stakeholders (Rowley, 1997). This idea fits with the interest in boundary spanning and stakeholder networks that extends beyond the boundary of the firm, concerning '...any group or individual who can affect, or is affected by, the achievement of a corporation's purpose' (Freeman, 1984: p.vi). This concept also draws on the concept of 'stake-holding' in systems research as an approach that seeks to understand organizations from the perspective of social actors.

Consideration of stakeholders therefore forms an integral part of the industrial planning process and the 'sociology of technology' where achieving change in the supply chain is '...not simply a technical-rational process of "solving problems", it also involves economic and political processes in articulating interests, building alliances and struggling over outcomes' (Webster, 1995: p31). Freeman (1984) attributes the source of an increasingly turbulent business environment to a change in the relationship between internal stakeholders (i.e. owners, customers, employees and suppliers), and external stakeholders (i.e. governments, consumer advocates, environmentalists, special interest groups and the media). The diversity of ST and its facility for identifying and prioritising conflicting requirements has rejuvenated interest in the literature particularly in the context of the possibilities of collaborative implementation of sustainable supply chain scenarios (e.g. Matos & Hall, 2007; Darnall, 2008; Kovacs, 2008). According to Preuss (2009), public organizations must

collect and disseminate sustainability related information. Organizations with successful sustainability initiatives are likely to have a sustainable procurement policy (Thai, 2001) and will be providing good training to their procurement officers (Brammer & Walker, 2011). It is the requirement by the Kenyan constitution and other governments directives that the county governments to establish ways to work with the public formally or informally in areas of policy making, budgeting and planning among other areas. It is also necessary for County Governments to establish good relationship with these stakeholders by defining and assigning responsibilities to the County Governments officials and those that need to be undertaken by the citizens which is likely to help the county achieve on their mandate in timely and economic manner. Good relationship also may result to enriched ideas when making future decision as well as “buying out” the public to accept projects to be undertaken to reduce resistance that may delay development. Including all stakeholders in making decisions about sustainability initiatives can make the difference between success and failure mostly on areas of contract award and implementation of procurement of infrastructural projects.

2.2.4 Social Capital Theory

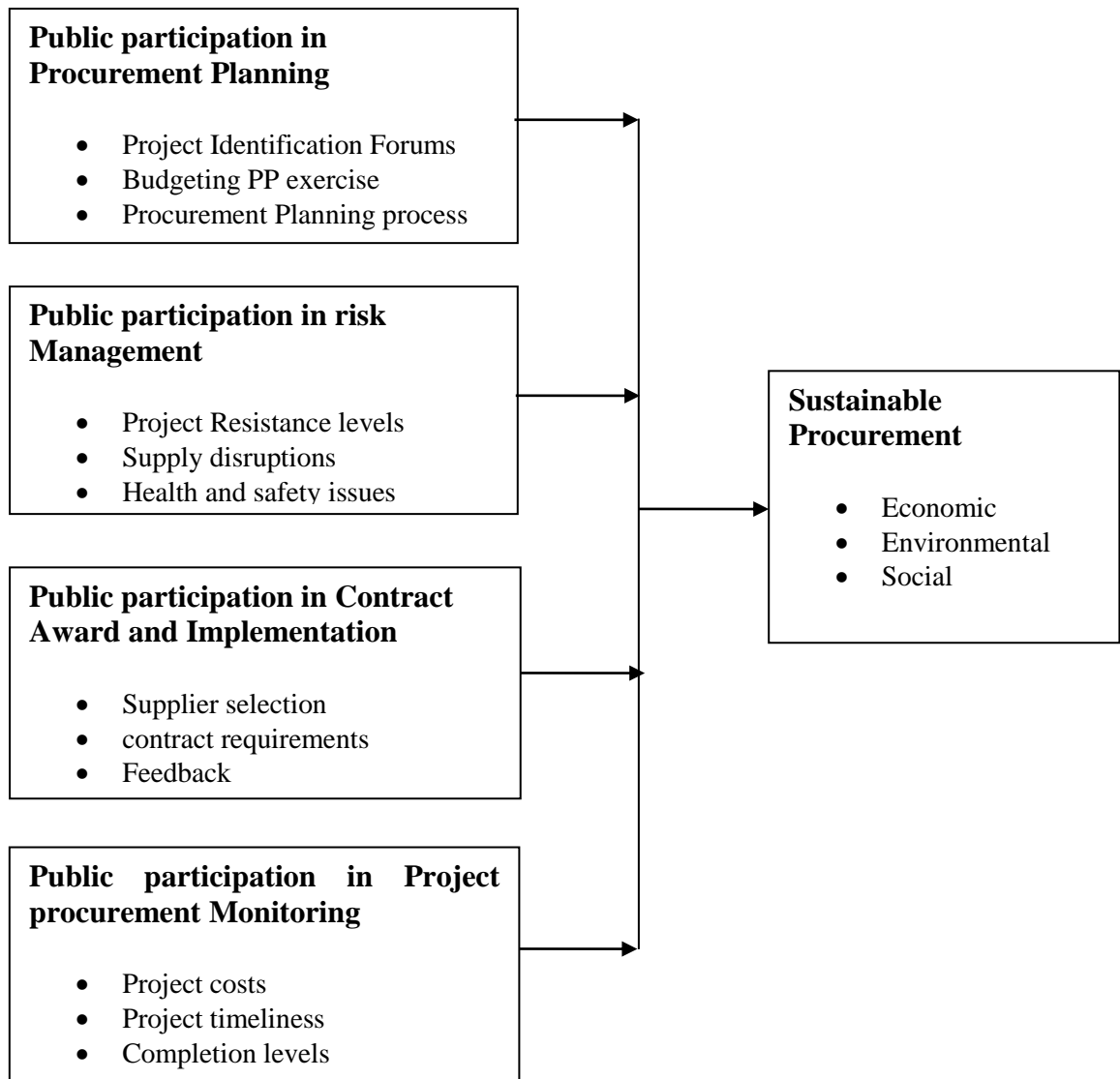
Ralph and Ozga (2005) define Social capital as the ‘social glue’ that holds people together in families and communities and gives them a sense of belonging in an increasingly fragmented and uncertain world. In regard to this the counties can achieve maximum benefits of the project it undertakes if people work together in regard to allocation and utilization of the resources they have. Social capital refers to resources, and the value of these resources, tangible (public spaces, private property) and intangible (“actors”, “human capital”, people), the relationships among these resources, and the impact that these relationships have on the resources involved in each relationship, and on larger groups. Coleman (1988) regards structures as resources which combined with other resources to produce different system-level behavior or, in other cases, outcomes for individuals. Hence, it is a form of capital that produces public goods for a common good. It is therefore clear that personal interest should not supersede community interest when it comes to allocation of resources and projects to be accomplished at the county levels so as to reduce

resistance and create sense of ownership of county projects by the community. It will therefore play a bigger role in passing and sharing of information, thus helping in managing most of the risks that are likely to be faced before, during and after implementation of the infrastructural projects

This theoretical framework is informed by the view that public participation will be strengthened in county government by making them informed of the resources at the disposal of their counties, their role and others in the distribution and usage of these resources and the impact their participation would have on well usage of these resources in order to attain common good for all either through formal or informal means. Foley and Edwards (1997) believe that political systems are important determinants of both the character of civil society and of the uses to which whatever social capital exists might be put. This will result to improved performance on all county government projects through enhanced supply chain relations and creator levels of ownership. Hence reducing chances of resistance and supply disruptions that are likely to delay or halt implementation of infrastructural projects.

2.3 Conceptual Framework

Shields and Rangarajan (2013) define a conceptual framework as the way ideas are organized to achieve a research project's purpose. A description of this framework contributes to a research report in at least two ways because it identifies research variables and clarifies relationships among the variables (William, 2001). Mugenda (2008) defines a variable as a measurable characteristic that assumes different values among units of specific population. The study involved independent variables and dependent variable. Mugenda (2012) explains that the independent variables are called predictor variables because they predict the amount of variation that occurs in another variable while dependent variable, also called criterion variable, is a variable that is influenced or changed by another variable. The study independent variable was public participation a composite of Procurement planning, risk management, contract management and monitoring and evaluation while the dependent variable was sustainable procurement as indicated in figure 2.1.



Independent variables

Dependent variable

Figure 2.1: Conceptual Framework

2.4 Review of Literature

2.4.1 Public Participation in Procurement Planning

Procurement planning is a process whereby professionals establish what needs to be procured (goods, services or works), when they need to be procured (contract

timeframes) and from what source (identifying suitable contractors and vendors). A procurement plan helps Procurement entities to achieve maximum value for expenditures and enables the entities to identify and address all relevant issues pertaining to a particular procurement before they can publicize their procurement notices to potential suppliers of goods, works and services (PPAD, 2015). Poor procurement planning has been one of the major stumbling blocks to the economic development of Africa and it has been clear that a number of African countries have not paid adequate attention to the proper management of public resources (Munyawera, Mulyungi & Ismail, 2018; Bianchi & Guidi, 2010)

State supply commission (2016) states that procurement planning and adoption of sound procurement practices lead to consistently better value for money; higher quality project and service delivery; reduced risks to the agency. Procurement planning and control helps organization achieve strategic performance (Jennifer & Ouma, 2014). Planning involves clearly formulating objectives of each intervention, describing how each intervention will meet the desired objectives, identifying the roles and responsibilities of the participants in the project, estimating which resources are needed, establishing a time frame and establish a monitoring and evaluation system, (Lefevre et al., 2000). According to State Supply Commission (2016) procurement planning involves consulting key stakeholders to define requirements, analyzing how the supply market works, assessing risks and ultimately defining the best procurement strategy to meet the agency's business needs. It further state that, planning and coordination provides the opportunity to establish a framework for cost minimization and certainty of delivery.

For effective and sustainable development to be realized, the community, which is the major beneficiary of the project, must participate through project implementation committees in, project planning and other aspects such as budgeting, resource identification, procurement and allocation of resources (Mulwa, 2008). New Zealand government (2014) effective procurement planning provides the following benefits; establishes evidence based, transparent decision making, provides a structured approach that allows key stakeholders to engage at the appropriate stages and influence the outcome, ensures sufficient research and analysis of the market and

makes government an informed, intelligent customer. Lack of proper planning through effective identification of user needs in an organization creates an avenue of unethical practices in procurement department such as corruption and improper use of resources, excess budget votes therefore integration of procurement planning into budgetary process is important in an institutional framework, (Munyawera, Mulyungi & Ismail, 2018).

It is the requirement by law that all public entities must prepare procurement plans at the start of the financial year and that no government procurement shall be undertaken unless it is in accordance with the approved annual procurement plan of the procuring entity (PPADA, 2015). AfriCOG (2015) states that according to the Auditor-General's 2014-2015 financial year report, most Counties have had adhoc, unplanned spending. It further asserts that the unplanned spending may indicate the total lack of procurement plans, or the ineffective use of existing procurement plans in anticipating all the activities to be undertaken. The success of a project will be enhanced if people with relevant knowledge and skills are involved at the beginning and throughout all processes (RDTL, 2011). (Apiyo & Mburu, 2014; Controller of Budgets (CB), 2013), noted that in Kenya, there is a conspicuous gap in procurement planning particularly in the newly developed County governments.

Sustainability considerations should be incorporated into significant procurement plans. The plan should document each element of the procurement planning process, including the demand and supply market analyses and the likely impact on the supply market (The State of Queensland, 2014). If solutions to community issues are identified and rectified by community developed remedies, ones that better understand the delicate intricacies of local issues, success and sustainability of community based projects are much more likely, (Easterly, 2006).

2.4.2 Public participation in Risk Management

Risk can be defined as the chance of loss or an unfavorable outcome associated with an action. Risk management is the process of identifying risk, assessing risk, and taking steps to reduce risk to an acceptable level. The risk management approach determines the processes, techniques, tools, and team roles and responsibilities for a

specific project. According to ISO 31000:2009, risks affecting organizations can have consequences in terms of economic performance and professional reputation, as well as environmental, safety and societal outcomes. Therefore, managing risk effectively helps organizations to perform well in an environment full of uncertainty. Risk occurs across the spectrum of government and its various enterprises, systems-of-systems, and individual systems (Katiba Institute, 2014).

Oracle (2015) states that maintaining an efficient, streamlined supply chain is becoming increasingly challenging due to growing scarcity of raw materials, rising energy prices, changing demand patterns and increasing costs of compliance. In the procurement guideline of World Bank (2019) it asserts that responding to increasing stakeholder expectations; it is important to take account of social responsibility and sustainability issues and this can be enhanced by using sustainable procurement approaches. Through sustainable sourcing processes organizations can improve supplier disclosure and risk management capabilities and support information exchange and verification. Monitoring suppliers' environmental, social and governance activities should be at the forefront of any risk and compliance management to avoid brand damage and consequent financial and compliance risk. As companies are facing increasing legislative pressure on how they manage their businesses and the impact of their operations on the environment, suppliers need to be ready and aware of all compliance requirements they face to eliminate or reduce the risk of supply chain disruption. Key issues that need to be addressed include forbidden substances, child labor, toxic substances, recycling, energy efficiency, traceability, and impact on local communities (Oracle, 2015).

The risks affecting the implementation of devolution in Kenya could be categorized as strategic, operational, institutional and funding. Strategic risks are perceived to be those that adversely affect the future shape and form of devolution in Kenya, especially in terms of their effect on the anticipated outcomes, in relation to the provisions of the Constitution. These include misinterpretation of the GoK 2010 provisions in relation to devolution, political posturing and the electioneering processes as well as inadequate stakeholder understanding of the provisions and implications on devolution. On the other hand, operational risks relate to those that

impact on the efficacy of the implementation of identified provisions in relation to the devolution processes. These include lack of capacity, poor public communication interventions, half-hearted implementation efforts and poor networks amongst key stakeholders (Bigambo, 2012).

According to CIPS and NIGP (2012) significant sustainability impacts should be identified and addressed as part of any comprehensive risk management strategy. Identified risks may include, but are not limited to legal risks, financial liabilities, moral/ethical risks, security of supply risks, price volatility risks and risks to reputation. HERAF, (2015) recognizes the risk of decentralizing corruption and impunity in counties unless urgent measures are put in place to safe guard against this from happening. Another greatest challenge that has emerged from the County government is poor management of county budgets. Reports from the controller of budget and auditor general have cast a gloomy picture on the way county governments are utilizing and accounting for the county budgets. In the Budget Implementation Review Report First Quarter (BIRRFQ), FY 2013 /2014, the controller of budget stated that while some Counties had well formulated and balanced budgets, others had deficits, unrealistic revenue estimates, or allocations to unauthorized items at the same time a total of Kshs. 27.1 billion of the total revenue available remained unspent. Encouraged by customers, shareholders and regulators, companies are striving to support sustainable procurement by conducting their activities to minimize negative impacts on the communities in which they operate, and on the environment.

2.4.3 Public Participation in Contract Award and Management

A procurement contract is a deal between a buyer and seller which states each individual's obligations, including the price, payment information, delivery, and other legal conditions. According to the government of South Africa(2020), Effective contract management: supports the achievement of value for money outcomes throughout the contact term, by ensuring that all parties to the contract meet or exceed their obligations in line with the contract performance measures, timeframes and expected deliverables by minimizing the risks to the public

authority, government and clients, holds the parties to the contract to account, prevents misunderstandings about the contract scope, promotes innovation and improvement in supplier performance; and assists in developing the capability of both the supplier and the public authority. Contract management is a multi-stage process that goes on through the entire duration of the contract and ensures that the parties meet their contractual obligations in order to deliver the specific objectives provided in the contract. Basingstoke and Deane (2013) define Contract management as the proactive monitoring, review and management of contractual terms secured through the procurement process to ensure that what is agreed is actually delivered by suppliers or partners. They further assert that effective contract management ensures strategic priorities agreed at the outset are delivered in a timely and cost effective manner, issues of non-compliance or variation are picked up early and either dealt with or appropriately escalated for resolution costs and risk are managed appropriately and reviews are undertaken and lessons learnt fed back into the commissioning and procurement process to ensure continuous improvement.

According to Steffen, Tampe, Georgi and Tina (2010) cost reduction, standardization and centralization, transparency and minimizing of risks are the key objectives of contract management. In short, Contract management includes ensuring compliance with the terms and conditions agreed and documenting and agreeing any changes or amendments that may arise during contract implementation or execution (Basingstoke & Dean, 2013). They noted that the vision of procurement and contract management is to ensure the delivery of best value, priority outcomes for the community through providing a strategic procurement and contract management function that is an exemplar of recognized good practice.

According to Esley (2007) new regulatory requirements, globalization, increases in contract volumes and complexity have resulted in an increasing recognition of the importance and benefits of effective contract management. He further asserts that a Successful contract management is most effective if upstream or pre-award activities are properly carried out. Motza and Conder (2012) noted that by improving drafting and management practices for vendor contracts, state and local governments can

ensure their continuing ability to provide all necessary and appropriate services to the public.

2.4.4 Public Participation in Project Procurement Monitoring

Monitoring is a continuing function that uses systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing project/ activity intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds, (OECD, 2017). Performance management is the continuous process of setting objectives, assessing progress and providing on-going coaching and feedback to ensure that employees are meeting their objectives and career goals (Lubale, 2012). It is the total system of gathering information on performance, Reviewing/evaluating performance against the set standards, providing feedback to the individual employees and storing information to improve institutional effectiveness (Lubale, 2012). Performance monitoring is essential throughout the life of the supply arrangement to ensure the supplier continues to perform according to the agreed terms and conditions of contract (The State of Queensland, 2014). Sound monitoring strategies are key to county government if they have to deliver on their mandates as well as bringing the sense of inclusivity in growth.

The purpose of performance management according to Lubale (2012) include; obtain better results from the organization, teams and individuals by understanding and managing performance within an agreed framework of planned goals, standards and competency requirements, establish shared understanding of what is to be achieved. Manage and develop people in a way that ensures that it will be achieved, align individual objectives to organizational objectives and ensure that individuals uphold corporate core values and act as a lever for change. Lawrence (2014) states that the evaluation or measurement of procurement performance has always been a vexing problem for procurement professionals.

Lubale (2012) explains that Result-Based Management (RBM) is the foundation of performance management in the public service whereby. RBM is defined as a participatory team-based approach designed to achieve defined results by improving

programme and management efficiency, effectiveness, accountability and transparency (RBM Guide, Kenya 2005). The performance management plans as provided for in Section 47 of the county government act is meant to facilitate the assessment of performance of the county public service and the implementation of county policies. The performance management plan provides the platform to match all performance contracting commitments to the indicators of development established in the other plans (Oduor, 2014).

For the purpose of ensuring comparability and standardization in public service in both the national and county government, it is recommended that performance of public agencies in both levels of government be measured in accordance with the following criteria categories; finance and stewardship, service delivery, nonfinancial, operations, dynamic/ qualitative, corruption eradication or government and national cohesion and national values (GoK, 2015).

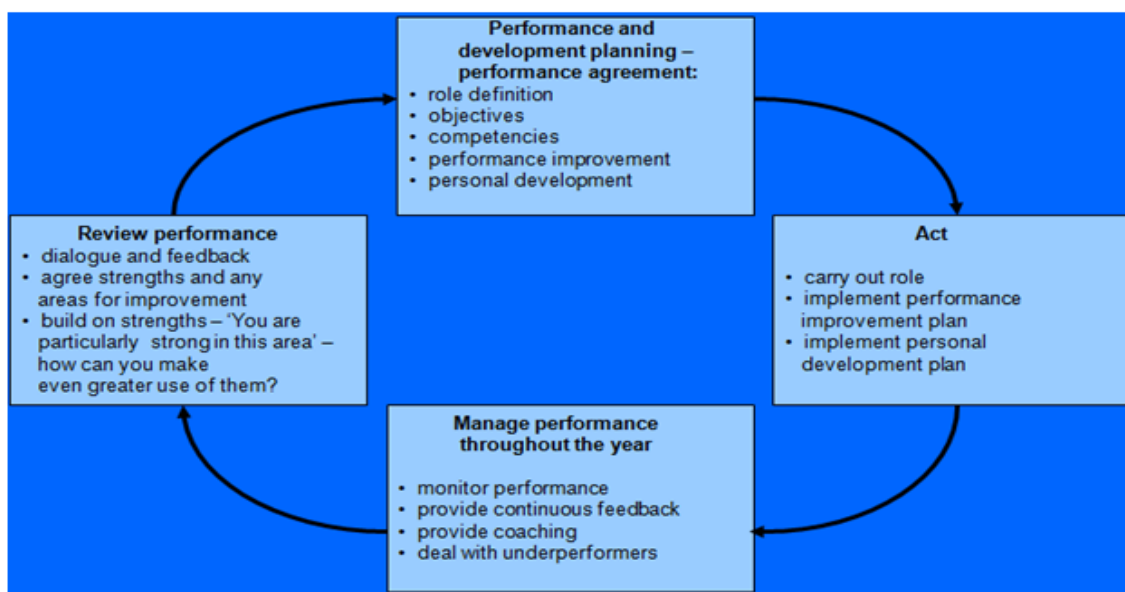


Figure 2.2: Performances Management Process

2.4.5 Sustainable Procurement

According to William (2007) the aim of sustainability from an organization’s perspective is the long-term wellbeing of the society as a whole as well as itself. Guidelines on sustainability encourage procurement to make decisions that

encompass the environmental, economic and social elements of the Triple Bottom Line (TBL) (Joanne & David, 2011). Sustainable Public Procurement is about spending public funds on products/services and projects that foster sustainable development. Sustainable procurement management is normally typified by commitments to: environmental sustainability which emphasizes the use of sustainable products and reducing resources use and social sustainability which strives to reflect local diversity in the workforce encouraging use of local suppliers and local labour (Samuel & Josphat, 2014). Hellen et al. (2009) explains that sustainability in procurement is ‘not about philanthropy, it is about cost reduction, risk reduction, building new opportunities and building stakeholder support. They continue to argue that sustainability is still a differentiator at present, but will be the license to operate in the future for organisations.

Rita (2012) states that transforming a public procurement system into a sustainable one is a complex task and represents a significant change which calls for the consideration of generic change management principles. This calls for integration of sustainability into other policy areas which is emphasized by the European Union (EU) Procurement directives which allow for sustainable procurement initiatives while also reinforcing the objective to obtain best value for money through a transparent and fair competitive process in line with the rules of the European single market. According to the directive best value for money means to get the best deal within the parameters set and this can include environmental and social considerations.

Acting fairly requires following the procurement laws as well as ensuring transparency and equal opportunities for bidders to compete for the contract (European Commission, 2004; European Commission, 2007; European Commission, 2010). Sustainable public procurement constitutes a significant lever for governments to accelerate the shift towards more sustainable consumption and production patterns, and more generally to contribute to the achievement of sustainable development goals (Marrakech, 2008).

The drivers of sustainable procurement are usually a combination of risk management with potential positive impact on corporate reputation and or ability to mitigate any regulatory non-compliance, potential resource depletion or disruption of supply, cost cutting via energy consumption reductions, reduction in the cost of recycling and packaging production and value creation through developing new green products and leveraging suppliers environmental innovation (HEC, 2009). Social aspect programs are inclined to the main actors (employees, customers and the community) who implement these activities. These activities often have benefits in terms of positive profile of customer and community support. Organizational leaders are increasingly being expected to ensure that their organizations behave as ‘good corporate citizens, not only at home, but in their dealings internationally (Brammer, 2012). However, this means that organizational leaders face tough decisions, including how to balance the interests of shareholders, and their expectations of high returns. In the sustainable concept, procurement professionals must take social responsibility purchasing (SRP) into account, along with other corporate considerations, such as ‘value for money’ and low cost sourcing, as well as consumer expectations of low prices. Delmas and Pekovic’s (2013) indicated that there was a considerable body of evidence that social interactions within organizations impact on organizational outcomes, such as engaging in sustainable procurement, this was based on an employer- employee survey of 5220 firms that revealed adoption of environmental standards, associated with increased employee training and interpersonal contacts, which was linked to improved labor productivity. Sammalisto and Brown (2012) acknowledged that empowering managers to change their perception is essential in implementing management systems which are in line with environmental aspect of sustainability

Various scholars have highlighted on organizational practices which tend to line with green practices. These green practices enable organizations achieve the environmental aspect of sustainability hence improving in performance. Zhu and Sarkis (2011) in their study acknowledged that organizations can improve environmental practices in organization if quality control is carried out continuously and mastering the art of quality management activities. Economic sustainability activities focus on business efficiency, productivity and profit. Public procurement

can be a lever to deliver broader government objectives, such as stimulating innovation in supply markets, using public money to support environmental, social and economic objectives and for supporting domestic markets (McCrudden, 2014). This forms the basis of integrating sustainability in the procurement processes to ensure the above objectives are achieved. From the reviews of the pillars of SP it can be asserted that each pillar plays a role in ensuring organizations achieve a competitive edge. Even though the three plays are key in sustainability, organizations tend to concentrate on economic and environmental pillar while ignoring the social aspect yet the pillar is key in balancing act of sustainability.

2.5 Empirical Review

2.5.1 Public participation in Procurement Planning

According to the constitution of Kenya 2010 planning for development priorities needs to be devolved to lower levels (wards and villages) to ensure representation. The County government officials including experts should only provide guidance and procedures to ensure law and policy guidelines are followed. Planners and participants can derive a number of tangible benefits from an effective public involvement process. However, the expectations of planners and the public must be roughly equivalent for the process to be effective (Bob, 2003). Benefits of citizen participation to the planning process include; information and ideas on public issues, public support for planning decisions, avoidance of protracted conflicts and costly delays, reservoir of good will which can carry over to future decisions; and Spirit of cooperation and trust between the agency and the public (Bob, 2003; Cogan & Sharp,1986).

Involving stakeholders with direct interest in the strategic planning process provides broad support to the strategic plan and serves as a guarantee for its successful implementation, as the ownership over the produced strategic plan is adopted by all the community members involved in the planning process (Cosma et al., 2015). Governments are increasingly becoming aware that public participation is not only beneficial to the public, but can go a long way in ensuring that the governments are seen as responsive to the public needs and improves the quality of public services

(Mchunu, 2012). Sustainable procurement is about taking social and environmental factors into consideration alongside financial factors in making procurement decisions. It involves looking beyond the traditional economic parameters and making decisions based on the whole life cost, the associated risks, measures of success and implications for society and the environment. Making decisions in this way requires setting procurement into the broader strategic context including value for money, performance management, corporate and community priorities (CIPS, 2014).

According to the Controller of budget; budget implementation review report first quarter, FY 2013 /2014, while some Counties had well formulated and balanced budgets, others had deficits, unrealistic revenue estimates, or allocations to unauthorized items. In addition, a total of Kshs. 27.1 billion of the total revenue available remained unspent. The low uptake of funds was assumably attributed to the failure of most Counties to meet the conditions for the release of funds as stipulated in the Public Finance Management (PFM) Act, 2012. One of these conditions is public involvement in specific budget phases which most counties had not complied. Most governments have moved from the incremental budgeting process to priority-driven budgeting process. Amann et al. (2013) surveyed 281 procurement files from 2007-2009 relating to eight product categories with the intention of establishing evidence of connections between sustainability policy goals included in public procurement tenders and offers and their achievement through contract award. They found out that public procurement was more effective at influencing socially responsible goals than environmental goals and that vendor are more progressed in delivering green than socially responsible operations. The research suggested to Public procurement practitioners and sustainability policy makers to consider the use of public procurements as a lever to attain environmental and socially responsible goals. They documented sufficient evidence that demonstrated the strategic use of public procurement impacts on environmental and socially responsible goals thereby benefiting society.

It is understood that the incorporation of citizen participation in public procurement allows for the generation of broader processes of government openness in decision-

making as to how public spending is used and allocated, as well as fostering processes of citizen monitoring, social oversight of government management and vertical public accountability (Zuleta, 2019) that would otherwise be extremely complicated to implement successfully. From its perspective, public procurement is a key pillar of strategic governance and service -managed public procurement can and should play a major role in recommendation document is based on twelve principles. The philosophy of priority-driven budgeting is that resources should be allocated according to how effectively a program or service achieves the goals and objectives that are of greatest value to the community (GFOA, 2011). These calls for engagement of outside help where needed to design the process, develop successful communication plans, incorporate citizen involvement, and institute a process. Civil society organizations need to play their oversight role in ensuring transparency and accountability in the budget making process. Even though this has greatly been impeded by inadequate knowledge and capacity on social accountability, key measures need to be put in place lest we decentralize corruption in the new structures (Heraf, 2014).

2.5.2 Public Participation in Contract Award and Implementation

OECD (2021) study on strengthening value for money in the public procurement system of the Slovak Republic: Towards a strategy to use adequate award criteria, acknowledged that the public procurement environment is a complex system of interconnected actors, where each has its own role in the system. They further stated that as public procurement involves using public funds, different bodies and actors can be involved in controlling the appropriate choice of award criteria. Therefore, a strategy aiming at enhancing the use of Most Economically Advantageous Tender (MEAT) criteria should build a consensus amongst the different actors involved as users, recipients and controllers. The study found out that public entities' were inexperienced in using public procurement to promote innovation and that public entities find pursuing this objective the most difficult, followed by the environment, responsible business conduct/ Social aspects and SMEs. The study recommended that for any procuring entity to achieve value for money communicating to the different stakeholders on the benefits of using MEAT criteria, including on the

achievement of broader policy objectives and understanding existing barriers, for instance by exploring the right balance between award criteria and tender requirements and also the need for developing the strategy using an inclusive approach by involving, procurement officials, oversight and control bodies, private sector representatives and line ministries. This is a clear indication that for any contract award and implementation to be effective and efficient there is need to have different players hence public participation is key.

Ahamed, (2016) in the study; Citizen Engagement in Public Procurement: Experience from pilot districts asserts that citizens are the direct beneficiaries of procurement output and that in order to provide better services for citizens, social accountability is instrumental in ensuring the effectiveness of the procurement process and strengthening both national and local government. Thus the procurement authority is responsible for taking care of public interest in service delivery, while considering transparency and accountability hence engaging citizens in the procurement process, especially in the implementation phase of procurement, is expected to ensure social accountability of public procurement activities. A contract must be well managed otherwise weak administration or management of procurement contracts is an invitation to corrupt practices (Centre for Governance and Development and national Taxpayers association, 2009). This implies need for better management of procurement contract otherwise a well established project may fail during the implementation process. The University's of Greenwich Procurement Policy (2009) statement states that working collaboratively with clients, providers and public bodies provides cost-effective procurement practices that achieve value for money expended on supplies, services and works and support the University's strategic objectives including corporate social responsibilities, primarily equalities and sustainability. It is clear that sustainability cannot be achieved by only one individual but requires consultation and involvement of those with interest in the project.

Esley (2017) in the CIPS contract management guide noted that it is vital that a contract management plan is drawn up in advance of contract award and should set out how the obligations of all the parties should be carried out effectively and

efficiently. This is an acknowledgement of key role played by different participants in contract management that assures the success of the process. Government of Kenya (2005) has advanced employment and social inclusiveness issues to be considered essential by the public entities who promote these priorities through their procurement processes. The Public Procurement and Disposal Act (Preference and Reservations) Regulations, 2011 reserving 30% of total value of public spend for the youth, women and people with disabilities to enhance access to public tenders by youth, women and people with disabilities owned business enterprises. Lemmet (2012) researching on social impacts of SP agrees that although the social component of sustainable development has often been considered as the most neglected one, the eight case studies she carried out indicated that a strong commitment from public purchasers to tackle social issues exist and that employment and social inclusiveness issues are considered essential by the public entities. She further argues that some of the social impacts are directly targeted by tenders, such as the participation of companies employing disabled persons

Tamara (2015) in their study on sustainability in Government Contract acknowledges that awarding government contracts is often non-competitive and notes that various collaborative efforts encompassing many elements ultimately influence decisions and outcome of contractual agreements. Meaning that contract administration and management calls for multi-stakeholder involvement to achieve the intended objectives. Concepts used to explain sustainable supply chain management will apply to explore sustainability factors facilitating successful performance in government contracting (Giunipero, Hooker, & Denslow, 2012; Tate, Ellram, & Dooley, 2012) which include Initiatives such as avoiding cost overruns through contract management through contractor performance (Tamara, 2015).

2.5.3 Public participation in Risk Management

OECD (2017) in their follow up report on Mexico's compranet reform; improving e-procurement through stakeholder engagement recognizes that countries are increasingly using public procurement as a strategic lever to achieve broader public policy objectives such as those related to sustainability, innovation, and social

objectives. They recommend that providing more information to stakeholders on public procurement processes can contribute to better market analysis, audits, and oversight of the system in general and can also help reduce integrity risks in public procurement processes. Therefore, right stakeholders with right knowledge and engaged at the right time will assist county governments to achieve development projects by reducing most risks that are likely to be faced before, during and after completion of these projects hence sustainability of the projects.

According to OECD (2017) in their publication; governance at glance 2017, acknowledges that infrastructure projects constitute a major mandate of governments in the delivery of key public services and have high and direct implications on a country's economic capacity, human development, social inclusion and environmental sustainability and that once a project is planned and financing schemes have been defined, it is critical that governments deliver infrastructure projects in a cost efficient way that is trusted by users and citizens to fulfil their mandate. It asserts that decisions on how to deliver infrastructure projects involve a close assessment and careful balancing between risk allocation and value for money. Hence the public procurement framework could help address risks of inefficiency and corruption that are often associated with procurement of major infrastructure projects due to their magnitude and complexity. Organizations should recognize the need to foster stakeholder goodwill and proactively and effectively address expectations and concerns in regard to sustainable procurement (CIPS & NIGP, 2012). There is need to encourage environmental impact assessments of products in the design stage and tailor policies to specific products and issues, drawing from a 'tool box' of measures which include voluntary agreements, taxes and subsidies (Mathew, 2012). The impact of any procurement process can only be felt directly by stakeholders who are likely to be affected or benefit from such a process. Therefore public procurement having to draw funds from taxes contributed by members of the public, there is need to give this public a chance starting from design stage up to when the goods have to be delivered for consumption since these are the people who will be able to determine sustainability of these processes.

Vincent and Abbie (2011) proposed that sustainable procurement practices necessitates the appropriate order in pursuit of procurement activities to match with policies and best practices as to first conform with and surpass all relevant legislation and regulatory requirements including environmental, social, health and safety policies. Secondly, it's to cut on environmental impact while maximizing economic and social advantage through entrenching appropriate sustainability standards within the procurement practice. Thirdly, come up with sustainable procurement awareness and skills amongst all stakeholders and further build a stronger base on policy and strategy understanding while stimulating sustainability in the market place, involving current and upcoming suppliers on best practice in sustainability along the supply chain. That is ensuring sustainability is the criteria in all phases of procurement through the integration of environmental, social and economic aspects in procuring supplies and services. In addition, assess the growth of sustainable procurement with a view to positive progress and work together with other organizations and to research best practice.

Goswami, Diljun, and Srivastava, (2013) in their policy brief of India, argue that public buying has been used as a medium to achieve various social objectives, such as, reducing unemployment, providing employment to disabled individuals, and to backward regions in the country, promoting gender and ethnic equality, etc. The focus has largely been on social aspects of sustainability. They advance that there is currently no public procurement law at the national level in India and that preference for certain kinds of products and services in the procurement process has therefore been introduced through policy measures and guidelines which are primarily department led and focus on promoting procurement from micro and small enterprises (MSEs) or give preference to indigenous procurement in the defense sector. Toolseeram (2012) in a study titled role of stakeholders in promoting sustainable Consumption and Production (SCP) and optimizing their participation acknowledges that SCP should be acknowledged by policy makers as a policy field in its own right, mainstreamed into all policy areas as a means of implementing sustainable development objectives. SCP should be embedded in an appropriate institutional framework and needs to be built from the national level. Its success will depend on the level of ownership from all stakeholders. The same as it is in

sustainable procurement it clearly indicates need for public participation to ensure all are part of the policy hence no resistance and will be an automatic obligation to support even in the implementation of the policy resulting to no resistance which may increase cost in terms of legal battles, increased cost for implementation, time

2.5.4 Public participation in Project Procurement Monitoring

According to Huang and Li (2020), research on Public Participation in Public Procurement states that Public participation can help alleviate government regulatory risks in public procurement by playing the role of external supervision to prevent the deviation of supervision objectives or lack of supervision in public procurement. They explain that the public promotes the effectiveness of public procurement supervision through complaints, reports, and information. Public agencies are increasingly using their purchasing power as a positive instrument to promote sustainable development and a green economy. Although governments have been developing and implementing sustainable procurement programmes for some years, a standardized and comprehensive methodology for measuring and communicating the benefits of these programmes remains elusive. Although the connection between sustainable public procurement (SPP) and environmental, economic, and social benefits appears to be possible, documenting and articulating those benefits is difficult. Quantitative models have been shown in recent literature to formalize stakeholder pressures and rewards for green or sustainable PM, as well as to measure sustainability progress (Brandenburg & Rebs, 2015). According to Bai and Sarkis (2010) environmental concerns of consumers, companies, and governments have increased in recent years. The evaluation methods used to measure the performance of sustainable supply chains help organizations choose the best investments in programs and initiatives to generate the best return and support the development of environmentally responsible suppliers. Focusing on procurement, Miemczyk et al. (2012) systematically review extant studies on the dyad, chain, and network levels and find that environmental sustainability in dyadic contexts prevails, thus pointing to the shortfalls of addressing social aspects and sustainability. Accordingly, some stakeholders should be formally recognized as potentially playing an integral role in monitoring, not solely as an external party applying pressure to improve.

Meixell and Luoma (2015) systematically review empirical studies on stakeholder pressures and found out that stakeholder pressure leads to increased sustainability orientation. Stakeholders are individuals or groups that can influence the achievement of a corporation's goals or that are affected by the company's performance (Freeman, 1984, 2010). In the context of SCM, stakeholders may be part of the considered SC (e.g., in the form of suppliers or customers) or, while being external actors, recognize the impact of the SC actors' performance. According to this distinction, stakeholders comprise primary stakeholders, such as customers and suppliers or employees and top managers, and secondary stakeholders, such as government and non-governmental organizations (NGOs), trade associations and competitors, or media and community (Meixell & Luoma, 2015). Besides economic objectives, stakeholder groups exert pressures on focal companies to enhance the sustainability performance of their SCs. Governmental pressures and incentives typically originate from local, national, and international regulations set by national governments or transnational regulatory bodies. The competitive advantage and reputation of a firm are influenced by external stakeholder groups that force companies to transparently monitor and control the sustainable SC performance (Seuring & Muller, 2008).

Studies have shown that firms can strategically choose stakeholder management tactics that can lead to gaps between actions and communications (Weaver et al., 1999), or between gathered information and disclosed information (Ball et al., 2000). Community involvement in sustainable procurement management can be viewed in terms of inclusivity, scope and disclosure. Given that inclusivity is viewed as foundational for building transparency between a focal firm and its stakeholders (Carter & Rogers, 2008; Edgley et al., 2010), the researcher proposes that inclusivity is intimately linked to scope and, indirectly, to final disclosure. This implies that there must exist a stakeholder feedback mechanism through which the community can propose areas of improvement and corrective measures within the project. The community provided feedback can be verified since studies have shown that firms can strategically choose stakeholder management tactics that can lead to gaps between actions and communications (Weaver et al., 1999), or between gathered information and disclosed information (Ball et al., 2000).

County governments should exhibit relational capabilities which include the ability to design contractual and informal mechanisms to share information, increase commitment, and generate common goals between different entities (Holcomb & Hitt, 2007). In the context of monitoring and evaluation, however, relational capabilities refer more specifically to ambidexterity in dealing with a variety of diverse stakeholder groups (Webb et al., 2010). In order to establish inclusive systems, county governments must be able to (i) identify individuals, groups or organizations exposed to supply chain externalities and categorize them according to their values and capabilities; (ii) establish two-way communication with them and foster lateral discussion to prioritize goals and design interventions; (iii) coordinate their work in the field for the achievement of common objectives (Adams & Evans, 2004; Perego & Kolk, 2012; Reed et al., 2009). Environmental and social accounting has recognized that multiple stakeholder groups have different competing interests (Edgley et al., 2010). Also, it has been debated that some stakeholders may be unwilling or unable to clearly articulate their expectations and informational needs beforehand, as these are context and situation specific (Hall & Vredenburg, 2003).

Engagement with some stakeholders can provide an early warning system for emerging sustainability risks, anticipating unexpected negative outcomes before they occur (Manetti & Toccafondi, 2012; Reed, 2008). According to Balch (2012) by increasing inclusivity, a focal firm can leverage the ability of some stakeholders to fulfill specific monitoring and evaluative tasks, thereby benefiting from reliable and relatively inexpensive information over wide supply chain operations. Although a community based monitoring and evaluation system might yield greater procurement efficiency, complex interactions make specific outcomes difficult to predict especially if some stakeholders lack sufficient expertise or knowledge to fully engage in highly technical issues (Edgley et al., 2010). Besides the importance of objective data from the M&E system, stakeholder theorists argue that a firm's success depends partly on conforming to the expectations and informational needs of stakeholders (Eisenhardt, 1989; Freeman, 1984; Mitchell et al., 1997).

A firm should concentrate its sustainable actions around issues and operations dictated by highly salient stakeholders, so as to reduce the imbalance or divergence

between “what a firm does” and “what a firm should do” according to the opinion of its diverse stakeholders (GonzálezBenito et al., 2011; Gray, 2013; Iansen-Rogers & Oelschlaegel, 2005). Some stakeholder groups have expectations about who should be consulted, and how a firm should account for its acts, omissions and risks (Adams & Evans, 2004; Gray, 2013; IansenRogers & Oelschlaegel, 2005). However, a wide variety of factors can potentially impede a firm’s willingness or efforts to increasingly align perceptions with expectations of stakeholder accountability. Limited firm capabilities and complex procurement structures might inhibit the development of M&E system, constraining any efforts to elevate perceived stakeholder accountability. For the case of county governments all efforts should be made to have a public-based M&E system in all their infrastructure projects so as to achieve sustainable procurement management in line with the constitution stipulates.

2.5.5 Public Participation in Procurement Process and Sustainable Procurement

According to UNEP (2021) study on Sustainable Public Procurement: How to Wake the Sleeping Giant; stated that sustainable development requires governments and organizations to consider the social, economic, and environmental aspects of their operations, with equal emphasis on all three dimensions and that the integration of sustainable development objectives into public procurement brings in the concept of Sustainable Public Procurement(SPP) which broadens the traditional procurement objectives on quality and cost to integrate value for money which consider the environmental and social implications or ‘externalities’ of purchase for society and the planet. They further acknowledge that SPP follows the essential elements of good public procurement; transparent, fair, non-discriminatory, competitive, accountable, efficient use of public funds, and verifiable while integrating the three dimensions of sustainable development: social, environmental, and economic. Further they state that SPP respects, considers, and responds to the interest of stakeholders involved in or impacted by the procurement activities including purchasing organizations, manufacturers, and the public, thus shared visions, inclusive solutions and targeted communication pave the way for stakeholder engagement.

As Huang and Li (2019) in their study; *Research on Public Participation in Public Procurement in the Context of Digital Economy*, acknowledges that the governance principles of public procurement include: Participation, Sustainable and green procurement, Transparency, Attributable Responsibility, fairness and efficiency. The study concludes that Public procurement requires transparent procedures to ensure public participation and respect public interests and that the government should strengthen performance evaluation centered on quality and safety, and make public satisfaction with public services or products an important criterion for performance evaluation. This indicates the need to have well representation of the members of the public in the projects procurement for sustainability of the infrastructural projects.

Kohen, wiek, kay and Harlow (2015) in their study entitled; *Aligning Public Participation to Stakeholders' Sustainability Literacy: A Case Study on Sustainable Urban Development in Phoenix, Arizona* stated that both sustainability science and urban planning literature identify public participation as an important decision making procedure. The study concluded that misalignments between the public participation process and local context, like low sustainability literacy of participating stakeholders, can undermine sustainability outcomes in public participation processes in urban development projects. The study recommended that facilitation and deliberation tools can improve discussions amongst members of the public. The study concentrated on ways to improve public participation in order to attain sustainability. Therefore it is true that well-structured public participation forums and well informed choice of the participants would go a long way helping in achieving sustainability of infrastructural projects.

Roos (2012) explains that in 2002, the World Summit on Sustainable Development acknowledged that public procurement can contribute to achieving sustainable development goals. In all countries, irrespective of their differences, local, regional and/or national authorities have in recent years made experimental use of public participation (EIPP, 2009). An efficient and effective public procurement is therefore essential to responding to the needs of the citizens, standing more and more as a key pillar of good governance and helping to restore trust in the public sector, (OECD, 2017). The (Gok, 2010) acknowledges the fact that public participation should be

enhanced in all government institutions undertaking to ensure accountability and equitable distribution of resources in order to uphold democracy. People's participation in development programs is not only affected by the environment in which participatory practices take place but also conditioned by the institutional framework, socio-economic as well as political backgrounds of the participant (Hussein, 2013).

In England, Lutz (2012) carried out a study to explore ways in which the local government authorities used their procurement function to foster sustainable development. The researcher reviewed existing literature using exploratory approach and the findings were: Local government had adopted wide range initiatives that address all three aspects of sustainability: Economic, Environmental and Social. They concluded that local government had managed to perform because the three aspects of sustainability were rightly balanced and other local governments are using England as a benchmark. This is a clear indication that sustainable procurement will only play its roles: cost reduction, minimal impact to the environment, quality and service delivery, in organization if the economic, environmental and social aspects sustainable are rightly balanced and integrated in the procurement process.

In Kenya Nyile and Ismail (2016) did a research on the role of sustainable procurement practices (SPP) in supply chain management performance in manufacturing sector (EAPCC). They applied stratified random sampling technique, data was classified, tabulated and summarized using descriptive measures and used Pearson correlation coefficient to establish the relationship between independent variables and dependent variable. The study findings indicated that 76% of supply chain performance of EAPCC was explained by four variables namely, green procurement, e-procurement, SCR and reverse logistics. Through these variables EAPCC has continued to be at the heart of Kenya's economic success story. They concluded that, there was a positive relationship between SPP and supply chain performance. From the above findings it can be explained that EACCP is enjoying the benefits of sustainable procurement because it has integrated the three aspects of sustainability: economic, environmental and social in their procurement processes.

In efforts towards building up a case for sustainable procurement UNEP (2012) highlights the development and implementation of sustainable public procurement policies in 17 to 20 countries in Europe, Southern cone, ASEAN countries and Africa have had an impact on sustainable development when the impacts of Sustainable Public Procurement policies measured on sustainable development. – Green Economy and market changes has had the following results; Institute of Electricity of Costa Rica, through SPP practices in tire management, it has achieved overall annual cost savings of 20%. Transport costs have decreased by a factor of 4, resulting in a reduction in emissions of 953 tonnes of CO₂ between 2008 and 2010. Further, the co-processing methods used for the end-of-life of tires have prevented 206.6 tons of waste, while increasing energy efficiency by 15.6%.

In Kenya, Waruguru, Muma, Mundia and Karuri (2015) carried out a comparative study on sustainable procurement practices in sisal processing firms: Nakuru County. The researchers established that the two firms: Athinai sisal estate and Lomolo estate had adopted similar SP practices, leading to cost reduction, minimal impact to environment and service delivery. The researchers recommended that, further studies should be carried out in other organizations to establish the role that SP plays in operations and other aspects of organizational performance. From the above findings it is clear that the three aspects sustainability were rightly balanced that's why ,the researchers recommended further studies over the same to validated their findings and establish whether SP plays the same roles across all organizations in an economy of a country. In Kenya, Nabiswa (2012) carried a research on green procurement practices in public sector and Ondieki (2012) carried out similar research in state corporations in Kenya, these researchers found out that, green procurement practices among public sector and state corporation were on the rise due to consumer awareness on green product through government policies which put emphasize on adopting these practice. From the findings of these researches it can be acknowledged that state corporation was implementing the environmental aspect of sustainability and economical aspect ,one aspect however was missing, the social aspects was not coming out strongly yet its key in implementation process.

Phusavat (2013) in the study of roles of public participation in developing and sustaining a networked government noted that for any public participation initiative to be successful the following as to be considered, the public must be aware of the impact of any activity they undertake, there must be continuous study and relevant information gathering and also the need to identify critical stakeholders. This suggests that most citizens are unlikely to participate in government projects as intended due to lack of information. It also worth noting that most county government based in rural areas are likely to be faced by ignorance and have high levels of illiteracy that calls for community sensitization and education.

According to Roos (2012), as a result of an increase in environmental, social, and economic problems in both developed and developing countries, Sustainable Public Procurement (SPP) is attracting a growing amount of attention. Government procurement accounts for about 15% of GDP in OECD countries and up to 25%-30% of GDP in developing countries, and governments are increasingly relying on it. It is evident that there is a growing need to involve members of public in key decision making mostly in regard to development projects by the county government and other government institutions, but the biggest question is to what extend and who should be involved so that the main objective is achieved without propelling personal interest at the same time ensuring its timeliness at minimal cost.

2.6 Critique of the Existing Literature

Although research has been documented, no studies have been undertaken in Kenya on the influence of public participation on sustainable procurement. However, Estomih and Namusonge (2015) in their study entitled governance factors affecting community participation in public development projects in Meru district in Arusha Tanzania found out that there exists greater benefits of community participation in government projects and also challenges of corruption and misuse of public resources that discourage community participation in the same projects. They recommended for adherences to good governance principles to encourage high levels of community participation. In the study their interest was on factors affecting public participation and highlighted challenges facing public participation hence did not

address the influence public participation plays in regard to procurement planning, contract management, risk management and project monitoring. Also their study did not address the relationship between public participation and sustainable procurement. It is also worth noting that their study was based in Arusha Tanzania and not in Kenya.

Nosiku and Lee (2013), in their study titled *Public Participation in Zambia* found out that there are opportunities for public participation within and outside government at various levels which include citizen be allowed to vote and hold leaders, Parliamentary Select Committees being open to public or expert submissions and Council meetings are open to the public, Sector specific initiatives also hold public meetings to create awareness and engage communities, Sector advisory groups and provincial and district development coordinating committees and there are community-based natural resource management boards which are platforms set up to strengthen public participation in public affairs. They also acknowledges challenges in public participation which include poor government structures to support public participation, lack of goodwill by politicians and concerned technocrats and no direct monetary benefits for those who participate. It is clear the study focused more on governance but not in relation to public procurement and also not based in Kenya.

Oduor, Wanjiru and Festus (2015) in their study, *Review of status of public participation, and county information dissemination frameworks; A case study of Isiolo, Kisumu, Makueni and Turkana Counties* realized that the county governments tried to put in place mechanism to encourage public participation though not able to realize the intended benefits since they were faced by challenges such as lack of goodwill, poor communication and dissemination of information among other challenges. The study emphasized on analyzing the status of public participation but not the role public participation would play in regard to sustainable procurement management.

In their research *Role of Sustainable Procurement Practices on Supply Chain Performance of the Manufacturing Sector in Kenya: A Case Study of East African Portland Cement Company (EAPCC)*, Nyile Erastus and Shale Noor (2016)

discovered that EACC had completely embraced sustainable procurement practices, which may explain why it has remained at the heart of Kenya's economic success story. They came to the conclusion that there is a connection between sustainable procurement practices and supply chain efficiency, and they advised businesses to prioritize sustainable procurement as a strategic value. As a result, the study stressed the importance of sustainable procurement practices in improving supply chain management in manufacturing firms. Thus the study did not address the influence of public participation on sustainable procurement.

Wamugu and Ogollah (2017) in their study; Role of stakeholders participation on the performance of constituency development fund projects in Mathira east constituency in Kenya argued that stakeholders participation is a powerful tool which should not be flouted but which must be prudently applied whenever a CDF project is being carried out since it enhances and augments the performance of CDF projects. They further indicated that constituency CDF board ought to ensure among others, that there are thorough participation by all stakeholders covering identification, screening and selection of the project for implementation. The study recommended that CDF management boards should strengthen stakeholder participation by removing the primary bottlenecks identified by the study- information asymmetry/lack of transparency, lack of clarity on stakeholder input and weak legal framework to support stakeholder participation. The study was limited to the performance of CDF projects and also did not address the procurement sustainability of these projects.

2.7 Research Gaps

From the reviewed literature, researchers have adequately described the need for public participation in government projects with most research focusing on methods of enhancing public participation and various opportunities available for public participation. Most of the research on public participation has been inclined to usage of target population as individuals ranging from members of public and opinion leaders then employ stratified sampling to select the sample size.

The current study sought to explore the influence of public participation in regard to sustainable procurement in the County Governments. It used target population of

individuals who are directly and extensively involved in specifically identified community development projects with sample size determined through stratified sampling technique. There is no evidence of study in Kenya addressing the influence of public participation on sustainable procurement in devolved system of government and hence a knowledge gap exists. Therefore, the study sought to bridge the scope, methodological and contextual gap by assessing the influence of public participation on sustainable procurement in devolved system of government in Kenya.

Most of the reviewed studies have also anchored their work on institutional and stakeholder theories while the current study adds sustainability development, social capital and rational decision theories. The inclusion of the theories helps the researcher to bring forth the concepts of sustainable procurement and public participation into play and how they related directly. The current study helped in filling the theoretical gap.

2.8 Summary

According to the reviewed studies, public participation is likely to result to greater benefits to the concerned institution. The biggest challenges are various mechanisms that institutions use to encourage the participation and also the good will by the concerned individuals. It is also clear that there exist many policies put forward to enable public participation including those at central government and also county government. In this regard a lot of emphasis has been put on the study of public participation in regard to governance and also regarding the status of public participation in different countries. Challenges for implementing SP have also been documented. These are: inherent conflicts between SP objective and other objectives (Cao, Yuying, & Fen, 2012); returns of adopting SP decisions (Quick wins) not being received by those that experience the additional cost (Belfitt et al., 2011); conflict of incentives (Morgan, 2010); resistance (Belfitt et al., 2011) ; absence of internal management structures (Mensah & Ameyaw, 2012) and lack of social drive especially by the private actors. (Helmsing & Knorringa, 2008).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter describes the research methodology of the study which explores on the research design, population, sample and sampling technique, research instruments, preliminary tests to be used to test validity and reliability of the instrument, test for model assumptions, hypothesis testing and methods used in the presentation and interpretation of collected and analyzed data.

3.2 Research Design

Research design is the master plan specifying the methods and procedures for collecting and analyzing the needed information (Kellen & Julius, 2014). A good design is one that minimizes biasness and maximizes the reliability of the data collected and analyzed. The study adopted descriptive research design. Kothari (2004) states that descriptive research studies are designed to obtain pertinent and precise information concerning the status of phenomena and whenever possible to draw valid general conclusions from the facts discovered. According to Kariuki (2016) descriptive research design is used to examine the relationships among variables (correlational). Correlational research is a form of descriptive research that attempts to establish the patterns of association among variables at a particular point in time without any manipulation based on the premise that if a statistically significant relationship exists between two variables, then it is possible to predict one variable using the information available on another variable (Mugenda, 2008; Mugenda & Mugenda, 2012; Kariuki, 2016; Mwende, 2016). The design was deemed appropriate since the study tried to relate the influence of stakeholders on key procurement activities and their effects on sustainable procurement.

Mwende (2016) in the study influence of community participation on performance of development projects in Makueni County used descriptive design. Hassan and Bori (2012) in their study the Determinants of community participation in government

funded projects in Mandera West constituency also used descriptive study. Given that these studies are related then it was appropriate for the study to adopt the descriptive design.

3.2.1 Research Philosophy

This study embraced the philosophical foundation of naturalist and positivist forms of inquiry, which are loosely referred to as the qualitative and quantitative methods respectively. These two approaches aim at building a body of scientific knowledge about phenomenon including casting that knowledge in form of verifiable theoretical frameworks. Positivism and naturalist paradigms are distinguished on the basis of four axioms namely; views about reality, cause and effect relationship between the inquirer and the object and views about knowledge and truth (Mugenda, 2003). The assumption of a single, tangible reality under the positivist paradigm gives rise to four basic purposes of research that include describing, predicting, controlling and explaining the phenomenon of interests. The study philosophy thus ensures the purpose of the research or study is clear on the description of the phenomenon being investigated. The philosophy also enables prediction. This is the ability to estimate phenomenon. This is what is referred to as correlation research. The study philosophy further enables control of phenomena. This is done by manipulating some part of the variables in order to exert control over another. Finally, the study philosophy enables explanation of phenomena. The explanations involve accurate observations and measurement of a given phenomenon.

3.3 Target Population

Population is the entire group of individuals or items under consideration in any field of inquiry and has a common attribute (Mugenda & Mugenda, 2003). Target population defines those units for which the findings of the study are meant to be generalized from (Lavrakas, 2007). Views on sustainability can be relative and varied from individual to individual, organization to organization, sector to sector and country to country (Walker & Phillips, 2009). The research collected information from those directly involved in public participation within the three counties of Makueni, Machakos and Kitui comprising of public participation coordinators

(PPCs), Project coordinators (PCs), procurement officers (PO) and Project management committee members (PMCMs). The 1146 are individuals who extensively participate in community-based infrastructure development projects.

Table 3.1: Target Population

Category	Makueni	Machakos	Kitui	Total
Public Participation	7	9	9	25
Coordinators				
Project Coordinators	30	40	40	110
Procurement officers	37	58	36	131
Project management committee members	300	280	300	880
Total	374	387	385	1146

3.4 Sample and Sampling Technique

A sample is some part of a larger body specially selected to represent the whole. Sampling is then taking any portion of a population or universe as representative of that population or universe. The researcher used stratified sampling method to obtain the study sample (Ali, 2014).

The sample size was determined using Slovin's formulae

$$n = N / (1 + Ne^2)$$

where

n = Number of samples,

N = Total population; in this case N = 1146

e = Error tolerance, 95% confidence level therefore e = 0.05

Hence

$$\begin{aligned} \text{Sample size} &= 1146 / (1 + 1146 * 0.05 * 0.05) \\ &= 297 \text{ Respondents} \end{aligned}$$

NB: The sample from each category was determined using proportionate percentage of each category to the total population sample i.e percentage of category total dividend by total population multiplied by sample size. For example, to obtain the number of Public Participation Coordinators in the sample of 297 respondents: 2.2% of 297= 6.47 approximately 6 PPCs

To obtain the sample of 297 respondents, 6PPCs, 29PCs, 34 POs and 228 projects committee members (either of chairman, Secretary or treasurer) are selected as indicated in table 3.2 below.

Table 3.2: Sample Size

Category	Population	% of Population	Sample
Public Participation Coordinators	25	2.2	6
Project Coordinators	110	9.6	29
Procurement officers	131	11.4	34
Project committee members	880	76.8	228
Total	1146	100	297

The sample per county from each category was determined using proportionate percentage of each category per county to the total population sample of the three counties i.e percentage of category total per county divided by total category sample for the three counties multiplied by category sample size. For example, to obtain the number of Public Participation Coordinators in Makueni county the sample of 6: (7/25*100% of 6%) = 1.68 approximately 2 PPCs, Machakos County (9/25*100% of 6%) = 2.16 approximately 2 PPCs and (9/25*100% of 6%) = 2.16 approximately 2 PPCs Kitui County respectively.

To obtain the sample of 297 respondents, 6 PPCs (2PPCs, 2PPCs and 2PPCs), 29PCs (8 PCs, 11PCs and 10Pcs), 34POs (10 POs, 15 POs and 9 POs) and 228 PMCMs (77, 73, and 78 PMCMs) from Makueni, Machakos and Kitui Counties respectively

Table 3.3: Sample Size Per County

Category		Makueni	Machakos	Kitui	Total Sample
Public	Participation	2	2	2	6
Coordinators					
Project Coordinators		8	11	10	29
Procurement officers		10	15	9	34
Project	management	77	73	78	228
committee members					
Total		97	101	99	297

3.5. Research instrument

A closed ended questionnaire was used which was subdivided into eight section in respect to the variables used.

3.6 Data Collection Procedure

The researcher used questionnaires for the respondents as the research instruments of data collection. This was to ensure adequate data is obtained from the respondents and their opinion was not limited. The questionnaire was divided into seven sections each of which was meant to get information about each of the study constructs. Project proposal approval was sought from JKUAT Board of Post Graduate Studies (BPS) after which a research permit was sought from National Council of Science and Technology Innovations (NACOSTI). Questionnaires were dropped and picked after two weeks. More time of one week was added to respondents who had not completed the exercise.

3.7 Pilot Study

To check the validity and reliability of the questionnaires in gathering the data required for purposes of the study, a pilot study was carried out. The purpose of pilot testing was to establish the accuracy and appropriateness of the research design and instrumentation (Saunders, Lewis & Thornhill, 2007). The importance of pilot testing cannot be overemphasized; “you will almost always find that there are questions that people fail to understand or interpret in different ways, places in the questionnaire where they are not sure where to go next, and questions that turn out simply not to elicit useful information” (Newing, 2011) Cooper and Schindler (2006) concur that the purpose of pilot test is to detect weaknesses in design and implementation and to provide proxy for data collection of a probability sample. Sekaran (2008) reinforces that pilot test is necessary for testing the reliability of instruments and the validity of a study. The size of a sample to be used for piloting testing varies depending on time, costs and practicality (Baker, 1988), but the same would tend to be 5- 10 per cent of the main survey, in fact the respondents in a pilot test do not have to be statistically selected when testing the validity and reliability of the instruments (Schindler, 2006).

In this study, the questionnaire was administered to 10% (30 respondents) of the sample to ensure that it was relevant and effective. These respondents were obtained from Embu County and hence did not form part of the final study sample so as to control response biasness. Cronbach’s alpha coefficient was generated to assess reliability. The closer Cronbach’s alpha coefficient is to 1, the higher the internal consistency reliability (Sekaran, 2003). A coefficient of 0.7 was found sufficient since it is recommended for a newly developed questionnaire.

3.7.1 Instrument Reliability

Mugenda and Mugenda (2003) define reliability as measure of degree to which a research instrument yields consistent results or data after repeated trials. The reliability of the researcher instrument was ascertained through the pilot study which was carried out in Embu county government. The pilot study tested whether the design of questions was logical, clear and easily understandable. It also tested whether the questions exhaustively responded to the objectives of the study.

3.7.2 Instrument Validity

Instrument validity according to Mugenda and Mugenda (2003) is the accuracy and meaningfulness of inferences based on research results. It is the ability of the instruments to measure what it purports to measure. To ensure validity the researcher pre-tested the data collection instrument by exposing it to the input of the study supervisors and an expert in public participation. The study tool was also classified into sections specifically dedicated to each of the study variables to ensure exhaustive coverage of each item. According to Kothari (2003) pre- testing is a pilot survey exercise to test a data collection tool aimed at bringing out any weakness of the tool before its actual application.

3.8 Data Analysis and Presentation

Data cleaning and editing was done by checking for incomplete information, where there was need a call or a second visit was done to clarify important information in the questionnaires and necessary corrections done. The data was then coded to enable meaningful analysis. Outliers were checked by examining the data based on the expected results to determine how good the data was. Analysis of data collected and the hypothesis testing was done using multiple regression analysis.

Pearson's correlation coefficient was used to determine the relationship between the independent variable and the dependent variable since it is used in bivariate relationships (Levin, Fox & Forde, 2010). According to Levin et al. (2010) likert scales are interval scales and where interval scales are used in a study, Pearson's correlation coefficient is the most appropriate tool for data analysis. The F-test was used to test hypothesis 1, 2, 3 and 4. Multivariate analysis was employed in the analysis of data. Multivariate analysis is a set of techniques applied to the analysis of data sets that comprise of many variables. It considers the linear effect of a combination of independent variables on a single dependent variable (Mugenda & Mugenda, 2012). The statistical package for social sciences (SPSS V24) was used to aid the statistical analysis of the data.

Data collected was generated by real happenings on the ground and therefore the data was likely to be far from perfect. As a result data was tested for multicollinearity. Multicollinearity occurs in multiple regression models in which some of the independent variables are significantly correlated among themselves (Hatekar, 2010; Mugenda & Mugenda, 2012). Multicollinearity was tested using the Variance Inflation Factor (VIF) which indicates whether a predictor has a strong linear relationship with the other predictor(s), with a value of 10 being a good value at which to worry (Field et al., 2012). This suggests that a value of 10 and above could suggest multicollinearity. According to Hatekar (2010), in case multicollinearity is detected, the problem is usually solved by use of extraneous information, that is, information obtained from outside the sample that is used for estimation purposes and is obtained from previous empirical work or institutional sources.

A multiple linear regression model was used to test the significance of the influence of the independent variables on the dependent variable. Multiple regression models basically reveal linear relationship between the predictors and the dependent variable. Many are the time when relationship exist but it may not be linear. If the independent variable is dichotomized, it is possible to fit in binary logistic Regression model which may reveal other relationships. The multiple linear regression model used was of the form;

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

Where: Y is the dependent variable, that is, Sustainable procurement

β_0 is the constant or intercept

$\beta_1 - \beta_4$ are the regression coefficients or change induced in Y by each X for X_i (i=1, 2, 3,4)

X_1 is Public participation in Procurement planning

X_2 is Public participation in Risk management

X_3 is Public participation in Contract award and Implementation

X_4 is Public participation in Project Procurement Monitoring

ε is the error term

3.9 Operationalization of study variables

Table 3.4: Operationalization of study variables

Type of Variable	Variable	Indicator
Dependent	Sustainable Procurement	Economic Environmental social
Independent	Procurement planning	project identification budgeting PP exercise procurement plans
	Risk management	Health and safety risks Supply disruptions Project resistance levels
	Contract award and Implementation	Supplier selection Contract requirements Feedback
	Project Procurement Monitoring	Project costs Project timeliness Completion levels

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter covers data analysis results and discussion of the study findings. It provides the findings of how public participation influences sustainable procurement at the county level. It begins with respondent's demographics, descriptive and inferential statistics of the study variables, diagnostic tests for regression model and testing of hypothesis.

4.2 Response Rate

The study had targeted a population of 297 drawn from a population of 1146 composed of public participation coordinators, project coordinators, procurement officers and project committee members from the counties of Makueni, Machakos and Kitui. A total of 290 questionnaires were completed and returned. According to Babbie (2004), a response rate of 50 percent is adequate, 60 percent is good, and 70 percent is really good, so this represents 97.6 percent response rate, which is appropriate for the study.

4.2.1 Pilot Study Results

Pilot study was conducted between 13th and 24th January 2020. The researcher administered questionnaires to thirty (30) respondents who had been purposively selected, which constituted 10% of the sample to ensure that it was relevant and effective. These respondents were obtained from Embu County government and hence did not form part of the final study sample so as to control response biasness. Cronbach's alpha coefficient was generated to assess reliability of the study tool.

The reliability of individual items was measured by examining the internal consistency values of the items on their corresponding constructs. Cronbach's Alpha (Cronbach, 1979) measure of internal consistency was computed to check the

consistency of construct items. Reliability was conducted on each scale of the constructs. The Cronbach's alpha value for the variables ranged from 0.871 to 0.910 as indicated in table 4.1. The overall Cronbach's alpha statistic attained of 0.964 was greater than the threshold of 0.7 hence all the retained scale items for the study variables were therefore maintained for further analysis for they had achieved the required thresholds for reliability. In general terms a Cronbach alpha of 0.8 is good, 0.7 is an acceptable range while if it is 0.6 and below, is poor (Sekaran, 2003). Therefore the study data collection tool was found to be reliable and fit for the actual study data collection.

Table 4.1: Reliability Analysis for Constructs

Construct	Cronbach's Alpha	No of Items	Decision
Public participation in Procurement Planning	0.878	4	Reliable
Public participation in Risk Management	0.871	4	Reliable
Public participation in Contract Award and Management	0.882	4	Reliable
Public participation in Project procurement Monitoring	0.910	4	Reliable
Overall	0.964	24	Reliable

4.3 Demographic Information

4.3.1 Distribution of the Respondents by Level of Education

On the distribution of the respondents by level of education, the study revealed that 37% of the respondents had university education, 11% had postgraduate education, 40% had college qualification and 12% had O/A level qualification. The findings were as presented in Figure 4.3.

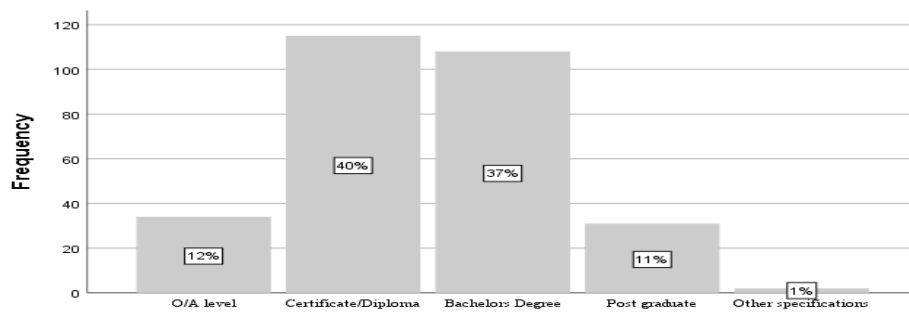


Figure 4.1: Distribution of Respondents by Level of Education

This is a clear indication that the population involved had majority of them beyond form four level. This means that the population easily understood the questionnaire and could give clear response. To the study, it is an indication of a group that is quite aware what is happening in the economic development and at the same time on the economic goal of sustainable development where sustainable procurement is drawn from.

4.3.2 Community Involvement in County Infrastructure Projects

The study sought to establish whether and how the County Governments informed members of the community on need for public participation in county infrastructure projects. Majority (96.6%) of the respondents agreed that the community is well involved in community infrastructural projects through different ways including town halls, websites, seminars and notice boards as shown on table 4.2. This is in line with Cogan et al. (1986) suggestion that "with few exceptions, a successful public involvement program incorporates several techniques notably publicity, public education, public input, public interaction and public partnerships. The results suggest that majority of the respondents had participated in public participation programs in any of the stated forms. They also seem to suggest that the county governments undertook public participation programs regularly and in different forms.

Majority of the respondents agreed that sensitization on infrastructure projects was done on regularly set schedules notably weekly, monthly and quarterly basis. Citizens have to be motivated to contribute their know-how, share their ideas, and

state their preferences. Citizens are the direct beneficiaries of procurement output. To provide better services for citizens, social accountability is instrumental in ensuring the effectiveness of the procurement process and strengthening both national and county government.

Table 4.2: Community Involvement in County Infrastructure Projects

Community involvement on county infrastructure projects	N	%	If Yes what ways	N	%	How regular is the sensitization above is done	N	%
Yes	280	96.6	Town hall meetings	36	12.9	Weekly	4	11.1
						Monthly	13	36.1
						Quarter yearly	17	47.2
						Any other	2	5.6
						Total	36	100.0
			Notice boards	59	21.1	Weekly	9	15.3
						Monthly	32	54.2
						Quarter yearly	18	30.5
						Total	59	100.0
			Development project sites	27	9.6	Weekly	12	44.4
						Monthly	11	40.7
						Quarter yearly	4	14.8
						Total	27	100.0
			Wards/sub-wards meeting	32	11.4	Monthly	10	31.3
						Quarter yearly	22	68.8
						Total	32	100.0
			Websites	2	0.7	Quarter yearly	2	100.0
			All	124	44.3	Weekly	13	10.5
						Monthly	60	48.4
						Quarter yearly	45	36.3
						Half yearly	3	2.4
						Yearly	3	2.4
						Total	124	100.0
No	10	3.45						

4.3.3 Community Awareness on Procurement Opportunities in the Counties.

When respondents were asked to indicate the level of awareness of the existence of procurement opportunities within their county, 76% of the respondents indicated that the community was aware of procurement opportunities with only 24% indicating a contrary opinion as indicated in figure 4.4. This shows that majority of the

communities' members are aware of the procurement opportunities hence have an opportunity to participate in this process. These results indicate that majority of the citizens are aware of their county government procurement activities due to existence of different public participation strategies. This is the case since citizens are the direct beneficiaries of procurement output and to provide better services for citizens, social accountability is instrumental in ensuring the effectiveness of the procurement process and strengthening both national and county government.

These findings are in line with Criado et al. (2013) who assert that nowadays we see an increasing number of governments on both the national and regional levels collaborating with externals, such as citizens, to stimulate social development by utilizing external knowledge. However, a necessary condition for collaborative value creation is citizen involvement (Voorberg et al., 2015), meaning it depends on citizens' willingness to interact with governmental institutions and provide input on the given task (Bekkers et al., 2013). Thus, the success of an open government approach is therefore influenced by the degree of public participation.

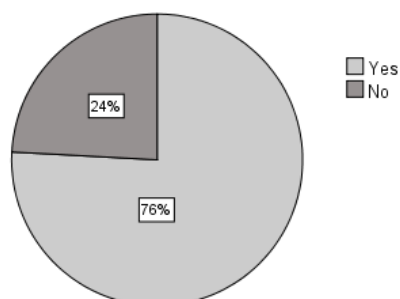


Figure 4.2: Community awareness of procurement opportunities in the County

4.4 Descriptive Analysis of Study Variables

4.4.1 Public Participation in Procurement Planning

The study sought to establish whether the county governments embraced public participation through the procurement planning process (project identification forums, budgeting exercise, procurement requirements) and sustainable procurement. The respondents were asked to rate the statements concerning Public Participation in Procurement Planning. The four items evaluating Public Participation in

Procurement Planning were rated on a five-point Likert type scale ranging from 1 representing "Not at all" to 5 designating "very large extent". Table 4.3 indicates that the item mean scale for Public Participation in Procurement Planning ranged from 3.11 to 3.73. This shows the respondents agreed with the statement slightly above moderate extent mark hence implying that the respondents believed that involvement of community in Project Procurement planning was done to reasonable extent.

The standard deviations of the Public Participation Procurement Planning process items ranged from 1.259 to 1.344. The low standard deviations implied that Public Participation in Procurement Planning item responses dispersed narrowly about the mean, implying low variations in the responses given by the respondents. The overall mean composite score for Public Participation in Procurement Planning process scale was (Mean=3.34, SD=1.30, n=290) which denoted a reasonably above moderate extent level of involvement of community in Procurement planning process by the study respondents.

The study results indicate that the public is involved in project identification, choice of procurement method, project scheduling as well as project materials requirement. This is an indicator that the community is involved in the procurement planning process. These findings are supported by Cooper (2005: 534) that Public participation is the process of engagement in governance, in which 'people participate together for deliberation and collective action within an array of interests, institutions and networks, developing civic identity, and involving people in governance processes. This is further supported by the fact that the devolved system of government, the County Government Act (Government of Kenya, 2012a), the Public Finance Management Act (Government of Kenya, 2012b), and the Urban Areas and Cities Act (Government of Kenya, 2011) have called for public participation in drafting new legislation, determining budget priorities, ensuring that public-sector performance and expenditures are reviewed and submitting grievances.

In addition, County governments have been tasked with ensuring that the public receives information for public participation, setting in place structures and mechanisms and guidelines for public participation, and also providing an annual

report on citizen participation to the County Assemblies. Public participation in Kenya’s devolved system of government has had its fair share of challenges, such as limited support from the political class and low levels of civic education (Kenya School of Government, 2015). However, there has been a success story in Makueni County, whose public participation model has been lauded by the World Bank (2016). In its model, the County has been able to have the citizens identify their development priorities at the grassroots level, with the citizens becoming involved in the prioritization, planning and setting of final expenditures for the identified projects.

Users are the start and end points of the procurement process. They are directly involved in a number of activities and decisions such as adequate definition of the user's requirements/needs relating to materials to be purchased for example; estimated requirements/quantities, specifications, identifying minimum and desirable elements and ensuring that there is adequate in consultation with users and their representative bodies (Scottish Police Authority, 2008). Furthermore, Procurement teams also have to be able to listen to the stakeholders whom they are engaging with, and then be ready to sell back ideas as a result of those conversations (Dressler, 2015). Korten (1990) asserts that authentic community participation enhances the sustainability of the community development projects and this can only be achieved through a people centered development.

Table 4.3: Descriptive statistics for public Participation in Procurement Planning

Procurement Planning	Mean	Std. Deviation
The community is involved in project identification	3.73	1.28
The community is involved in determining project procurement method	3.11	1.31
The county government involves the community in determining the project time schedule (time to start and end project)	3.31	1.26
The County Government involves community in determining the requirements of projects	3.20	1.34
Composite score	3.34	1.30

4.4.2 Public Participation in Risk Management

The study sought to establish whether the county governments had embraced public participation through risk management (resistance levels, supply disruptions, health and safety issues) in achieving sustainable procurement on community-based infrastructure projects. Respondents were asked to rate the statements concerning public participation in risk management. The four items evaluating public participation in risk management were rated on a five-point Likert type scale ranging from 1 representing "Not at all" to 5 designating "very large extent". Table 4.4 indicates that the item mean scale for public participation in risk management ranged from 3.20 to 3.91. This an indication that the respondents felt community is involved in risk management of infrastructural projects to a reasonably above moderate extent level.

The standard deviations of the public participation in risk management items ranged from 1.026 to 1.318. The low standard deviations implied that public participation in risk management item responses dispersed narrowly about the mean, implying low variations in the responses given by the respondents. The overall mean composite score for public participation in risk management scale was (Mean=3.50, SD=1.13, n=290) which denoted a reasonably above moderate extent level of involvement of community in Project risk management.

These results are supported by Mostert (2003) assertion that recent years have witnessed an increased understanding of the value brought about by the involvement of both institutional actors and lay citizens in public decision-making processes (Mostert, 2003). In very general terms, PP mostly aims at improving decision making by either enhancing the effectiveness of the decisions, or their legitimacy, or both (Newig, 2005). Through a stakeholder analysis, it is possible to assess the distinguishing features of different stakeholders. Stakeholders have knowledge, experience or aspirations due to the economic, social or cultural relationship that they have with the problem (Harrison et al., 2001). However, in order to ensure transparency and trust, justification of the prioritized stakeholders should also be made (EU, 2002; Videira et al., 2003). Further support to the findings is provided by

Beckley, Parkins and Shephard (2005) that effective public participation leads to avoidance of conflicts and delays, in turn results into information sharing and desired outcomes as well as lower operational costs.

Table 4.4: Descriptive Statistics for Public Participation in Risk Management

Risk Management	Mean	Std. Deviation
The community is made aware of the community infrastructural development projects to be undertaken in their areas	3.91	1.04
Community is regularly informed of the progress of community infrastructural projects	3.40	1.13
Complaints by the community on matters of project health and safety are acted on immediately on matters arising in the implementation of Community involvement	3.49	1.03
Community involved in projects supplies leads to less supply disruptions	3.20	1.32
Composite Score	3.50	1.13

4.4.3 Public Participation in Contract Award and Implementation

The respondents were asked to rate the statements concerning Public participation in contract Award and Implementation. The four items evaluating Public Participation in contract Award and Implementation were rated on a five point Likert type scale ranging from 1 representing "Not at all" to 5 designating "very large extent". Table 4.5 indicates that the item mean scale for Public Participation in contract Award and implementation ranged from 3.19 to 3.50. This implied that the respondents believed that involvement of community in contract award and implementation was done to slightly above moderate extent level. The standard deviations of the contract Award and Implementation items ranged from 1.118 to 1.279. The low standard deviations implied that Public Participation in contract Award and Implementation item responses dispersed narrowly about the mean, implying low variations in the responses given by the respondents. The overall mean composite score for the Public Participation in contract award and Implementation scale was (Mean=3.33,

SD=1.23, n=290) which denoted above moderate extent level of involvement of community in Project contract Award and Implementation by the study respondents.

The results indicate that the community is involved in contract management to a reasonable extent through; supplier identification, project negotiations, actual supplying of local available materials and ascertaining compliance to contractual terms and conditions by the contractors. These findings are in line with Ondieki (2011) that without the support of stakeholders, an organization ceases to exist. In this retrospect, many organizations, both public and private, source for ways and means to involve stakeholders in their operations. Further support from Bateman (2015) who states that user involvement in purchasing may create and maintain relationships with suppliers hence enhancing partnership between the organization and its stakeholders. Furthermore, Care (2015) states that user involvement in service selection may lead to greater satisfaction among the users, and improved quality of work, enhanced user friendliness and health responsiveness especially for people with disabilities who have had greater control in purchasing decisions when they are involved in purchasing decisions.

A participatory approach not only improves the success of the project but also makes projects more efficient and effective (McGee, 2002, p.95). Community participation in project implementation influences sustainability in several ways: it helps keep the project relevant and adapted to a changing situation; it makes use of a wider range of resources, skills and expertise and acknowledges and supports local capacities and expertise. The community is able to contribute labour and/or materials as well as financial resources for the project, (ALNAP, 2009). Involvement of people in project implementation and the utilization of local resources generate a sense of ownership over the development interventions by the local people, (Kumar, 2002).

Table 4.5: Descriptive Statistics for Contract Management

Public Participation in Contract Award and Implementation	Mean	Std. Deviation
The community is involved in supplier identification of community infrastructural projects by county government	3.50	1.28
community is involved in the negotiation with supplier for community development projects	3.19	1.26
Community involvement in supply of locally available materials during community infrastructural development projects	3.39	1.12
Community involvement in ensuring compliance with terms and condition of contracts in community infrastructural development projects	3.24	1.27
Composite score	3.33	1.23

4.4.4 Public Participation in Project Procurement Monitoring

The respondents were asked to rate the statements concerning project Monitoring. The four items evaluating project monitoring were rated on a five point likert type scale ranging from 1 representing "Not at all" to 5 designating "very large extent". Table 4.6 indicates that the item mean scale for project monitoring ranged from 3.09 to 3.72. This implied that the respondents believed that involvement of community in Project monitoring exhibited a reasonably above moderate extent level of involvement. The standard deviations of the project monitoring items ranged from 1.208 to 1.318. The low standard deviations implied that the Monitoring item responses dispersed narrowly about the mean, implying low variations in the responses given by the respondents. The overall mean composite score for the project Monitoring scale was (Mean=3.40, SD=1.26, n=290) which denoted a slightly above moderate extent level of involvement of community in project monitoring by the study respondents.

The results indicate that the public is involved in project monitoring of community-based infrastructure projects suggesting improvements to areas not well done. The findings are in line with the World Bank (2004) that participatory methods provide active involvement in decision making for those with a stake in a project,

programme, or strategy, and generate a sense of ownership in the Monitoring results and recommendations. Further support comes from Karani, and Kamau (2014) who state that development practitioners are prioritizing M&E as a platform for learning and accountability. Valadez and Bamberger (2004) further state that monitoring is more of a programme activity, whose role is to determine whether project activities are implemented as planned. If, to the contrary, it determines the cause of the anomaly and what can be done to address the anomaly. The research findings are consistent with Helen (2010); Belfit et al. (2011) and McCrudden (2004) whose arguments support that the government has the biggest role to play in implementing sustainable procurement practices in both private and public sector through regulating the environment. Moreover, DuberSmith (2005), Stevels (2002) and Gunther (2006) supported efficiency, competitiveness and reduction of cost as drivers of sustainable procurement. Their findings are comparable to the findings of this study which consider reduction of services/products costs and operational cost savings as major drivers of sustainable procurement. However, contrary to Jonas and Tom (2014) study which showed that strong media attention and growing awareness among customers greatly influenced the need for sustainability procurement, this study found out that increased activism from NGO's and social media had no influence on the need for implementation of sustainable procurement.

Participatory M&E is a process through which stakeholders at various levels engage in monitoring or evaluating a particular project, program or policy, share control over the content, the process and the results of M&E activity and engage in taking or identifying corrective actions, (Philip et al., 2008). According to the World Bank (2010), community participation in M&E is critical in project sustainability since: it offers new ways of assessing and learning from change that are more inclusive and more responsive to the needs and aspirations of those most directly affected; is geared towards not only measuring the effectiveness of a project, but also towards building ownership, empowering beneficiaries, building accountability and transparency and taking corrective actions to improve performance and outcomes. Participation in M&E has much less meaning if population members and local stakeholders have not been involved much earlier in the project cycle, (ALNAP, 2009).

The findings of this study are in harmony with Vincent and Abbie (2011) argument that sustainable procurement practices should match with policies and best practices laid down by organizations. First conform with and surpass all relevant legislation and regulatory requirements including environmental, social, health and safety policies. Secondly, it's to cut on environmental impact while maximizing economic and social advantage through entrenching appropriate sustainability standards within the procurement practice. Besides economic objectives, stakeholder groups exert pressures on focal companies to enhance the sustainability performance of their Supply chains. Governmental pressures and incentives typically originate from local, national, and international regulations set by national governments or transnational regulatory bodies. The competitive advantage and reputation of a firm are influenced by external stakeholder groups that force companies to transparently monitor and control the sustainable Supply chains performance (Seuring & Muller, 2008).

Table 4.6: Descriptive Statistics for Public Participation in Project Procurement Monitoring

Project Monitoring	Mean	Std. Deviation
Community is involved in monitoring implementation process of community infrastructural projects	3.72	1.29
Community is allowed to raise concerns on areas they think are not properly done during project implementation process	3.37	1.21
Community can suggest areas of improvement during project implementation process	3.40	1.24
Community is involvement in monitoring of performance of community infrastructural projects	3.09	1.32
Composite score	3.40	1.26

4.5 Diagnostics Tests

The study adopted linear regression model to establish the extent to which public participation parameters influenced sustainable procurement and hence the need to carry out diagnostic tests to determine the fitness of the model before its use. Linear

regression analysis is a powerful statistical model when estimated correctly. The model predicts the dependent variable by seeking patterns exhibited by the independent variable. Linear regression requires assumptions to be done on the data in order for the model to remain appropriate in prediction of the data (Hayes, 2015). The section provides various diagnostic tests done on the data prior to estimation of the regression model. Multicollinearity, normality, heteroscedasticity and linearity test were performed to facilitate data analysis.

4.5.1 Multicollinearity test

Multicollinearity was performed on the data by examining variance inflation factor (VIF) and assessing the tolerance ratio (1/VIF). Independent variables are considered collinear if the value of VIF exceeds 3 (Schwarz, Schwarz and black, 2014). VIF values ranged from 1.546 to 1.924 implying that multicollinearity was not a problem in the data as indicated in Table 4.7.

Table 4.7: Test of Multicollinearity

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
Public participation in Procurement planning	0.561	1.781
Public participation in Risk management	0.520	1.924
Public participation in Contract Award and Implementation	0.647	1.546
Public participation in Project Procurement Monitoring	0.563	1.777

a. Dependent Variable: Sustainable procurement

4.5.2 Normality Test

Normality is assessed by examining whether the residuals follow a normal distribution (Kline, 2010). The test statistic of the regression model needs to follow a manageable probability distribution typically the normal distribution. Normal QQ plots were plotted to identify the distribution of the error terms of the model. The

graphical analysis results showed the line representing the actual data distribution closely follow the diagonal in the normal Q-Q plot as shown in figures 4.5 to 4.9, suggesting normal distribution (Hair, Tatham, Anderson & Black, 2006).

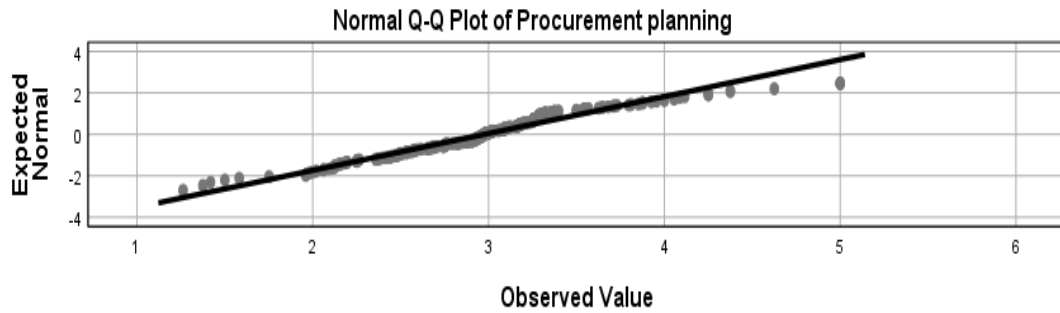


Figure 4.3: Normal Q-Q plot of Public Participation in Procurement planning

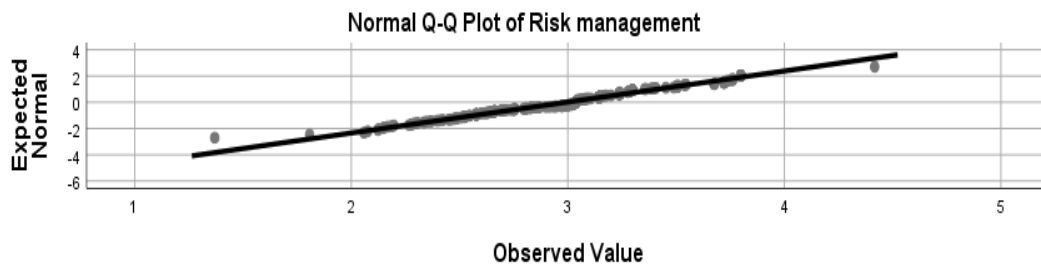


Figure 4.4: Normal Q-Q plot of Public Participation in Risk management

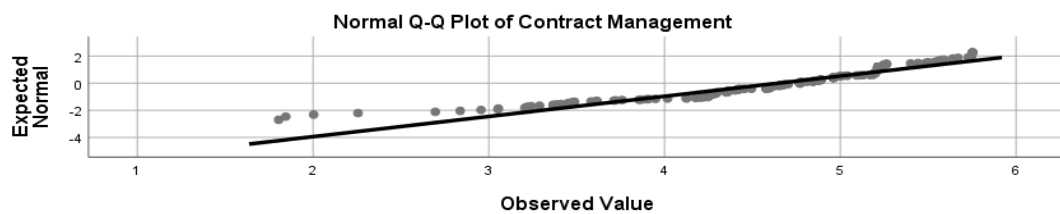


Figure 4.5: Normal Q-Q plot of Public Participation in Contract Award and Implementation

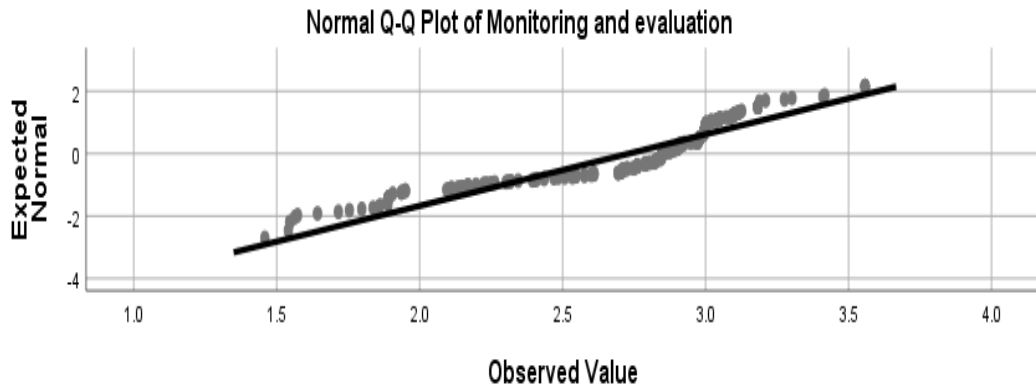


Figure 4.6: Normal Q-Q plot of Public Participation in Project Procurement monitoring

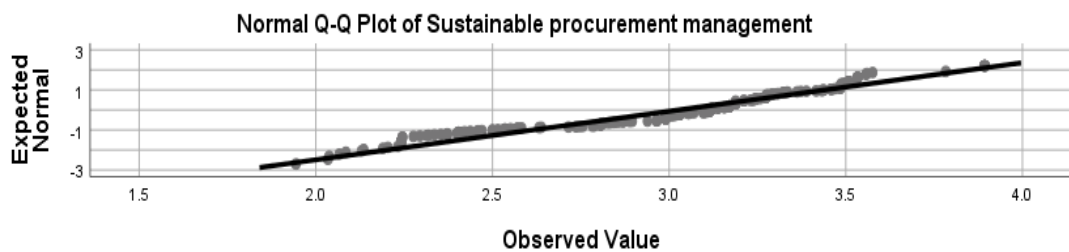


Figure 4.7: Normal Q-Q plot of sustainable procurement

4.5.3 Test for Normality using Shaphiro-Wilk Test

Shaphiro wilk test is a robust test for normality that generates a P value that indicates whether the probability estimation follows normal distribution. Shaphiro wilk test is performed on all the predictors and the dependent constructs. The test concluded that data is normal if the p-value are not less than 0.05 (Shapiro & Wilk, 1965). Table 4.8 Indicates that the significance levels of all the variables were more than .05, which is a clear indication that all the variables were normally distributed and therefore other statistical analysis would be carried out on the data.

Table 4.8: Shaphiro-Wilk Test

Variables	Shaphiro-Wilk		
	Statistic	df	Sig.
Public Participation in Procurement Planning	0.997	290	0.869
Public Participation in Risk management	0.991	290	0.073
Public Participation in Contract Award and Implementation	0.994	290	0.307
Public Participation in Project Procurement Monitoring	0.996	290	0.672
Sustainable Procurement	0.993	290	0.193

a. Lilliefors Significance Correction

4.5.4 Heteroscedasticity Test

Heteroscedasticity occurs when the variance of the errors varies across observations resulting in unbiased ordinary Least Square (OLS) estimator and therefore becomes inefficient (long and Ervin, 2000). The study used Breusch-Pagan and Koenker test to estimate heteroscedasticity. Breusch-Pagan and Koenker tests the null hypothesis that the variances of the error terms are constant. The test rejects the null hypothesis when the significant value is less than 5% (Daryanto, 2013). Table 4. 4 Displays the results of Breusch-Pagan and Koenker test. Table 4.9 Presents significant values more than 5% indicating that heteroscedasticity was not a problem.

Table 4.9: Breusch-Pagan and Koenker Test Statistics and Sig-values

Tests	LM	Sig
BP	2.151	.142
Koenker	1.860	.173

4.5.5 Linearity Test

Linearity of the regression model tests the consistency of the gradient that represents the relationship between the response and predictor variables. If the slope of change in the relationship between the variables is fickle then it is difficult to carry out regression analysis on the study data (Tabachnick & Fidell, 2013). Testing for linearity can be done in a number of methods, yet the easiest is the deviation from linearity test performed by ANOVA. The test indicates that the variables are not linear if the significant value for deviation from linearity is less than 0.05 (Meyers, Gamst, & Guarino, 2013).

Test for linearity for the relationship between Public participation in Procurement planning and Sustainable procurement

The ANOVA table 4.10 contains tests for the linear, nonlinear, and combined relationship between Public Participation in Procurement planning and Sustainable procurement. The test for linearity has a significance F value smaller than 0.05 ($F=535.787$, $P<0.05$), indicating that there is a linear relationship between Public Participation in Procurement planning and Sustainable procurement. The test for deviation from linearity (nonlinear) has insignificance F value, ($F=1.173$, $P=0.198$) which means that there is no nonlinear relationship in addition to the linear component.

Table 4.10: Test for linearity for the relationship between Public Participation in Procurement planning and Sustainable procurement

			Sum of		Mean		
			Squares	Df	Square	F	Sig.
Sustainable procurement * Public Participation in Procurement planning	Between Groups	(Combined)	30.637	201	0.152	3.833	0.000
		Linearity	21.308	1	21.308	535.787	0.000
		Deviation from Linearity	9.329	200	0.047	1.173	0.198
	Within Groups		3.500	88	0.040		
	Total		34.137	289			

Test for linearity for the relationship between Public participation and Risk management and Sustainable procurement

The ANOVA table 4.11 contains tests for the linear, nonlinear, and combined relationship between Public Participation in Risk management and Sustainable procurement. The test for linearity has a significance F value smaller than 0.05 (F=1128.678, P<0.05), indicating that there is a linear relationship between Public Participation in Risk management and Sustainable procurement. The test for deviation from linearity (nonlinear) has insignificance F value, (F=1.063, P=0.355) which means that there is no nonlinear relationship in addition to the linear component.

Table 4.11: Test for linearity for the relationship between Public Participation in Risk management and Sustainable procurement

			Sum of Squares	df	Mean Square	F	Sig.
Sustainable procurement management * Public Participation in Risk management	Between Groups	(Combined) Linearity	25.803	126	0.205	10.012	0.000
		Linearity	23.085	1	23.085	1128.678	0.000
		Deviation from Linearity	2.718	125	0.022	1.063	0.355
	Within Groups		3.334	163	0.020		
	Total		29.137	289			

Test for linearity for the relationship between Contract Award and Implementation and Sustainable procurement

The ANOVA table 4.12 contains tests for the linear, nonlinear, and combined relationship between Public Participation in Contract Award and Implementation and Sustainable procurement. The test for linearity has a significance F value smaller than 0.05 (F=2500.026, P<0.05), indicating that there is a linear relationship between Public participation in Contract award and implementation and Sustainable procurement. The test for deviation from linearity (nonlinear) has insignificance F

value, (F=1.085, P=0.311) which means that there is no nonlinear relationship in addition to the linear component.

Table 4.12: Test for linearity for the relationship between Public Participation in Contract Award and Implementation and Sustainable procurement

			Sum of		Mean		
			Squares	df	Square	F	Sig.
Sustainable procurement*	Between Groups	(Combined) Linearity	17.009	115	0.148	22.815	0.000
Public Participation in Contract Award and management		Deviation from Linearity	16.207	1	16.207	2500.026	0.000
			0.802	114	0.007	1.085	0.311
	Within Groups		1.128	174	0.006		
	Total		18.137	289			

Test for linearity for the relationship between Public Participation in Project Procurement Monitoring and Sustainable procurement

The ANOVA table 4.13 contains tests for the linear, nonlinear, and combined relationship between Public Participation in Project Monitoring Procurement and Sustainable procurement. The test for linearity has a significance F value smaller than 0.05 (F=1964.241, P<0.05), indicating that there is a linear relationship between Project Procurement Monitoring and Sustainable procurement. The test for deviation from linearity (nonlinear) has insignificance F value, (F=0.908, P=0.710) which means that there is no nonlinear relationship in addition to the linear component.

Table 4.13: Test for linearity for the relationship between Public Participation in Project Procurement Monitoring and Sustainable Procurement

			Sum of		Mean		
			Squares	df	Square	F	Sig.
Sustainable procurement * Project Monitoring	Between	(Combined)	33.348	116	0.287	17.833	0.000
	Groups	Linearity	31.665	1	31.665	1964.241	0.000
		Deviation	1.683	115	0.015	0.908	0.710
		from Linearity					
	Within	Groups	2.789	173	0.016		
	Total		36.137	289			

4.5.6 Correlation Analysis

Correlation was used to explore the relationship among the independent variables and in turn assist in testing for multicollinearity. A correlation of above 0.90 is a strong indication that the variables may be measuring the same thing (Tabachnick & Fidell, 2013). Table 4.14 presents the correlation coefficients between study variables. The highest correlation coefficient in the study was between public participation in Project procurement Monitoring and Sustainable procurement ($r=0.803$, $p<0.05$). The correlation between public participation in Procurement planning and Sustainable procurement was positive and significant ($r=0.659$, $p<0.05$). Public Participation in Risk management was positively and significantly related to Sustainable procurement ($r=0.685$, $p<0.05$) and Public Participation in Contract Award and implementation was positively and significantly related to Sustainable procurement ($r=0.574$, $p<0.05$). The study found out that all the correlations were less than 0.90 implying that the variables were sufficiently different measures of separate variables and consequently the all the variables were utilized in the study.

Table 4.14: Correlation Analysis for Variables

variables		Sustainable procurement	Public participation in Procurement planning	Public participation in Risk Management	Public participation in Contract award and Implementation	Public participation in Project Procurement Monitoring
Sustainable procurement	Pearson Correlation	1	.659**	.685**	.574**	.803**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000
	N	290	290	290	290	290
Public Participation in Procurement planning	Pearson Correlation	.659**	1	.586**	.471**	.572**
	Sig. (2-tailed)	0.000		0.000	0.000	0.000
	N	290	290	290	290	290
Public participation in Risk management	Pearson Correlation	.685**	.586**	1	.541**	.577**
	Sig. (2-tailed)	0.000	0.000		0.000	0.000
	N	290	290	290	290	290
Public Participation in Contract Award and Implementation	Pearson Correlation	.574**	.471**	.541**	1	.486**
	Sig. (2-tailed)	0.000	0.000	0.000		0.000
	N	290	290	290	290	290
Public participation in Project Procurement Monitoring	Pearson Correlation	.803**	.572**	.577**	.486**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	
	N	290	290	290	290	290

** . Correlation is significant at the 0.01 level (2-tailed).

4.6 Test of Hypothesis

The section examines the study hypothesis formulated from research objectives with the aim of identifying existing relationships between study variables through use of inferential statistics. The statistical objective of regression analysis is to show high R^2 and significant t-values, thus rejecting the null hypothesis of no effect. Parameters with an absolute t-value greater than 1.96 indicate a significance level of 0.05 (i.e. $p < 0.05$).

4.6.1 Public Participation in Procurement Planning and Sustainable Procurement

The first objective was to evaluate the influence of Public Participation in Procurement planning process on sustainable procurement. Linear regression was

used to test the relationship between public participation in Procurement Planning on sustainable procurement. Path coefficients were used to determine the direction and strength while T=statistics provided information on the significance of the relationships. The study null hypothesis was stated as;

H₀₁:Public Participation in Procurement planning does not significantly influence sustainable procurement.

The R² for the regression model between public participation in Procurement Planning and sustainable procurement was 0.434 meaning that public participation in Procurement Planning explained 43.4 % variation in the sustainable procurement while the remaining variation is explained by the error term as shown on table 4.15.

Table 4.15: Model Summary for public participation in Procurement Planning on Sustainable Procurement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.659 ^a	.434	.432	.31085

a. Predictors: (Constant),Public Participation in Procurement planning

The regression model was a good fit as indicated by a significant F-statistic (F=220.516, p<0.05).

Table 4.16: ANOVA for Public Participation in Procurement Planning on sustainable procurement

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.308	1	21.308	220.516	.000 ^b
	Residual	27.829	288	.097		
	Total	49.137	289			

a. Dependent Variable: Sustainable procurement

b. Predictors: (Constant), Public Participation in Procurement planning

The regression model obtained from the output was;

$$\text{Sustainable procurement} = 1.589 + 0.434 \text{ Public Participation in Procurement planning} + \text{error}$$

The standardized regression coefficient for public participation in Procurement planning was 0.659. This indicates that a unit increase in the public participation in Procurement planning would result in 65.9% increase in the Sustainable procurement. The t-statistic for the regression coefficient for public participation in Procurement planning was significant at 5% level of significance ($T=14.850$, $p<0.05$) implying rejection of null hypothesis. On the basis of these statistics, the study concludes that there is significant positive relationship between public participation in Procurement planning and Sustainable procurement. Stakeholders are affected in both positive and negative ways due to the different stages and nature of the procurement process from identification of the needs to contract closure (Olander, 2007). The procedure should be exposed to user inspection, depending on the procurement technique used and any privacy agreement stemming from that particular procurement technique employed (Noelia, 2016) user involvement in purchasing may create and maintain relationships suppliers enhancing partnership between the organization and its suppliers (Bateman, 2015).

Care (2015) states that user involvement in service selection may lead to greater satisfaction among the users, and improved quality of work, enhanced user friendliness and health responsiveness especially for people with disabilities who have had greater control in purchasing decisions when they are involved in purchasing decisions. Other benefits include; enhanced planning of procurement and purchasing activities, enhanced achievement of procurement and purchasing goals in relation to demand requirements and enhanced Project Monitoring of purchasing activities. User Involvement in procurement complies primarily with contract or viable law with respect to the establishment of agreements, but their methods of procurement are ruled by business rules. In order for the purchasing department to deliver products and services that meet the user needs, there is need to involve the users themselves when making decisions relating to purchasing (Perreau, 2015).

They are directly involved in a number of activities and decisions such as adequate definition of the user's requirements/needs relating to materials to be purchased for example; estimated requirements/quantities, specifications, identifying minimum and desirable elements and ensuring that there is adequate in consultation with users and their representative bodies (Scottish Police Authority, 2008). A number of scholars (Kabonga, 2016; Kessler & Tanburn, 2014; Metzger & Guenther, 2015; World Bank, 2010) have argued that development should be assessed on four significant fronts that is effectiveness, efficiency, impact, and sustainability. Ahmed (2018) Citizens are the stakeholders with the right to know how their money is being spent in public procurement activities.

According to CIVICUS, Community-Led Procurements (CLP) are a tool for developing systems to manage local government and/or donor funds and to use them in community determined ways to purchase products, contractors and services, usually through locally elected community organizations (CIVICUS, 2018). Through purchasing committees or similar instances of representation, the design of tenders, awards, and resource management are discussed. This tool allows for greater inclusion in the procurement processes, as well as due diligence in the enforcement of the law, promoting public accountability processes. It was recommended that to ensure value for money, management support for VFM programme at all levels of administration should be encouraged and procurement regulatory authorities in collaboration with public entities (Polytechnics) must ensure compliance through rigorous Project Monitoring of the procurement policy to ensure VFM (Nsiah-Asare & Prempeh, 2016). Rolfstam (2015) found out that scheduling supplies is very important in enhancing value for money because it provides a list of all requirements that the entity will obtain over a period of time.

This study finding are consistent with Queensland Government Chief Procurement Office (2012) study findings which supported cost savings as an important objective to sustainable 31 procurement practices i.e. proposed procuring goods and services that are more efficient to operate and thereby reduce operating costs. Additionally, the study findings are also in line with Lemmet (2012) study findings which proposed support to small business activity in Scotland, local industries in Costa Rica

and financial savings. Contrary to this study, which found out that most public organizations were planning to considered insisting on procuring green products for reuse and recycle, Plambeck (2007) who carried out a study on Walmart found out that the company was very keen on procuring 100% renewable energy, creating zero waste and selling products that are environmental friendly. It is understood that the incorporation of citizen participation in public procurement allows for the generation of broader processes of government openness in decision-making as to how public spending is used and allocated, as well as fostering processes of citizen monitoring, social oversight of government management and vertical public accountability (Zuleta, 2019) that would otherwise be extremely complicated to implement successfully.

Table 4.17: Coefficients for Public Participation in Procurement Planning on sustainable procurement

Model		Unstandardized		Standardized		
		β	Std. Error	Beta	t	Sig.
1	(Constant)	1.589	.099		16.109	.000
	Procurement planning	.484	.033	.659	14.850	.000

a. Dependent Variable: Sustainable procurement management

4.6.2 Public participation in Risk Management and Sustainable Procurement

The second objective was to establish the influence of public participation in risk management on sustainable procurement. Normality of risk management variable was tested using Shapiro-Wilk test, which compares the scores in the population of study to a normally distributed set of scores. The results were not significant at $p < .05$, and so the data was assumed to be normally distributed. The research hypothesis formulated from the specific research objective was

H0₂: Public Participation in Risk management does not significantly influence sustainable procurement

Linear regression was used to test the relationship between Public Participation in risk management on sustainable procurement. Path coefficients were used to determine the direction and strength while T=statistics provided information on the significance to the relationships. The R² for the regression model between risk management and sustainable procurement was 0.470 meaning that public participation in risk management explain 47 % variation in the sustainable procurement while the remaining variation is explained by the error term as shown on table 4.18. Sustainable operations place a particular emphasis on managing economic, environmental, and social sustainability risks (Jaehn 2016). The sustainable management of SC risks is emphasized as an important strategic element. Carter and Rogers (2008) see risk management as a supporting facet of SSCM that includes the requirements of contingency planning, supply disruptions, and outbound SCs. Seuring and Muller (2008b: 1703) formulate “supplier management for risks and performance” and “supply chain management for sustainable products” as basic strategies for SSCM.

Table 4.18: Model Summary for Public Participation in risk management on sustainable procurement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.685 ^a	.470	.468	.30076

a. Predictors: (Constant), risk management

The regression model was a good fit as indicated by a significant Fstatistic (F=255.205, p<0.05).

Table 4.19: ANOVA for risk management on sustainable procurement

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.085	1	23.085	255.205	.000 ^b
	Residual	26.052	288	.090		
	Total	49.137	289			

a. Dependent Variable: Sustainable procurement

b. Predictors: (Constant), Risk management

The regression model obtained from the output was;

$$\text{Sustainable procurement} = 1.029 + 0.47 \text{ risk management} + \text{error}$$

The standardized regression coefficient for Public participation in risk management was 0.685. This indicates that a unit increase in the public participation in risk management would result in 68.5% increase in the Sustainable procurement. The t-statistic for the regression coefficient for risk management was significant at 5% level of significance (T=15.975, p<0.05) implying rejection of null hypothesis. On the basis of these statistics, the study concludes that there is significant positive relationship between risk management and Sustainable procurement.

According to CIVICUS (2018) effective public oversight depends on a degree of freedom of information to access relevant government data and documents and freedom of expression to publicly discuss findings and concerns. It is important that public oversight mechanisms be accessible, independent and have the trust of the general public. (CIVICUS, 2018). Stakeholders can be a considerable asset, contributing knowledge, insights and support in shaping a project brief as well as supporting its execution. The high failure rate of major projects has been attributed to a lack of attention to stakeholders. Stakeholders' negative attitudes towards a project can cause cost overruns and time schedule delays due to conflicts over project design and implementation (Ouyabaka, 2017). Participatory governance is embodied in processes that empower citizens to participate in public decision-making, and has gained increasing acceptance as an effective means of addressing 'democracy

deficits' and improving public accountability. Around the world, a growing number of governments and their civil society partners are experimenting with innovative practices that seek to expand the space and mechanisms for citizen participation in governance processes beyond elections. There is evidence that participatory governance practices are contributing to greater government transparency, accountability and responsiveness, and (CIVICUS, 2018)

Table 4.20: Coefficients for public participation in risk management on sustainable procurement

Model		Unstandardized		Standardized		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.029	.126		8.148	.000
	Risk management	.668	.042	.685	15.975	.000

a. Dependent Variable: Sustainable procurement

4.6.3 public participation in Contract award and Implementation and Sustainable Procurement

The third objective was to assess the influence of public participation in contract award and implementation on sustainable procurement. Normality of public participation in contract award and implementation variable was tested using Shapiro-Wilk test, which compares the scores in the population of study to a normally distributed set of scores. The results were not significant at $p < .05$, and so the data was assumed to be normally distributed. The research hypothesis formulated from the specific research objective was

H₀₃: Public Participation in Contract award and implementation does not significantly influence sustainable procurement

Linear regression was used to test the relationship between public participation in contract award and implementation and sustainable procurement. Path coefficients

were used to determine the direction and strength while T=statistics provided information on the significance to the relationships. The R² for the regression model between public participation in contract award and implementation and sustainable procurement was 0.33 meaning that contract administration explain 33 % variation in the sustainable procurement while the remaining variation is explained by the error term as shown on table 4.21.

The implementation of open data in the public procurement system helps to create spaces for citizens and the private sector to participate in the system's decision and, promotes competition, equal treatment of private actors in the system, public access to the system's data for accountability and oversight purposes, and encourages the use of data to manage knowledge and establish mechanisms for continuous improvement (Zuleta, 2019). Each contract problem that occurs can threaten the success of the project by impacting any or all of the 5 “R’s” in an adverse manner, such as, delivery of incorrect product, incorrect quantity, an increase in project costs, a delay in delivery, poor quality or the ultimate unsuccessful result, contract termination (Davison & Wright, 2004). Effective management of procurement contracts was essential for achievement of value for money (Mchopa et al., 2014).

Table 4.21: Model Summary for public participation in contract award and implementation on sustainable procurement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.574 ^a	.330	.328	.33814

a. Predictors: (Constant), contract management

The regression model was a good fit as indicated by a significant Fstatistic (F=141.741, p<0.05).

Table 4.22: ANOVA for public participation in contract award and implementation on sustainable procurement

		Sum of				
Model		Squares	df	Mean Square	F	Sig.
1	Regression	16.207	1	16.207	141.741	.000 ^b
	Residual	32.930	288	.114		
	Total	49.137	289			

a. Dependent Variable: Sustainable procurement

b. Predictors: (Constant), public participation in Contract award and implementation

The regression model obtained from the output was

$$\text{Sustainable procurement} = 1.388 + 0.33 \text{ Contract Award and Implementation} + \text{error}$$

The standardized regression coefficient for public participation in contract award and implementation was 0.574. This indicates that a unit increase in the public participation in contract award and implementation would result in 57.4% increase in the Sustainable procurement. The t-statistic for the regression coefficient for contract award and implementation was significant at 5% level of significance (T=11.906, p<0.05) implying rejection of null hypothesis. On the basis of these statistics, the study concludes that there is significant positive relationship between public participation in contract award and implementation and Sustainable procurement.

Table 4.23: Regression Coefficients for public participation in contract award and implementation on sustainable procurement

		Unstandardized		Standardized		
		Coefficients		Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.388	.139		9.976	.000
	Contract Management	.353	.030	.574	11.906	.000

a. Dependent Variable: Sustainable procurement

4.6.4 Public Participation in Project procurement Monitoring and Sustainable Procurement

The fourth objective was to determine the influence of Public participation in Project procurement monitoring on sustainable procurement. Normality of public participation in project procurement monitoring variable was tested using Shapiro-Wilk test, which compares the scores in the population of study to a normally distributed set of scores. The results were not significant at $p < .05$, and so the data was assumed to be normally distributed. The research hypothesis formulated from the specific research objective was

H0₄: Public participation in Project Procurement Monitoring does not significantly influence sustainable procurement.

Linear regression was used to test the relationship between Public Participation in Project procurement Monitoring on sustainable procurement. Path coefficients were used to determine the direction and strength while T=statistics provided information on the significance to the relationships. The R^2 for the regression model between public participation in Project procurement Monitoring and sustainable procurement was 0.644 meaning that project monitoring explain 64.4 % variation in the sustainable procurement while the remaining variation is explained by the error term as shown on table 4.24.

Stakeholders are affected in both positive and negative ways due to the different stages and nature of the procurement process from identification of the needs to contract closure (Olander, 2007). The procedure should be exposed to user inspection, depending on the procurement technique used and any privacy agreement stemming from that particular procurement technique employed (Noelia, 2016). User involvement in purchasing may create and maintain relationships suppliers enhancing partnership between the organization and its suppliers (Bateman, 2015). They prepare the technical recommendation in any bid assessment report and approve key review stages throughout the procurement process (SPA, 2008). In order for the purchasing department to deliver products and services that meet the user needs, there is need to involve the users themselves when making decisions relating

to purchasing (Perreau, 2015). Thousands of new institutional designs have been created in recent years with the aim of not only including more citizens in the political process, but also, through citizen participation, making governments more responsive to citizen demands, making institutions more accountable for their actions, as well as to strengthening the rule of law and promoting social equality (Pregrebinschi, 2017).

Table 4.24: Model Summary for Public participation in Project Monitoring on sustainable procurement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.803 ^a	.644	.643	.24631

a. Predictors: (Constant), public participation in Project procurement Monitoring

The regression model was a good fit as indicated by a significant F statistic (F=521.940, p<0.05).

Table 4.25: ANOVA for Public Participation in Project Procurement Monitoring on sustainable procurement management

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.665	1	31.665	521.940	.000 ^b
	Residual	17.472	288	.061		
	Total	49.137	289			

a. Dependent Variable: Sustainable procurement

b. Predictors: (Constant), public participation in project procurement monitoring

The regression model obtained from the output was

Sustainable procurement management = 0.958 + 0.644 Public Participation in Project Procurement Monitoring + error

The standardized regression coefficient for Public Participation in Project procurement Monitoring was 0.803. This indicates that a unit increase in the Public participation in Project Procurement Monitoring would result in 80.3% increase in the Sustainable procurement. The t-statistic for the regression coefficient for Public Participation in Project Procurement Monitoring was significant at 5% level of significance ($T=22.846$, $p<0.05$) implying rejection of null hypothesis. On the basis of these statistics, the study concludes that there is significant positive relationship between Public Participation in Project Procurement Monitoring and Sustainable procurement. Ahmed (2018) citizens are the stakeholders with the right to know how their money is being spent in public procurement activities. Their role of observing implementation is supposed to ensure the accountability of the actors such as bidders/contractors. Such third party monitoring through direct citizens' engagement is expected to effectively contribute in achieving the target of a socially accountable procurement process. In this regard, increasing technical knowledge of citizens will bring expected results.

Citizen participation is a key tool on which open government rests as an approach to contemporary public governance (CruzRubio, 2015). Within the public participation framework, a criterion of success associated with this type of initiative must be included in the real openness generated as an effect or direct consequence of the participatory implementation of a given strategy that is, whether or not, thanks to the implementation of the initiative, a greater openness of information and key processes (decision-making, follow-up and/or monitoring) linked to public procurement (in decision-making, in process supervision, in control mechanisms or vertical accountability) was achieved. According to CIVICUS, public expenditure monitoring involves tracking the flow of public resources for the provision of goods and services from origin to destination. It can help detect bottlenecks, inefficiencies and/or corruption in the transfer of public goods and resources and is a vital tool for government and civil society organizations to protect themselves against corruption and to ensure transparent, accountable and effective public financing (CIVICUS, 2018). Public expenditure monitoring usually involves some form of quantitative research, such as verification of financial accounts to monitor the actual flow of funds, and qualitative research, such as interviewing users of public services about

their experiences and evaluations of the quality, accessibility and cost of public services. Expenditure monitoring can be done at the local, district or sub-national level. (CIVICUS, 2018). Indeed when public hearings are associated with the monitoring, control and management of a budget, (Gestion Local, 2001) they are a mechanism for community participation in the formulation and control of the execution of the municipal budget. Every neighbour has the opportunity to make their needs known and to influence how best to spend public money.

Table 4.26: Coefficients for Public participation in Project procurement Monitoring on sustainable procurement

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.958	.092		10.439	.000
	Public Participation in Project Procurement Monitoring	.758	.033	.803	22.846	.000

a. Dependent Variable: Sustainable procurement

4.6.5 Regression Analysis of Overall Model

The R^2 for the regression model between public participation and sustainable procurement was 0.751 meaning that the independent variables explains 75.1 % variation in the sustainable procurement while the remaining variation is explained by other factors as shown on table 4.27.

Table 4.27: Regression of Overall Model

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.866 ^a	.751	.747	.20736

a. Predictors: (Constant), Procurement planning , Risk management , Contract Award and implementation and Project procurement Monitoring

The results indicate F statistic of 214.451 which was greater than f critical implying that the model was statistically significant. Further, the results imply that the independent variables were good predictors of sustainable procurement. This was also supported by the reported $p=0.00$ which was less than the conventional probability of 0.05 significance level.

Table 4.28: ANOVA of Overall Model

ANOVA^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	36.883	4	9.221	214.451	.000 ^b
	Residual	12.254	285	.043		
	Total	49.137	289			

a. Dependent Variable: Sustainable procurement

b. Predictors: (Constant), Procurement planning , Risk management , Contract Award and implementation and Project Procurement Monitoring

Multilinear regression was used to test the relationship between the independent variables and sustainable procurement. Path coefficients were used to determine the direction and strength while T=statistics provided information on the significance to the relationships. Regression of coefficients results in table 4.29 shows that public participation in procurement planning positively and significantly influences sustainable procurement ($\beta=0.131$, $p=0.000$). The table indicates that public participation in risk management positively and significantly influences sustainable

procurement ($\beta=0.211$, $p=0.000$). It was also established that public participation in contract award and implementation positively and significantly influences sustainable procurement management ($\beta=0.075$, $p=0.001$). Table 4.29 results also indicates that Public Participation in Project Procurement Monitoring positively and significantly influence sustainable procurement ($\beta=0.487$, $p=0.000$).

The findings are in line with Asif (2013) findings that public participation can be achieved through stakeholder analysis. Stakeholder analysis can reveal which stakeholders are able to have an impact on the implementation and success of sustainability. In the case of public sector bodies, a single political actor often represents the interests of a large group of other, relatively powerless, stakeholders. Stakeholder pressures and respective reputational and legal risks are usually seen as a key driver toward the implementation of standards and codes of conducts. Stakeholder management is crucial for driving sustainability performance (Asif et al., 2013). Internal stakeholder pressure, particularly from middle managers, can be a strong force behind sustainability initiatives, particularly middle managers (Ehrgott et al., 2011). Stakeholder theory is a promising foundation for analysing which actors influence the speed of implementation of sustainability initiatives. Top management set the policy and goals for developing sustainability and the implementation is delegated to the purchasing department. The elements needed for successful implementation are a formal policy with clear goals (Thai, 2001; Warner and Ryall, 2001) and a clear dissemination within the organization (Preuss, 2009). Gelderman et al. (2015) report that in municipal organizations three internal actors are important in relation to sustainability initiatives: party-political executives, procurement managers and department managers.

Table 4.29: Coefficients of Overall Model

		Coefficients ^a				
		Unstandardized		Standardized		
		Coefficients		Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.326	.100		3.252	.001
	Public participation in Procurement planning	.131	.029	.179	4.533	.000
	Public Participation in Risk management	.211	.040	.217	5.278	.000
	Public Participation Contract Award and Implementation	.075	.023	.122	3.312	.001
	Public Participation in Project Procurement Monitoring	.487	.037	.516	13.089	.000

a. Dependent Variable: Sustainable procurement

$$Y = 0.326 + 0.131X_1 + 0.211X_2 + 0.075X_3 + 0.487X_4$$

Where:

Y is Sustainable Procurement

X1 is Public Participation in Procurement planning

X2 is Public Participation in Risk management

X3 is Public Participation in Contract Award and Implementation

X4 is Public Participation in Project Procurement Monitoring

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter gives the summary and conclusion of the findings of the study as per the objectives of the study which included; the general objective that was to establish the influence of public participation in procurement process for sustainable project procurement in the South Eastern Counties in Kenya, with specific objectives; to evaluate the influence of Public Participation in Procurement Planning on Sustainable Project Procurement ,to establish the influence of Public Participation in Risk Management on Sustainable Project Procurement, to assess the influence of Public Participation in Contract Award and Management on Sustainable Project Procurement and to determine the influence of Public Participation in Project Procurement Monitoring on Sustainable Project Procurement in the South Eastern Counties in Kenya. Chapter also gives the recommendation and possible actions that may be taken as per the research findings. It also gives areas for further research.

5.2 Summary

The study aimed at assessing the influence of public participation on sustainable procurement of Infrastructural Projects in South Eastern Counties in Kenya. The study was confined in the counties of Kitui, Machakos and Makueni due to their proximity and also their close interaction towards the common goal of formation of the South Eastern Kenya Economic Block (SEKEB) aiming at improving their Infrastructural projects and better service to their people. Specifically, the study sought to establish the influence of public participation in procurement planning, risk management, contract award and implementation and Project Procurement Monitoring on Sustainable Procurement. A sample of 297 was selected through stratified sampling from a target population of 1146. Semi structured questionnaires were used to collect the study data.

5.2.1 Influence of Public Participation in Procurement Planning on Sustainable Procurement

The first objective of the study was to evaluate the influence of Public Participation in procurement planning on sustainable procurement of Infrastructural projects in the South Eastern Counties in Kenya. Various statistical tests were carried out to determine the relationship that existed between the two variables. The study found that public participation in procurement planning had above moderate positive significant relationship with sustainable procurement as indicated by an overall mean of 3.34. Multiple linear regression analysis was used to test the hypothesis which indicated that there is a positive significant relationship between public participation in procurement planning and sustainable procurement in devolved system of government. This indicated that the null research hypothesis was rejected, and it was therefore concluded that there is a positive significant relationship between public participation in procurement planning and sustainable procurement of Infrastructural projects in the South Eastern Counties in Kenya.

5.2.2 Influence of Public Participation in Risk Management on Sustainable Procurement

The second objective of the study was to establish the influence of Public Participation in risk management on sustainable procurement of Infrastructural projects in south Eastern Counties in Kenya. Various statistical tests were carried out to determine the relationship that existed between the two variables. The study found that public participation in risk management had a positive significant relationship with sustainable procurement. Multiple linear regression analysis was used to test the hypothesis which indicated that there is a positive significant relationship between public participation in risk management and sustainable procurement in devolved system of government. This indicated that the null research hypothesis was rejected, and it was therefore concluded that there is a positive significant relationship between public participation in risk management and sustainable procurement in infrastructural Projects in South Eastern Counties in Kenya.

5.2.3 Influence of Public Participation in Contract award and Implementation on Sustainable Procurement of Infrastructural Projects

The third objective of the study was to assess the influence of public participation in contract award and implementation on sustainable procurement of infrastructural projects in South Eastern Counties in Kenya. Various statistical tests were carried out to determine the relationship that existed between the two variables. The study found that public participation in contract Award and Implementation had a positive significant relationship with sustainable procurement. Multiple linear regression analysis was used to test the hypothesis which indicated that there is a positive significant relationship between Public Participation in contract Award and Implementation and sustainable procurement of infrastructural Projects South Eastern Counties in Kenya. This indicated that the null research hypothesis was rejected, and it was therefore concluded that there is a positive significant relationship between public participation in contract award and implementation and sustainable procurement of Infrastructural projects in the South Eastern Counties in Kenya.

5.2.4 Influence of Public Participation in Project Procurement Monitoring on Sustainable Procurement of Infrastructural Projects

The fourth objective of the study was to determine the influence of public participation in Project procurement Monitoring on sustainable procurement on sustainable procurement of Infrastructural projects in the South Eastern Counties in Kenya. Various statistical tests were carried out to determine the relationship that existed between the two variables. The study found that Public participation in Project Procurement Monitoring had a moderate positive significant relationship with sustainable procurement. Multiple linear regression analysis was used to test the hypothesis which indicated that there is a positive significant relationship between Public Participation in Project Procurement Monitoring and sustainable procurement of infrastructural projects in the South Eastern Counties in Kenya. This indicated that the null research hypothesis was rejected, and it was therefore concluded that there is a positive significant relationship between public Participation in Project

Procurement Monitoring and sustainable procurement of infrastructural projects in the South Eastern Counties in Kenya.

5.3 Conclusion

5.3.1 Influence of procurement planning on Sustainable Procurement of infrastructural projects in South Eastern Counties in Kenya

The study found that there exists a relationship between public participation in procurement planning and sustainable procurement of infrastructural projects in South Eastern Counties in Kenya. From the forgoing, it can be concluded that an improvement in involvement of community in procurement planning leads to a positive improvement in sustainable procurement of Infrastructural projects in South Eastern Counties in Kenya.

5.3.2 Influence of risk management on Sustainable Procurement of infrastructural projects in South Eastern Counties in Kenya

On the second objective the study found that there exists a relationship between public participation in risk management and sustainable procurement of infrastructural projects in the South Eastern Counties in Kenya. From the forgoing, it can be concluded that an improvement in community involvement in public participation in risk management in community based projects leads to a positive improvement in sustainable procurement of the projects.

5.3.3. Influence of public participation in contract award and Implementation on Sustainable Procurement of infrastructural projects in South Eastern Counties in Kenya

On the third objective the study found that there exists a positive relationship between public participation in contract award and implementation and sustainable procurement of infrastructural projects in Kenya. From the forgoing, it can be concluded that an improvement in community involvement in contract award and implementation of community based projects leads to a positive improvement in sustainable procurement of the projects.

5.3.4 Influence of Project Procurement Monitoring on Sustainable Procurement of infrastructural projects South Eastern Counties in Kenya

On the fourth objective study found out that there exists a relationship between public participation in Project procurement Monitoring and sustainable procurement of infrastructural projects in South Eastern Counties in Kenya. From the forgoing, it can be concluded that an improvement in involvement of community in project procurement monitoring on community based projects leads to a positive improvement in sustainable procurement of the projects. In summary the study findings indicated that there exist positive relationships between public participation in procurement planning, risk management, contract award and implementation and project procurement monitoring and sustainable procurement of infrastructural projects in South Eastern Counties in Kenya.

5.4 Recommendations

Based on the study findings and conclusions it is recommended that;

The County governments need to adopt effective procurement planning techniques so as to reap the benefits of public participation in procurement process for sustainable procurement. There is also need to adopt and disseminate accurate and timely information to the members of public by sensitizing them on the need to actively and fully participate in identification, provision of materials and also budget preparation for the projects to be undertake in their wards. This is so since public participation through procurement planning leads to a positive improvement in sustainable procurement of infrastructural projects.

The county governments need to embrace the community involvement in risk management so as to achieve sustainable procurement. This helps in mitigation of projects risks notably; resistance, delayed supplies and so on. The county government also requires to prepare guidelines on who should participate when and how so at help reduce conflicts and also achieve the objective of the public participation exercise. This is likely to create a sense of ownership hence timely and smooth completion of the Infrastructural projects.

The county governments need to involve citizens more on contract award and implementation to achieve sustainable procurement. This is so since the implementation of open data in the public procurement system helps to create spaces for citizens and the private sector to participate in the system's decision and, promotes competition, equal treatment of private actors in the system, public access to the system's data for accountability and oversight purposes. Each contract problem that occurs can threaten the success of the project. There is also the need to use locals more as suppliers of the materials required where possible, involve of the relevant community members in contract award and implementation is likely to safe on time, reduce cost and increase effectiveness of implementation of the infrastructural projects.

The county governments need to engage the citizens more in project procurement monitoring of community projects. This is so since through citizens monitoring government become more responsive to citizen demands hence achieving sustainable procurement objectives. It is also imperative to provide the right information and the right time so as to help curb on rumor mongering hence creation sense of ownership and support for the infrastructural projects under taken by the county Governments.

In summary, the study therefore recommends that county governments should stipulate and implement policies that would improve public participation in procurement process so as to improve on their sustainable procurement in community-based infrastructure projects. In general the results revealed that public participation positively influences sustainable procurement of infrastructural projects undertaken by different counties.

Hence the county governments need to involve the community in project procurement planning, risk management, contract award and implementation as well as project procurement monitoring so as to achieve sustainability. Of course the reasons for organizations to be involved in sustainable procurement are varied. Some are due to; the increasing regulatory pressure from government a better environment (UNEP, 2012), the role SP plays in the organization; minimal impact to environment,

cost reduction, quality goods /services and service delivery, others concern with the impacts of social and environmental performance on financial performance.

5.5 Areas for Further Research

In this section, suggestions for further research in areas related to this study are given. In future, it is recommended that research be done to address the limitations of this study. This study considered only the south eastern development block; Kitui, Machakos and Makueni counties future researchers could consider carrying out a similar study in a different block or counties to assess any variation in responses. It would be interesting to explore how the results obtained when the methods applied in this study are applied in other contexts for example in other countries at higher or lower stages of development. It would be worthwhile establishing the extent to which the findings of this study are generalizable to other industries, sectors or settings.

Future researchers could also introduce different variables other than the one used and test for moderation or mediating effect of such variables on the relationship between public participation and sustainable procurement. Studies using other additional variables, such as organization culture, government regulation as moderators or mediators can be carried out to gain further insights into the relationship. The current study is cross-sectional other scholars can carry out the study as a longitudinal study. Since it is recommended to have continuous engagements for retention practices in place, a longitudinal study will show whether the findings vary over time. Further research could also be carried out in-depth studies on specific companies or groups of companies to analyze further the reasons for certain results specific to them.

REFERENCES

- Ahamed, R. (2016). Citizen Engagement in Public Procurement: experience from pilot district
- André, P., Enserink, B. Connor, D. & Croal, P. (2006). *Public Participation International Best Practice Principles*. Special Publication Series No. 4. Fargo, USA: International Association for Impact Assessment.
- Apiyo, R. O., & Mburu, D. K. (2014). Factors affecting procurement planning in county governments in Kenya: a case study of Nairobi City County. *International Journal of Economics, Commerce and Management*, 2(11), 1-34.
- APCC (2013). *Sustainable Procurement Practice Note; incorporating a case study of the procurement of multi- function devices*. Sydney, Australia: APCC.
- Arribas, E. (2019). Pactos de Integridad. *Eunomia*, 17, 328-348.
- Asian Development Bank (2021). Circular economy as a strategic option to promote sustainable economic growth and effective human development. *Journal of International Studies*, 14(1), 60 - 73.
- Australian Government (2013): *Sustainable Procurement report: Australian and UK universities*. *Public Management Review*, 18(7), 993-1016.
- Basheka, B. C., (2008). Procurement planning and accountability of local Government procurement systems in developing countries: Evidence from Uganda, *Journal of Public Procurement*, 8(3), 379 – 406.
- Basheka, B.C. (2017). *A Framework for understanding the barriers to effective participation of WOBs in Public Procurement in Uganda*. Kampala: Unpublished Document.
- Bateman, A. (2015). Service user Involvement & Purchasing. Retrieved from: <http://www.jmcass.co.uk/purchase-our-service.html>

- Brac institute of Governance and development. (2022). Citizen Engagement in Public Procurement: A Qualitative Assessment, *People, Process and Policy*, 14(1), 1-30.
- Beach (2008). *Stakeholders in government agencies*: Brisbane Australia: BRAC Institute of Governance and Development
- Bigambo, J. (2012). Devolution in Kenya; Balancing Issues and Risk Factor County Governments. *Retrieved July, 19, 2014*.
- Bolin, J. H. (2014). Introduction to mediation, moderation, and conditional process analysis: a regression-based approach. *Journal of education fall*, 51(3), 335 - 337.
- Bruel, O., & SNCF, O. M. (2009). *Sustainable Procurement: a crucial lever to end the crisis?*. HEC Paris: SNCF, and Ecovadis.
- Bukenya, B, & Muhumuza, W. (2017). *The politics of core public sector reform in Uganda*. United Kingdom: University of Manchester.
- Busu, C., & Busu, M. (2016). Analysis on the Satisfaction Degree of Hotel Services Consumers in Romania. In *Proceedings of the international management conference* (Vol. 10, No. 1, pp. 28-37). Faculty of Management, Academy of Economic Studies, Bucharest, Romania.
- Care, I. (2011). *Service User Involvement; Alcazar Court*. London: Institute of Public Care.
- CIPS, & NIGP (2012). *Public Procurement Practice: Sustainable Procurement Practice*, United Kingdom: CIPS, & NIGP
- CIVICUS. (2018). Participatory Governance Toolkit. Retrieved from: <https://www.civicus.org/index.php/es/centro-de-medios/recursos/manuales/611-participatory-governance-toolkit>

- CRECO (2014). *Model policy framework for public participation in county governments*: Miner logistics. Nairobi: CRECO.
- Daryanto, A., (2013). Heteroskedasticity - SPSS syntax Retrieved from: <https://sites.google.com/site/ahmaddaryanto/scripts/Heterogeneity-test>
- Davenport, K. (2000). *Corporate Citizenship: A Stakeholder Approach for Defining Corporate Social Performance and Identifying Measures for Assessing It,* *Business and Society*, 39(2), 210219.
- Dressler, M. (2015). *Customer involvement management; Empirical observations of explorative studies on enrichment activities of German wine*. Germany: University Ludwigshafe.
- EIPP (2009). *Public Participation in Europe An international perspective*, Europe: EIPP.
- EU (2002). *Guidance on Public Participation in Relation to the Water Framework Directive. Active Involvement, Consultation, and Public Access to Information*. Common Implementation Strategy Guidance Document No. 8. Luxembourg: EU.
- Field, A. (2009). *Discovering Statistics using SPSS*. Thousand Oaks, CA: Sage Publications.
- Flynn, A., Davis, P., McKeivitt, D., & McEvoy, E. (2013). *Sustainable public procurement in practice: case study evidence from Ireland*. Thai: PrAcademic press.
- Freeman, E. (2004). *Stakeholder theory and the corporate objective revisited*, Maryland USA: PrAcademic press.
- GoK (2006). *The Public Procurement Regulations*. Nairobi: Government Printer.
- GoK (2010): *The constitution of Kenya*. Nairobi: Government Printer.

- GoK (2013). *The Public Procurement and Disposal (County Government) Regulations*: Nairobi: Government Printer.
- GoK (2015). *Performance contrasting guidelines for county governments*, Nairobi: Government Printer.
- GoK (2015). *The Public Procurement and Asset Disposal Act 2015*, Nairobi: Government Printer.
- Gomes, R. C., & Gomes, L. D. O. M. (2008). Who is supposed to be regarded as a stakeholder for public organizations in developing countries? Evidence from an empirical investigation in Brazilian municipalities. *Public Management Review*, 10(2), 263-275.
- Green, S. L. (2002, May). *Rational choice theory: An overview*. Baylor: Baylor University Faculty development seminar on rational choice theory.
- Gigerenzer, G. (2001). Digital computer: Impact on the social sciences. In *International encyclopedia of the social and behavioral sciences* (pp. 3684-3688). Elsevier Science.
- Gumisiriza, P. (2019). Public Procurement in Uganda. *Journal of Educational Measurement*, 51(3), 335-337.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (Vol. 6): Upper Saddle River: Pearson Prentice Hall.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-151.
- Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York: The Guilford Press.
- Hayes, A. F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research*, 50(1), 1-22.

- HERAF (2014). *Raising the Alarm on Public Participation in the Budget Making Process: County Governments Undermining Citizens' Role in the Budget Making Process* Nairobi: HERAF.
- Huang, J. & Li, J. (2020). Research on Public Participation in Public Procurement: In the Context of Digital Economy. *Journal of Business Administration Research*. 3(10), v3i4.
- Hussein, F.H. (2013). *Determinants of Community Participation in the Implementation of Development Projects*. Nairobi: Government Printer.
- Isaac, R. G., Herremans, I. M., & Kline, T. J. (2010). Intellectual capital management enablers: a structural equation modeling analysis. *Journal of Business Ethics*, 93(3), 373-391.
- Kalubanga, M. (2012). Sustainable procurement: concept, and practical implications for the procurement process. *International Journal of Economics and Management Sciences*, 1(7), 01-07.
- Karyeija, G. K. (2012). Public sector reforms in Africa: what lessons have we learnt?. In *Forum for Development Studies*, 39(1), 105–124
- Kisika. S (2019). Public Participation and Referendum push: The constitution-making. *International Journal of Constitutional Law*, 18(1), 173-178.
- Kellen, K., & Itunga, J. (2014). *Business research methods*, Nairobi: Kenhill consultants.
- Kennedy, C.J. (2022). A Short Guide to Project Management Procurement: Warrenstown. *International Journal of construction management*, 22(15), 2914-2921.
- Klarin, T. (2018). The Concept of Sustainable Development: From its beginning to the Contemporary Issues. *Zagreb International Review of Economics and Business*. 21. 67-94.

- Kothari, C.R (2004). *Research methodology, Methods and Techniques*. (2nd Edition).
Mumbai India: New Age International.
- Lawrence, N. (2014). *Public Procurement Law and Procurement Performance of County Governments in Kenya*, Nairobi: Government Printer.
- Long, J. S., & Ervin, L. H. (2000). Using heteroscedasticity consistent standard errors in the linear regression model. *The American Statistician*, 54(3), 217-224.
- Lubale, G. (2012). *Introduction to Performance Management in the Public Service*, Nairobi: Government Printer.
- Lutz, P. (2012). Addressing sustainable development through public procurement: The case of local government”, *Supply Chain Management: An International Journal*, 14(3), 213-223.
- Martin J. (2013). *Stakeholder theory and its implications for ethical behavior in public organization*, Adershot: Ashgate publishing limited.
- Marzuki, A. (2015): *Challenges in the Public Participation and the Decision Making Process* Universiti Sains Malaysia; Flinders University, Adelaide, Australia: Flinders University.
- Meehan, J., & Bryde, D. (2011). *Sustainable Procurement Practice*, Liverpool, UK: Liverpool John Moores University.
- Meyers, L. S., Gamst, G. C., & Guarino, A. J. (2013). *Performing data analysis using IBM SPSS*. New York: John Wiley & Sons.
- Moazzam, A. (2014). *Sampling & Sample Size Estimation*. Geneva: WHO.
- Mostert, E. (2003). The challenge of public participation. *Water Policy*, 5(2), 179–197.

- Mugambi, K. W., & Theuri, F. S. (2014). The challenges encountered by county governments in Kenya during budget preparation. *IOSR Journal of Business and Management*, 16(2), 128-134.
- Mugenda, O., & Mugenda, G. (2003). *Research Methods; Quantitative and Qualitative Approaches.*, Nairobi: ACTS press.
- Newig, J. & Fritsch, O. (2008). More Input – Better Output: Does Citizen Involvement Improve Environmental Governance?, in: I. Blühdorn (ed.): *In Search of Legitimacy. Policy Making in Europe and the Challenge of Societal Complexity*, Opladen & Farmington Hills: Barbara Budrich Publishers.
- Newig, J. (2005). Die Öffentlichkeitsbeteiligung nach der EG-Wasserrahmenrichtlinie: Hintergründe, Anforderungen und die Umsetzung in Deutschland. *Zeitschrift für Umweltpolitik und Umweltrecht*, 28(4), 469–512.
- Newig, J., Pahl-Wostl, C. & Sigel, K. (2005). The role of public participation in managing uncertainty in the implementation of the Water Framework Directive. *European Environment*, 15(6), 333–343.
- Nyile, K., & Shalle, N. (2016). Role of Sustainable Procurement Practices n Supply Chain Performance of Manufacturing Sector in Kenya: *European Journal of Logistics, Purchasing and Supply Chain Management*, 4(3), 1-31.
- Ochieng, M., Oginda, M., & Oteki, M. (2016). *Analysis of Sustainable Procurement Practices and the Extent of Integration in Lake Victoria South Water Services Board, Kenya. IOSR Journal of Business and Management (IOSR-JBM)*, 18(3), 109-115
- Oduor, C. (2014). *County Planning, County Budgeting and Social Accountability*, Nairobi: Birds Printers.

- Oduor, C., Wanjiru, R., & Kisamwa, L. (2015). *Review of status of Public Participation, and County Information Dissemination Frameworks: A Case Study of Isiolo Kisumu Makueni and Turkana Counties*. Nairobi: Institute of economic affairs.
- OECD (2022). *Strengthening value for money in the public procurement system*. Paris: OECD Publishing.
- OECD (2021). *Strengthening value for money in the public procurement system of the Slovak Republic: Towards a strategy to use adequate award criteria*. <https://doi.org/10.1787/df80bc12-en>
- OECD (2017). *Government at a Glance 2017*, Paris: OECD Publishing.
- Olander, S. (2007). Stakeholder impact analysis in construction project management. *Construction Management and Economics*. 25(3), 277-287.
- Ondieki, W. M. (2011). *Factors influencing stakeholders' participation in Project Monitoring of Local Authority transfer fund projects in Kisii municipality, Kenya*. Retrieved from: <http://erepository.uonbi.ac.ke:8080/handle/123456789/3906>
- Oracle (2015). Embedding Sustainability in the Sourcing and Procurement Process: Oracle Sustainability Solutions, *Technology Forecast: A Quarterly Journal*, 4, 6-21.
- Ouyabaka, G. M. (2017). Stakeholder and Nature of Procurement Process in the United Nations Organization Stabilization Mission in the Democratic Republic Of Congo (Monusco) Entebbe Support Base. *International Journal of Supply Chain and Logistics*. 1(2), 55-81.
- Pacheco, L. (2017). Customer satisfaction in Portuguese hotels: Evidence for different regions and hotel segments. *Tourism Analysis*, 22(3), 337-347.

- Pacheco, L. (2017). Customer satisfaction in Portuguese hotels: Evidence for different regions and hotel segments. *Tourism Analysis*, 22(3), 337-347.
- Pallant, J. (2010). *SPSS Survival Manual. A step by step guide to data analysis using SPSS* (4th ed.). Melbourne: Open University Press
- Passas, N. (2007). *Corruption in the procurement process/outsourcing government functions: Issues, Case studies, Implications*. Boston: North Eastern University.
- Perreau, F. (2015). The 3 decision making process guiding consumers' purchasing behavior. Retrieved December 20, 2017.
- Quinot, G. & Arrowsmith, S. (Eds.). (2013). *Public Procurement Regulation in Africa*. Cambridge: University Press Cambridge.
- Quinot, G. (2013). *Promotion of Social Policy through Public Procurement in Africa*. Stellenbosch: Stellenbosch University.
- Stephanie, R. (2021). The Risk Management Process in Project Management, Project manager. *International Journal of Project Management*, 30(6), 697-707.
- Samuel, K., & Josphat, W. (2014). Analysis of the Key Drivers of Sustainable Procurement in Public Organizations in Kenya, *International Journal of Science and Research*, 3(10), 431-442.
- Sarkis J. (Ed.) (2006): *Greening the Supply Chain*. London: Springer.
- Schwarz, C., Schwarz, A., & Black, W. C. (2014). Examining the Impact of Multicollinearity in Discovering Higher-Order Factor Models. *CAIS*, 34, 62.
- Scottish Police Authority. (2008). *Scottish Government's Public Procurement Policy Handbook*. Scotland: Scottish Police Authority.

- SELA. (2017). *Las compras públicas como herramienta de desarrollo en América Latina y el Caribe*. Caracas: SELA (Sistema Económico Latinoamericano y del Caribe).
- Shayne, K. (2011). Anatomy of a priority-driven budget process. *Chicago: Government Finance Officers Association, 2(3)*.
- Shields, P., & Rangarjan, N. (2013). *A Playbook for Research Methods: Integrating Conceptual Frameworks and Project*, Oklahoma: New forums Presss.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. (6th ed.). Boston: Pearson.
- Tabachnick, B.G. & Fidell, L.S. (2013). *Using Multivariate Statistics*. Boston: Pearson.
- Taherdoost, H. (2016); sampling methods in research methodology; How to choose a Sampling Technique for Research: *International Journal of academic Research in Management, .5(2)*, 18 -27.
- The State of Queensland (2014). *Procurement guidance: Integrating sustainability into the procurement process, PLoS medicine, 17(6)*, e1003141.
- Tomislav, K. (2018). The concept of sustainable development: From its beginning to the contemporary issues. *Zagreb International Review of Economics & Business, 21(1)*, 67-94.
- Tony, I., & Kerry, E. (1997). *The Stakeholder Theory in the Modern Global Business Environment*, Maryland USA: Wiley.
- Toolseeram, R. (2012). *Role of Stakeholders in promoting Sustainable Consumption and Production (SCP) and optimizing their participation*, New Delhi: CRC Press.
- Tyssen, C. (2011). *Sustainable Supply Chain Management*: London: Springer

- Santiago, L. & Ralf, C. (2020). Sustainable Public Procurement, *Palais des Nation* 8-14 av de la Paix 1211 Geneva 10, Switzerland.
- UNEP (2021). *Sustainable Public Procurement: How to Wake the Sleeping Giant!* Introducing the United Nations Environment Programme's Approach. *Environment, Development and Sustainability*, 1-16.
- United Nations (2012). *Report of world commission development, the future we want*, Geneva: UN.
- Valadez, J., & Bamberger, M. (2004). Monitoring and Evaluating Social Programs in Developing Countries. *A Handbook for Policy Makers, Managers and Researchers*. Washington: World Bank.
- Videira, N., Kallis, G., Antunes, P., & Santos, R., (2003). Public participation in integrated river basin governance. *In Integrated Evaluation for Sustainable River Basin Governance. Advisor Project (ed.)*. London: IWA Publishing.
- Walker, H. & Phillips, W. (2009). Sustainable procurement: emerging issues. *International Journal of Procurement Management*, 2(1), 41-61.
- Walker, H. & Brammer, S. (2012). The *relationship between sustainable procurement and e-procurement in the public sector*", *International Journal of Production Economics*, 140(1), 256-268.
- William, B. (2007). *The Sustainability Handbook: The Complete Management Guide to Achieving Social, Economic and Environmental Responsibility*. New York: Earthscan Press.
- Wittke, K. (2014). *The contribution of stakeholder theory to supply chain management*. The Netherlands: University of Twente.

World Bank. (2010). *Planning, Monitoring and Evaluation: Methods and Tools for Poverty and Inequality Reduction Programs*. Washington DC: The World Bank.

World Bank. (2011). *Project Monitoring Capacity Development*. Washington DC: The World Bank.

World Bank. (2004). *Monitoring and Evaluation, Some tools, Methods and Approaches*. Washington DC: The World Bank.

Zuleta, M. M. (2019). *Hacia una política de datos abiertos: del Sistema de Compra Pública para los países miembros de la RICG*.

APPENDICES

Appendix I: Introduction Letter

Dear Sir/Madam

RE: ACADEMIC RESEARCH PROJECT

I am a PhD student at the University of Jomo Kenyatta and Technology University (JKUAT). I wish to conduct a research entitled **“Public Participation in Procurement Process for Sustainable Procurement Management in Devolved Systems of Government”**. A questionnaire has been designed and will be used to gather relevant information to address the research objectives of the study. The purpose of writing to you is to kindly request you to grant me permission to collect information on this important subject from purposively selected members of your staff.

Please note that the study will be conducted as an academic research and the information provided will be treated in strict confidence. Strict ethical principles will be observed to ensure confidentiality and the study outcomes and reports will not include reference to any individuals.

Your acceptance will be highly appreciated.

Yours Sincerely

Eunice Gitiri Njagi

Appendix II: Questionnaire

INSTRUCTION:

The questionnaire is intended to collect data for an academic project titled; Public Participation in Procurement Process for Sustainable Procurement Management in Devolved Systems of Government.

Please answer all the questions honestly and exhaustively by putting a tick (✓) or numbers in the appropriate box that closely matches your view or alternatively writing in the spaces provided where necessary.

NB: This information will be used strictly for academic purposes only and will be treated with utmost confidence.

PART A: Background Information

Level of education

- 1). O/A level 2). Certificate/Diploma 3). Bachelors degree
- 4). Post graduate 5). Other specifications

PART B: General Information

i. Does the County Government inform members of the community on need for public participation/ community involvement?

Yes No

ii. If yes in what ways does public participation take place in the County Government to sensitize the community on various issues?

Town hall meetings

Notice boards

Development project sites

Wards/ sub-wards meetings

Any other specify.....

iii. How regular is the sensitization above done?

Weekly

Monthly

Quarter yearly

Half yearly

Yearly

Any other

iv. The community is made aware of procurement opportunities in the County?

Yes No

PART C: Procurement Planning

Please indicate the extent to which the community is involved in Procurement planning. Use a scale of 1-5, where (1-Not at all, 2-small extent, 3-moderate extent, 4-large extent and 5- very large extent.

Statement	5	4	3	2	1
1. The community is involved in project identification					
2. The community is involved in determining project procurement method					
3. The county government involves the community in determining the project time schedule(time to start and end project)					
4.The County Government involves community in determining the requirements of projects					

PART D: Risk Management

Please indicate the extent to which the community is involved in risk management. Use a scale of 1-5, where (1-Not at all, 2-small extent, 3-moderate extent, 4-large extent and 5- very large extent.

Statement	5	4	3	2	1
1. The community is made aware of the community infrastructural development projects to be undertaken in their areas					
2. Community is regularly informed of the progress of community infrastructural projects					
3. Complains by the community on matters of health and safety are acted on immediately on matters arising in the implementation of Community involvement					
4. Recommendations by the community on matters of health and safety during implementation of community infrastructural projects are acted upon					

PART E: Contract Management

Please indicate the extent to which the community is involved in contract management. Use a scale of 1-5, where (1-Not at all, 2-small extent, 3-moderate extent, 4-large extent and 5- very large extent)

Statement	5	4	3	2	1
1. The community is involved in supplier identification of community infrastructural projects by county government					
2. community is involved in the negotiation with supplier for community development projects					
3. Community involvement in supply of locally available materials during community infrastructural development projects					
4. Community involvement in ensuring compliance with terms and condition of contracts in community infrastructural development projects					

PART F: Project Monitoring

Please indicate the extent to which the community is involved in monitoring. Use a scale of 1-5, where (1-Not at all, 2-small extent, 3-moderate extent, 4-large extent and 5- very large extent)

Statement	5	4	3	2	1
1. Community is involved in monitoring implementation process of community infrastructural projects					
2. Community is allowed to raise concerns on areas they think are not properly done during project implementation process					
3. Community can suggest areas of improvement during project implementation process					
4. Community involvement in evaluation of performance of community infrastructural projects					

PART G: Sustainable Procurement

Statement	5	4	3	2	1
1. Community involvement in community infrastructural projects results in lower cost of implementation					
2. Community involvement increases the level of acceptance of community infrastructural projects					
3. Community involvement ensures maximum utilization of County resources					
4. Community involvement reduces time for completion of County Development Projects					
Community involvement results to less environmental degradation					
Community involvement results to less health risks as a result of community infrastructural development projects					
Community involvement results to less security risks as a result of community infrastructural development projects					
5. Community involvement to improvement of quality of life among people living in the county					

-----Thank You -----

Appendix III: NACOSTI Permit



REPUBLIC OF KENYA

Ministry of Education, Science and Technology

Ref No: **557286**



**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION**

Date of Issue: **28 February 2020**

RESEARCH LICENSE



This is to Certify that Miss., Eunice Gitari Ngugi of Jomo Kenyatta University of Agriculture and Technology, has been licensed to conduct research in Barings, Bomet, Bungoma, Busia, Elgeyo-Marakwet, Embu, Garissa, Hombay, Isiolo, Kakamega, Kericho, Kilimo, Kiambu, Kiisi, Kirinyaga, Kisii, Kisumu, Kitui, Kwana, Laikipia, Lamu, Machakos, Makueni, Mandera, Marsabit, Meru, Migori, Mombasa, Murang'a, Nairobi, Nakuru, Nandi, Narok, Nyamira, Nyandarua, Nyeri, Samburu, Siaya, Taita-Taveta, Tana-River, Tharaka-Nithi, Trans-Nzoia, Turkana, Uasin-Gishu, Yala, Wajir, Wunduchi on the topic: **Public Participation and Sustainable Pesticide Management in Devolved Systems of Government for the period ending: 28 February 2021.**

License No: **NACOSTI/20/489**

Application Identification Number: **557286**

Director General
**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY &
INNOVATION**



Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, scan the QR Code using QR scanner application.

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research License is Guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014

CONDITIONS

1. The License is valid for the proposed research, location and specified period
2. The License any rights thereunder are non-transferable
3. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research
4. Excavation, fitting and collection of specimens are subject to further necessary clearance from relevant Government Agencies
5. The Licensee does not give authority to transfer research materials
6. NACOSTI may monitor and evaluate the licensed research project
7. The Licensee shall submit one hard copy and upload a soft copy of their final report (thesis) within one of completion of the research
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice

National Commission for Science, Technology and Innovation
off Wajopak Way, Upper Kaburu,
P. O. Box 30623, 00100 Nairobi, KENYA
Land line: 020-4807900, 020-2241349, 020-2310571, 020-8001077
Mobile: 0713 788 787 / 0725-404 245
E-mail: info@nacosti.go.ke / registry@nacosti.go.ke
Website: www.nacosti.go.ke

132

Appendix IV: Letter of approval

