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Role of Procurement Practices on the Performance of Projects Funded by District Development Fund in Ghana. A Survey of Greater Accra

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Abstract

The District Assemblies' Common Fund (DACF) is a pool of resources created under Article 252 of the 1992 constitution of Ghana. It is a minimum of 5.0% of the national revenue set aside to be shared among all District Assemblies in Ghana with a formula approved by Parliament. The Common Fund is a development Fund that is intended to ensure equitable development of the various Assemblies in the country. The DACF Administrator is the Manager of the Fund. However, ensuring the success of the Fund is not the sole responsibility of the Administrator but a collective responsibility of all stakeholders including the government, the Administrator, officials of Metropolitan, Municipal and District Assemblies (MMDAs) that receive the fund, Ministry of Local Government and Rural Development (MLGRD), Civil Society who benefited from the fund. The fund is a Development Fund which enables the use of the nation's wealth throughout Ghana to the benefit of all citizens. However, the studies were not geared towards the role procurement practices play in determining the success or failure of projects funded by the District Development Fund. This backdrop formed the basis of the study for which the general objective of the study was the role of procurement practices on the performance of Projects funded by District Assemblies' Common Fund (DACF) in Ghana. The specific objectives were formulated after exploration of best procurement practices adopted in other countries and included; the role of stakeholder management, supply chain risk management, contract management, Supplier Appraisal on the performance of projects funded by District Assemblies' Common Fund (DACF) in Ghana. Theories relevant to this study were reviewed which included; stakeholder management theory, project management theory, Grey Systems theory and Transaction costs Economic Theory. The study variables were discussed under the conceptual framework under independent variables namely stakeholder management, supply chain risk management, contract management, and Supplier Appraisal. Critique of relevant literature to the study was done and research gaps identified. The target population was all the projects funded by District Assemblies' Common Fund (DACF) in Greater Accra. The study used stratified random sampling, and the sample size was 450 projects. The study used questionnaires for data collection which were self-administered by research assistants. Qualitative and quantitative data were coded and entered in Statistical Package for Social Sciences (SPSS) for analysis. Descriptive statistics were generated. To test the relationship between independent and dependent variables correlation analysis was undertaken where all the independent variables were positively correlated with the dependent variable. To test the predictability role of the model and test of hypothesis, logistic regression was used where the results showed that contract management had the highest predictability role in the model. For stakeholder management, regular communication with stakeholders was ranked as the most effective stakeholder management method followed by mutual trust and respect amongst the stakeholders. Standardising inputs specifications was found out to be the most effective method for supply chain risk. A financial appraisal was found to be one of the most undertaken appraisals across many projects. One sample T-test was used to evaluate the perceived effect of independent variables for which the findings were in line with the results obtained in the logistic regression model. The study recommended that the project and procurement committees should reduce

resources meant for supply chain risk management as more emphasis on supply chain risk management would negatively affect the performance of the projects funded by District Assemblies' Common Fund (DACF). Further adoption of e-contract management was recommended to ensure real-time tracking and retrieval of contracts records.

Keywords:

1.0 INTRODUCTION

Throughout the 1980s and early 1990s, many countries were performing poorly in meeting their general public service objectives. The general public procurement systems were not working correctly. It was therefore held that effective public procurement systems could be created through reforms (Agaba & Shipman, 2006). Generally, public procurement has continued to evolve both conceptually and organizationally. That evolution sped up during the late 1990s as governments at all levels came under increasing challenges to do more with less. Indeed, all governmental entities of abundant and developing countries are struggling in the face of unrelenting budget restrictions, government downsizing, public demand for increased transparency in public procurement; and increased concerns about efficiency, justness, and equity. Additionally, general public procurement professionals have confronted a continually changing environment typified by rapidly growing technologies, increasing product choice, environmental concerns, and the complexities of international and regional trading agreements. (Khi, 2009). A well-functioning procurement system is built on specific benchmarks, which revolves around four pillars--legislative and regulatory framework, institutional framework and management capacity, procurement functions, market practices, and integrity of procurement practices (Agaba & Shipman, 2006). As finances decrease, government agencies are under increasing pressure to reduce costs without diminishing their missions. An essential system for cost-cutting is purchase practices that facilitate competition among vendors so that government agencies benefit from efficiencies inherent in private enterprise. Often, the national government is the sole customer for specific products or services. (Khi, 2009). A large number of various governments are at the forefront in asking the public sector to use E-procurement as a purchasing practice in-order to lower the transaction costs involved in placing orders from many suppliers (Tonkin, 2007).

MacManus, (2002) shows that public sector purchase practices require departments to use a sizable number of suppliers to encourage competition. Such requirements help to change the way in which procuring entities develop relationships with their suppliers and consequently how they develop techniques for automatic incorporation. Procurement officials have to constantly weigh the trade-offs between conflicting purchase objectives which include; quality and cost tradeoffs, timeliness and cost tradeoffs, socio-economic goal and cost tradeoffs, competition and cost tradeoff, risk and cost tradeoff (Khi, 2009). Basheka and Kabatereine (2013) add that good procurement is one devoid of problems and based on public procurement practices that promote efficiency and performance for better service delivery. Therefore, the citizen-centred government should use at least seventy per cent of its budget to provide timely, effective and efficient public goods and services such as; health, education, defence and infrastructures since the greatest percentage of these funds is extracted from the taxpayers. Public procurement may be often influenced by a variety of secondary objectives which are not related to, or may even conflict with, the principles of best value for money in obtaining products or services under procurement (Mbabazi et al., 2009). Secondary goals include; the promotion of national industries by closing out foreign competition and even discriminating against certain imported foreign goods.

Brown and Hyer (2010) argue that the attention to the management of projects undoubtedly is growing because organisations, whether private nonprofit making or public, have raised their project portfolios and consequently spend large sums of money on projects. According to Chandra (2010), has been a significant constraint on the successful implementation of public projects in India culminating in projects becoming uneconomical as a result of time and cost over-runs. The result has been slow economic development. This view is supported by Oladipo (2008) who evaluated local government projects in Nigeria where he identified key project challenges as poor project planning, poor quality workforce, financial constraints and insufficient project monitoring. In addition, the established procurement processes in developing countries hinder project success (Frimponga et al., 2003) as the project procurement and administrative arrangements currently in use in developing countries have been inherited from developed Western countries which have a different culture, history, collective experience and endowment of construction expertise (Ofori, 2000).

In developing countries, Basheka and Bisangabasaija (2010) argue that public procurement is increasingly recognised as essential in service delivery and it takes a high proportion of total expenditure. Accounts for 60% in Kenya (Akech, 2005), 58% in Angola, 40% in Malawi and 70% of Uganda‟s public spending (Wittig, 1999)

This is very high when compared with a global average of 12-20 %. Due to the high chunk of money involved in government procurement and the fact that such money comes from the taxpayers, there is a need for accountability (Hui et al., 2011).

1.1 Background of the Study

Considering the Organization for Economic Co-operation and Development (OECD) report, Kamau and Odhiambo (2003) asserted that public procurement has economic and political implications which imply that the process should be made as far as possible economic and efficient. This requires that the whole procurement process should be well understood by the players who include; government, the public procuring entities, suppliers/contractors, professional bodies, academic institutions and the public as a whole. Chandra (2010) defines a project as an investment activity that involves a current or future outlay of funds in the expectation of a stream of benefits extending far into the future. A public project is one where such an investment involves the use of public financial resources government body mandated out certain specific missions to achieve specific objectives for the benefit greater public majority. As Brown and Hyer (2010) assert, a project is a temporary endeavour intended to solve a problem, utilise an opportunity, or respond to a mandate. All types of organisations engage in project activities: Families, Government agencies, small businesses and multinational corporations. Brown and Hyer (2010) cite examples of public projects as, street lighting, street repair and public parking.

Walker and Rowlinson (2008) suggest that the project procurement choice can be guided by the project typology and the degree of collaboration and integration between the supply chain parties and their relationships. The current process of procurement selection tends to be carried out in a somewhat unstructured manner, and this may give rise to the adoption of procurement system which could be beyond the deliberate choice (Luu & Chen, 2003). The result of employing an imprudently selected procurement method could be an impediment to the realisation of certain anticipated benefits associated, and might eventually lead to project failure (Ambrose & Tucker, 1999). Inappropriate procurement strategies may lead to cost and time overruns claims and disputes on projects (Huimin, David & Wang, 2014). Conversely, appropriate procurement strategies are needed to help achieve optimal solutions regarding cost, time and quality. They can also contribute positively to other aspects of performance, such as meeting agreed with targets (Huimin et al., 2014).

Public procurement is increasingly recognized as a profession that plays a crucial role in the successful management of public resources, and a number of countries have become increasingly aware of the significance of procurement as an area vulnerable to mismanagement and corruption and have thus made an effort to integrate acquisition into a more strategic view of government efforts. As part of the efforts to adopt a long-term and strategic view of their procurement needs and management, most countries have resorted to using their annual procurement plans as a possible problem solver (Mahmood, 2010).

According to the Organization for Economic Co-operation and Development (OECD, 2007) benchmarks, public procurement accounts for about 16% of most countries GDP in ordinary times. Further, Woolcock (2008) shows that among African countries such as Uganda and Tanzania, procurement accounts for about 10% of GDP and sometimes even up to 70% of total government expenditure. Moreover, Bianchi and Guidi (2010) argue that, apart from wealth generation, public procurement can be utilised in other activities such as environmental conservation and cultural cohesion. Overall, public procurement is essential today than at any other time before. This is attributable to factors such as, market liberalisation, globalisation and technology which have played vital roles in opening up local public procurement to the global business periphery.

1.2 Problem Statement

The Ghana public procurement system has evolved from a mostly crude unregulated system to a highly regulated system (PPOA, 2009). Despite the progress made, the Ghana procurement system still faces a myriad of challenges. World Bank Report (2009) indicated that the average project funds absorption rate was less than 10% per annum which was attributed to a constrained procurement process. According to DACF status report (2009), tendering and procurement procedures have become conduits through which some suppliers, contractors, Members of Parliament and their political allies fleece hundreds of millions of shillings from the District kitties through procurement processes. Common abuses range from establishing personal fronts or ghost companies which are awarded DACF project tenders un-procedurally and use the opportunity to inflate prices of goods and services (TISA, 2011). Malala (2011) found out that, 88 % of projects were behind schedule for which there was an expression by the respondents that, the procurement process derailed DACF projects performance and the community needed to be involved to realise ownership and acceptability. Omanga (2010) study on factors affecting the implementation of DACF funded projects (cited in Malala, 2011) found out that, the DACF projects fail because the procurement is not transparently done. As procurement oversees the management of financial resource in the form of inventory (projects

inputs), this has a direct impact on the performance of DACF funded projects. Shiundu (2010) in his study in Accra Metro (cited in Malala, 2011) reported that 60 % of projects were behind schedule and this delay was attributed to the procurement process. These statistics are asserted by Rutere (2009) who revealed that procurement is a cause of stalling of DACF projects (cited in Malala, 2011).

Considering some of these studies and taking into considering that procurement is a process, studies and reports have generally not addressed the specifics of acquisition that affect the performance of projects funded by DACF. This gap created the need to research to examine the role of procurement practices on the performance of the projects financed by District Assemblies' Common Fund (DACF) in Ghana.

1.3. Primary Objectives

To examine the role of procurement practices on the performance of projects funded by District Assemblies' Common Fund (DACF) in Ghana.

1.4. Secondary Objectives

1. To examine the role of stakeholder management on the performance of projects funded by District Assemblies' Common Fund (DACF) in Ghana.
2. To determine the role of supply chain risk management on the performance of projects funded by District Assemblies' Common Fund (DACF) in Ghana.
3. To determine the role of supplier appraisal on the performance of projects funded by District Assemblies' Common Fund (DACF) in Ghana.
4. To establish the role of contract management on the performance of projects funded by District Assemblies' Common Fund (DACF) in Ghana.

1.5. Limitations of the study

It was difficult for the researcher to access some records that had factual information on the projects that were funded by the District Development Fund. This led to over-reliance on the respondent's feedback, but the researcher encouraged the respondents to respond to the open-ended questions which at least gave factual information and formed a basis for triangulation.

1.6 DESIGN AND OVERVIEW OF STUDY

1.6.1 Scope of the Study

The study surveyed Greater Accra it has districts that had been reported with misuse of tax payer's money through poorly implemented and abandoned projects. District Assembly Development Fund Report Card substantiated this for the period between 2008-2012 for which three districts in Greater Accra had a cumulative 78% waste of DACF kitty through scrupulous procurement deals for projects funded by DACF which was among the top 5 districts with the high percentage of wasted funds across the country. Further, the scope of the study was limited to the following specific objectives; stakeholder management, supply chain risk management, contract management and Supplier Appraisal on the performance of projects funded by the District Development Fund. Some respondents were reluctant to give some information in writing in fear of victimization and whistleblowing. However, the researcher recorded some of the oral responses more so for the open-ended questions. It became difficult to conduct interviews as most of the respondents were not readily available as they were ad hoc DACF project committee members. This necessitated the need to book appointments where possible, but generally, this made the researcher to revert to drop and pick the method of data collection for the interest of time.

The study mainly focused on evaluating the role of stakeholder management, supply chain risk management, contract management and supplier appraisal. These are some among other factors that may influence the performance of projects funded by District Assemblies' Common Fund (DACF) in Ghana. Thus the study was not able to wholesomely consider other factors such as politics, corruption, and selection of the DACF committee's members which have a significant bearing on the performance of projects funded by DACF.

1.6.2 Research Questions

1. Examine the role of stakeholder management on the performance of projects funded by District Assemblies' Common Fund (DACF) in Ghana.
2. What the role of supply chain risk management on the performance of projects funded by District Assemblies' Common Fund (DACF) in Ghana.
3. What the role of supplier appraisal on the performance of projects funded by District Assemblies' Common Fund (DACF) in Ghana.

4. What the role of contract management on the performance of projects funded by District Assemblies' Common Fund (DACF) in Ghana.

1.6.3 Hypothesis

- $H0_1$. Stakeholder management has no significant role on the performance of projects funded by District Assemblies' Common Fund (DACF) in Ghana.
- $H0_2$. Supply chain risk management has no significant role on the performance of Projects funded by District Assemblies' Common Fund (DACF) in Ghana.
- H03. Supplier appraisal has no significant role on the performance of projects funded by District Assemblies' Common Fund (DACF) in Ghana.
- H04.Contract management has no significant predictor role on the performance of projects funded by District Assemblies' Common Fund (DACF) in Ghana.

1.6.4 Organization of the Study

This research work is divided into five main chapters. Chapter One which is the introductory part of the research work contains the background, statement of the problem, objectives, research question, scope, significance, limitation, and organisation of the study. Chapter Two discusses the concepts in procurement and also review opinions, findings from different authors of books, journals, publications, and others. Chapter Three also deals with the methodology used for the study. It presents the methodological procedures and approaches used in conducting the research. It comprises the research design, population, sampling method, and data collection methods. Chapter Four discusses the results. It involves the use of tables and figures to explain and understand the data collected (responses) from respondents. Chapter five deals with summary, conclusion and recommendations. This section summarises the major findings and draws conclusion base on the results and finally recommends appropriate interventions where necessary.

1.7 SUMMARY

Motivated by the continued link of procurement to failure/ stalling of projects funded by DACF in Ghana Districts, the research sought to establish the role that, procurement practices have on the performance of the projects financed by DACF which shed light on how procurement contributes to the success or failure of the projects funded by DACF. The findings formed a reference point especially with the enactment of The National District Assembly Development Fund Act (2015) where most of the funds will be channelled to funding projects in public schools. Thus the government will take note of what made some projects funded by DACF to be successful and others fail.

For policymakers and procurement professionals the study is of the great breakthrough as the specific procurement aspects that profoundly affect the performance of projects funded by DACF that have not been well documented. Further, the findings of the study made a significant contribution to the literature as most studies that have been done on the performance of projects funded by District Development have primarily based their conclusions on descriptive statistics, but for this study, extensive advanced data analysis was done.

Academically, the researcher brought out insights on procurement practices that have a propensity in determining projects success or failure for which the findings were published to form a basis for future reference for other scholars who may be interested in undertaking research in the field of procurement for projects. In fact, the researcher's recommendation for supplier appraisal and stakeholder management has been adopted in the draft procurement regulations.

2.0 LITERATURE REVIEW

The civic acquisition is typically precise as the attainment of consultancy, facility and infrastructure through the contractual framework, funded wholly or in share from national purse (World Bank, 1995). It includes selection assessment and the urgent issue of "make or buy" choice which might lead to the delivery of facilities and amenities in a suitable situation (PPB, 2003). Procurement is the procedure of buying, hiring or attaining works, properties and facilities on a reasonable cost in the correct amount and excellence, by the correct period, in the correct domicile aimed at thru profit or for national usage, companies, normally via a pact" in agreement with the Public procurement (amendment) Act 2016, Act 914. From this time administration pledges to economic self-control, liability, clearness, moral behaviour and actual administration of civic attainment of worth for national expenditure is authoritative. This becomes portion of the basis in areas the rough guide of the Public procurement (amendment) Act 2016, Act 914 in the nation to control public expenditure so as to get value for money nevertheless, this amount has remained incredulous with certain problems in expenditures, communiqué blockages, administration and over-all interruptions in the procurement processes. According to Waara (2007), Public Procurement is any procuring achieved by any

public expert inside the general area or inside the services area. According to Sarpong (2007), procurement is the running of workable achievement of goods, works and services to enhance value for money in a complete an expert, auditable and clear outline. The public procurement rules relevant to acquiring units also hinge on the entire acquisition value is finished or beneath the so-called "threshold values", which vary as respects properties, facilities and building work. For procurement to attain its aim, it has to be carried out professionally and economically. Global knowledge proposes four fundamental philosophies upon which the procurement scheme is founded (World Bank, 2003).

- Make the best use of the best low-cost and effectiveness.
- Endorsing competitiveness and allowing supreme contribution from dealers and contractors for the provision of supplies, infrastructure and consultancy.
- Reasonable and unbiased handling of all dealers.
- Transparency in events and limiting chances for dishonesty and collusive doings.

2.1 Development Of Study

2.1.1 Conceptual Framework

Considering the views of Robson (2011), a conceptual framework is the system of concepts, assumptions, expectations, beliefs, and theories that supports and informs your research. Contract management and supply chain risk management were adapted from the Council of Supply Chain Management Professionals model of 10 best procurement practices while stakeholder management and supplier appraisal borrowed from PPOA 2009 procurement manual. The independent variables of the study were stakeholder management, supply chain risk management, supplier appraisal, contract management, and performance of projects funded by the District Development Fund as the dependent variable.

2.1.2 Implementation of the Value-For-Money Approach

For the government, as well as in some other state entities such as MMDAs, the Public Procurement Act 2016, (Act 914) it‟s obligatory for the Controller and Accountant General and the Auditor General to appraise the economy, efficiency and effectiveness as the respect of government expenses. For local government, under the same Act, the auditors of local specialists are obligatory to be content that the organisations concerned have finished proper preparations for safeguarding that economy, efficiency and effectiveness in the submission of assets have been attained (Kotoka, 2012). Against this challenging background, the National Development Planning Commission (NDPC) in collaboration with the MMDAs have taken it upon themselves to ensure that the three criteria of economy, efficiency and effectiveness which must be separately defined are applied to the latter regarding MMDAs projects. Policy makers at the local level nevertheless must decide what best provides the values or satisfaction to the particular community they serve. Clearly, while it is difficult enough to identify the amounts recognised by individual people, it is much more difficult to determine the values of a group of people in particular communities, and certainly impossible to measure them.

Achieving value-for-money in metropolitan, municipal and district assemblies. The five fundamental pillars of a healthy-performing procurement fiduciary managing‟ are all articulated in Ghana‟s Public Procurement Act (World Bank, 2003). The procurement reforms of Ghana are not, of themselves, adequate situations for the attainment of VfM. Kotoka (2012) admits this point and calls for better pact supervision and superior expertise in the procurement sector. The sole dependence upon the out-dated approaches and the use of mostly price-based supplier assortment standards appear to be vital mistakes when dealing with social projects or public projects and services (Palaneeswaran et al. 2001). There are discrepancies in procurement systems descriptions and vocabulary. The spread of procurement schemes and the transfer methods, at its smallest size, are a replication of the purpose of the world-wide edifice industry to stride towards a happier upcoming and to speech long-known and known glitches. An organised tactic bearing in mind all procurement preparations and scheme transfer modalities is measured the finest mode to protected VfM in MMDAs. Nonetheless, these procurement systems and distribution systems are classic and through coherent request can donate to the insight of Ghana‟s search for VfM in-state ventures, especially that of MMDAs.

2.1.3 Competitive Tendering (Section 35 and Part V of PPA 2016, ACT 914)

Tender denotes official proposal to source for materials of a settled value. From a purchase viewpoint, competitive tendering is a procurement method in which probable dealers are asked to create a secure and clear proposal of the amount and conditions on which they determine resource stated goods and services, which upon receipt, will be the foundation of a succeeding contract (Lysons and Frrington 2006). Tender is usually founded on the specification of supplies provided by the buyer nevertheless a substitute is to invite dealers to succumb a key and an amount to a challenge established by the buyer. It is clear that tendering is based on principles of competitiveness, fairness and accountability, transparency, openness and integrity once the entire procedure is meant at safeguarding

best value for money and not inescapably lowermost amount. In response to the above declaration, Dimitri et al. (2006) reverberated that though it is competitive procurement (open bidding), it is unbolted solitary to befitting contractors to assure decent contracts affecting.

Competitive tendering methods: Per section 35, 36, and 38, of the public procurement Act 914 (2016) is the numerous means of competitive tendering. Hence competitive tendering which is made up of International, National, limited tendering and two (2) stage is tendering. Domestic competitive tendering concerns acquiring locally engage state modest proffering measures. (Section 44) even though Global competitive bidding is active for huge amount indenture which invites external suppliers owing to unobtainable close by or cannot be provided on the justification of methodological and extra capabilities composed through monetary restraint. (Section 45). Limited bidding is approved out for details of budget and competence and focuses to the endorsement of the Panel involves in procurement by the income of controlled bidding. (Section 38) If goods, works or services are accessible solitaries since a restricted figure of dealers or services. Formerly likewise if the period and charge obligatory investigative and assessing a huge number of bidders is uneven to the worth of the goods, works and services to be acquired. Choosing a competitive technique of rendering the actual instrument for guaranteeing value for money, a study done by Dimitri et al. (2006) showed that the procurement expert is faced with two main choices. The principal is the competitive tendering plan to accept any quantity of dealer lots. The competitive tendering plummet in two key classes Sealed-bid tendering and dynamic reversed auctions, with the sealed bid tendering, dealers submit proposals deprived of detecting the offer finished by the ally‟s whiles in potent sales amounts are revealed in the process of the race so that dealers use the chance to outdo their competitors before the sale come to an end. The likely challenge with this system is that it can last for long. (Dimitri et al. (2006) If handled professionally, it helps the procuring entity to make gains, hence the attainment of the best value for money spent.

2.1.4 Good Practices and the Importance of Procurement

According to Public Procurement Authority (2006), Public Procurement has a straight effect on the succeeding; the fruitful distribution of national schemes and public facilities, complete civic monetary administration by attaining value for money in administration outflow, plummeting exploitation, new rivalry, financial reserves, decrease commitment planes, besides inspiring secluded area. Public influences of public procurement comprise improved reverence for the rule of law, better public sector services, better forecasts of attaining other management aims, improved contact by the indigenous marketplace to national pacts, and improved status for government organisations. This is a signal that procurement has multi-dimensional standing which scratches crosswise all provinces of lives. Governments of evolving nations need to safeguard that they instrument procurement laws entirely and eliminate all blockages to attain this status as specified by PPA. Research led by PPA showed that the Government of Ghana could save about 25 per cent of its local income as of proper public procurement performance and it decreases government spending. There is no hesitation that public procurement scheme in the nation is in conformism per global most exceptional practices.

2.1.5 Merits of Public Procurement Practices

An able, operative and expert presentation of common buying rules usually donate rigorous administration of public expenses (Hunja, 2003). There is an increasing indebtedness relation amid specific public area goals, and public procurement performs. Example, public procurement concerns are regularly a vital effort of packages to control bribery and to safeguard proper trusted authority for secluded improvement by federal bureaucrats are limited (Evenett, et al., 2005). There is the upsurge of patron confidence in public schemes through Public procurement. This has aided in patron effective public procurement planning. Also, it gives indications to the credentials of necessary asset expenses, that in turn enables fiscal and distribution choice-creating of procurement experts. It is hard but, to imagine how the public can carry significant developments citizens welfare. Judicious operation of public expenses stresses on actual and effectual buying strategies. This gratitude explains growing attention on public procurement rules and observations which are probable penalties of improvements, subsidy, gifts and external through asset in the nation.

2.1.6 Challenges of Public Procurement in Ghana

Schiele and McCue (2006) delineated public procurement operation encounters as marketplace situations, permissible and party-political setting, structural and socioeconomic environmental features. Discovered that, irrespective of the exertion by the ruling regime and its associated activities to overcome execution tasks, a colossal figure of Procurement professionals in various departments, act on their own and frequently bypass the procuring practices.

2.1.7 District Assemblies' Common Fund (DACF)

The District Assemblies' Common Fund (DACF) is a pool of resources created under Article 252 of the 1992 constitution of Ghana. It is a minimum of 5.0% of the national revenue set aside to be shared among all District Assemblies in Ghana with a formula approved by Parliament. The fund is a Development Fund which enables the use of the nation's wealth throughout Ghana to the benefit of all citizens. The Common Fund is a development Fund that is intended to ensure equitable development of the various Assemblies in the country. The DACF Administrator is the Manager of the Fund. However, ensuring the success of the Fund is not the sole responsibility of the Administrator but a collective responsibility of all stakeholders including the government, the Administrator, officials of Metropolitan, Municipal and District Assemblies (MMDAs) that receive the fund, Ministry of Local Government and Rural Development (MLGRD), Civil Society who benefited from the fund.

The Administrator of the District Assembly Common Fund is the sole Manager of the Fund. Each year the Administrator prepares the Formula to be used for sharing of the Fund and places it before Parliament for approval. After approval, the Administrator disbursed the Fund to the various District Assemblies based on the approved Formula. The Administrator also checks and monitors the use of the Fund by the District Assemblies, and reports in writing to the Minister of Local Government and Rural Development on how the Assemblies utilise the Fund. The Administrator is also required by law to present an annual report to Parliament on all activities of the Fund during the year.

2.1.7.1 Recipients of the Fund

1. It is a shared responsibility among civil society, the Government and the Office of the Administrator of the District Assemblies Common Fund
2. The individual vigilance ensures quality work of the Assemblies
3. The District Assemblies' prudent use of the Fund provides value for Money
4. Government agencies responsible for the Fund (DACF and Ministry of Local Government and Rural Development) must ensure strict adherence to guidelines for the Funds application.
5. The Auditor-General by law has a responsibility to provide that common Funds are used in line with laid down procedures.

2.1.7.2 How the Fund is distributed

Part of the Fund is disbursed directly to District Assemblies following the approved Formula. This is referred to as 'direct transfers.'' The MMDAs use the funds for projects and programmes determined by their respective Assemblies. In 2013 and 2014, about 50 per cent of the total amount for the Common Fund was allocated for 'direct transfer'' to the Assemblies. Some of the money from the Fund is also used directed to support many crucial social intervention projects which take place in the Districts but are national in scope. Disbursement for such programmes is referred to as ''indirect transfers''. Some of the national programmes supported by 'indirect transfers'' are the School Feeding Programmed, National Borehole Programme, GYEEDA, Sanitation Module and Sanitation/Waste Management. Also, about four per cent of the Fund is shared to Members of Parliament for District project, one and a half per cent is divided among the 10 Regional Co-ordinating Councils for supervision of the Assemblies in their respective Regions while two per cent is reserved to meet contingency expenditures.

2.1.7.3 Yearly Funds for Greater Accra Region

The Administrator of the District Assembly Common Fund according to the section 252 of the 1992 Constitution is the sole Manager of the Fund

Districts	**1ST QTR 2018**	**2ND QTR 2018**	**3RD QTR 2018**	**4TH QTR 2018**	**Total**
ACCRA METRO.	662,577.09	795,092.50			**1,457,669.59**
OKAIKWEI NORTH MUNICPAL	662,575.33	795,090.39			**1,457,665.72**
ABLEKUMA NORTH MUNICIPAL	662,717.92	795,261.50			**1,457,979.42**
ABLEKUMA WEST MUNICIPAL	662,723.30	795,267.96			**1,457,991.26**
AYAWASO EAST MUNICIPAL	663,594.07	796,312.89			**1,459,906.96**

AYAWASO NORTH MUNICIPAL	663,552.38	796,262.85			**1,459,815.23**
AYAWASO WEST MUNICIPAL	675,725.58	810,870.70			**1,486,596.28**
LA DADE-KOTOPON MUNICIPAL	918,356.34	1,102,027.60			**2,020,383.94**
LEDZEKUKU MUNICIPAL	531,824.33	638,189.20			**1,170,013.53**
KROWOR MUNICIPAL	587,167.00	704,600.40			**1,291,767.40**
TEMA METRO.	498,127.50	597,753.00			**1,095,880.50**
TEMA WEST MUNICIPAL	450,371.88	540,446.25			**990,818.13**
KPONE AKATAMANSO MUNICIPAL	522,623.09	627,147.71			**1,149,770.80**
ASHAIMAN MUNICIPAL	660,064.85	792,077.82			**1,452,142.67**
ADENTA MUNICIPAL	424,697.14	509,636.57			**934,333.71**
GA WEST MUNICIPAL	432,122.57	518,547.08			**950,669.65**
GA NORTH MUNICIPAL	432,305.95	518,767.14			**951,073.09**
GA SOUTH	434,813.70	521,776.44			**956,590.14**
GA SOUTH MUN. NGLESHIE AMANFRO	437,604.31	525,125.18			**962,729.49**
GA CENTRAL MUNICIPAL	938,460.98	1,126,153.17			**2,064,614.15**
GA EAST MUNICIPAL	400,935.15	481,122.18			**882,057.33**
LA NKANTANANG MADINA MUNICIPAL	421,033.80	505,240.56			**926,274.36**
ADA EAST	339,682.51	407,619.01			**747,301.52**
ADA WEST	357,002.71	428,403.25			**785,405.96**
SHAI/OSUDOKU	325,410.83	390,492.99			**715,903.82**
NINGO/PRAMPRAM	329,722.61	395,667.13			**725,389.74**
TOTAL	**14,095,792.90**	**16,914,951.48**			**31,010,744.**

2.1.8 Local Counterpart and Donor Participation in Project Delivery

According to the Pan American Health Organization (PAHO), "Community participation," in project delivery is a process that ensures the active participation of community members in programs or other efforts that are conducted in their interest (PAHO, 1984). PAHO identifies three distinct levels of community participation of donor funded programs which includes the utilization of services by the target community, the "cooperation" of the local community in foreign-funded programs, and community participation in the planning and management of health activities. Akukwe (1999) revealed that community participation is a process of guaranteeing target communities to take active role in the conceptualization, design, implementation, and evaluation of externally funded programs designed in their interest. If this is well done the process ensures that the needs of the communities are given considerable attention before external funding approval.

This continued 10 investment in counterpart funding has been driven mostly by a demand from donor agencies and developing countries on most support programmes. The World Bank has supported approximately 190 lending projects amounting to $9.3 billion in 2000 - 2005 (Tanaka, 2006). And this has emerged as one of the fastest growing investments by donor organizations and multilateral developments banks. External aid generally inflows from industrialized nations to developing countries especially from the United States, have been less than one-half of 1% of the federal budget (USAID; 1996) and has never exceeded 0.30% of the combined gross national product of the industrialized countries (World Bank report: 1993 and Riddell, 1996). This calls for strong local counterpart support in donor funding of Infrastructural developments. Several rural development programs have failed to achieve their desired objectives due to poor organization and implementation strategies.

Kerote (2007) in Nyaguthii and Oyugi (2013) revealed that, relevant methods that call for effective management of funds have been inadequate in allowing maximum utilization of local resources. He also noted that, vital components of project implementation, project identification, monitoring and evaluation have not fully been managed by the committees in the constituencies. The level of contribution by counterparts from the rural communities and local officials can be defined as participation. Local communities are often asked to contribute in the form of voluntary by providing labour, materials or sometimes cash to support a project. According to Kimenyi (2005), the introduction of community participation is designed to fight poverty through the implementation of developmental projects at the local level and particularly those that provide basic needs such as water and sanitation, Agriculture health and education. In Ghana many schools and health 11 centers have been built and equipped through the community participation of projects which have provided a lot of result (Bagaka, 2008). Before the introduction of counterpart participation in projects and programmes delivery in the 1970‟s and 1980‟s, the concept of Local community participation in infrastructural development has evolved over time. But this has wildly been accepted with the promotion by non- governmental organizations and multilateral agencies such as the World Bank and other donor agencies.

Local counterpart participation in donor funded project participation had taken place in projects at different levels of society in different forms, ranging from money contributions, ideas, information sharing, consultation and empowerment. Local counterpart participation can also be seen as process where donors and communities cooperate and collaborate in developmental projects and programmes. This also provides empowerment to both the donor and the local counterpart through skills and knowledge acquisition and experience which can lead to self-reliance and management. The Inter-American Development Bank (IDB) explained that participation improves project design, help resolve or manage conflict, generate social learning and invention and strengthen local institutions. Participation is also seen as contributing to the goals of good governance, respect for human rights and democratization (IDB). More specifically, the Bank sees the potential benefits of participation as:

- Greater relevance and appropriateness of the development processes and products.
- Increased commitment and stakeholder ownership of projects and a willingness to share costs.
- Greater efficiency, understanding and better planning, based on the concerns and ideas of a wide range of stakeholders.
- A better match between human capabilities and physical capital investment.
- Greater transparency and accountability and improved institutional performance.
- Enhanced information flows which allow markets to function more efficiently.
- Increased equity by involving the poor and disadvantaged in development efforts.
- Strengthened capacity of stakeholders, as a consequence of their involvement in the process of development action. According to the Bhatnagar and Williams (1992), in a World Bank Report, participatory approaches should allow governments to:
- Collect more accurate and representative information about the needs, priorities, and capabilities of local people, and the impact of government initiatives and programmes.
- Adapt programmes to meet local conditions so that scarce resources can be employed more effectively.
- Deliver better quality and demand-responsive services.
- Mobilise local resources to augment or even substitute for scarce governmental resources.
- Improve utilisation and maintenance of government facilities and services.
- Increase public recognition of governmental achievements and legitimacy.

2.1.9 Local Fund

Local fund is a fund to support community and municipal base initiatives, and is available through institution located within these communities. According to Salterthwaite (2002) many local funds also use loans and are often combined with support for community base saving groups. Local funding ensures high levels of local ownership; this is because people will not devote in processes that will not benefit them when they know that they will have to repay even part of the cost. It is believed that high levels of local engagement reduce the chance of corruption if the implementing agency is known by the community. Locals funds reduces the time and cost for community or an organization to access resources, but it is demand driven and create effective system for absorption of external funds. Salterthwaite (2002) in his work reported, that there is a growing tendency among donor agencies to concentrate their funding on governments that they judge to be very good in their administrative process. But this will penalize many of the poorest people in the world, who suffer not only from inadequate income and asset bases but also from incompetent governments. Local funds allow donor agencies to channel funds directly to community based organization in countries where they do not want to support governments.

Local funding need to learn from other local funding established and also to recognize the need to have their structure and procedures rooted in local contexts. Local funds have common goals and are based on many shared principles, but they need to be shaped according to what work best in each location. Local funds work best where there are representative and inclusive community based organization formed by urban poor groups and local governments that are capable of being supportive.

2.1.10. The Development of Local Fund

Local funds in developing countries have emerged out of the experience of both social and challenge funds. Beall (2005) defined local funds as several sectors targeted to benefits a country‟s poor and vulnerable groups based on a participatory manner of demand generated by local groups and screened against a set of eligible criteria. Social funds were developed from the early 1980s as a strategy to counteract the social cost of the structural adjustment programs which was promoted and supports by the World Bank. The main aim of local funds is to alleviate poverty through financing of activities that include social service programs, infrastructural developments such as schools, health centers, water supply and sanitation. Local funds had helped rural and urban communities to develop their own standard for engaging the communities to deliver projects to the satisfaction of the people. 2.4.1 Attributes of local fund Local fund have been used over the years as a means to gather small resources targeted directly towards urban and rural communities. The funds are;

- Swift and flexible
- Local funds are demand driven and operate in response in demand arising from local communities themselves.
- Stimulate partnership
- Leverage resources
- Co-financing (Beall, 2005).

2.1.11 Donor Funded Projects

Most developing countries do not have enough money resources to enable them to do what their people required of them. Due to this, governments from developing countries are therefore finding ways of getting additional resources and one of such ways is the help from donors in the form of loans and grants to support their budget. The presence of these donors in the economy over the years has served the country well in most areas. Even though the introduction of donors in the development of most countries has help significantly, some countries are tumbling deeper and deeper into donor dependency and this dependency has been very difficult to split. According to Kisubi (2005), Donor support needs to move away from an approach whereby the donor seems to be in the driving seat and the target community members are passive recipients.

Many of the recipients know exactly what they want to do. In fact, the communities have even more technical expertise in some of the areas, than the donors themselves. They also understand the local situations and their people better. In many cases donors by themselves have implemented programmes directly for recipient‟s communities. The challenge lies in the provision of adequate funds for the relevant sectors involved, and donors are in a position to support with their resources and technical assistance to start programmes in developing countries. In some instances, the donors‟ agenda is hidden. The donor‟s role should not be about doing things for the recipients, as is sometimes the case, for this kills initiative, innovativeness and lowers participation, but, rather, to support and create an enabling and supportive environment (Kisubi 2005).

Donor funded projects include capital intensive projects such as major construction or significant reconstruction and major fixed assets which are partly or wholly 16 financed with donor funds. These are termed donor funded projects. In Ghana, most road projects are partly or wholly funded with donor funds. This is because the revenue generated in the country may not be enough to undertake such projects. Donor fund comes in the form of loans and grants from bilateral and multilateral donor agencies. In a study of road funds in Ghana, Malawi and Tanzania it was reported that, the overall GOG road sector funding from 1996 to 2001 was US$ 1,121.00 million. Donor funding represents about 44%, which is 496.00 million (Andreski, 2008). These funds come from donor agencies such as:

- Africa Development Bank (AFDB)
- Japan International Co-operation Agency (JICA)
- European Union (EU)
- Department for International Development (DFID)
- International Development Association
- United States Agency for International Development (USAID)
- Australian Agency for International Development (AUSAID)

- Danish Government (DANIDA)

2.1.12 Infrastructural Development and Local Counterpart Participation

Infrastructural and community projects over the years have been carried out in many communities across the length and breadth of the country to improve life of the people. Many of these projects were done with contributions from the Local Assemblies or the central government and the beneficiary communities in kind, cash, materials, tools, labour, administration and supervisions, which are normally done through communal labour and self helps projects (Satterthwaite, 2002). The participation of local counterparts in infrastructural development is very important since local counterparts have lots of knowledge on their local environment, culture, vulnerabilities, requirements, and building techniques. With this experience form the local counterpart's public development should be jointly planned by both local and donor partners where both parties are contributing to the project. The practice of local counterpart participation in the execution of donor funded projects increases the level of community investment and believed that more people and resources in communities are mobilized for lower-cost project with fewer fund from the government and district assemblies. This practice allows for reallocation of funds to finance more infrastructural projects (Stein, 2001). Infrastructural developments in most communities in Ghana may include:

- Roads, gutters and walkways
- Expansion of electricity and portable water
- Improvement, expansion and repairs of educational structures, health centers and other community works.

In all this projects funds provided by the local counterparts are nonrefundable to the beneficiary communities and are made to agree to term of the conditions to contribute a certain proportion in percentage terms to the project (Bagaka, 2008).

2.1.13 Types of Local Participation in Community Supports

Community involvement in donor funded projects had differed over the years in terms of the extent of citizen involvement in decision making with respect to their preferred expected outcomes. This participation types include the following. 18 Local initiatives: Under this type the local counterpart or the communities conceives, initiates, and runs project independently; this occurs where there is an agency in participation in the community‟s projects. Interactive: Participation is by analyzing the needs of the end users and programmed towards its achievement. Supply of materials, cash, or labor: Helps decide how these resources are used by supplying funds; materials and labor needed to co-finances a joint project. Supply of information: The local counterpart or communities providing information to their partners in response to questions but has no influence over the process (Bruton and Hill, 1991).

2.1.14 Local Fund Challenges

Different constraints for participatory hinder the success of the possibility of effective participation between the different elements of urban development programs in developing countries; these constraints include factors that deals with the legal constraints, regulations and technical standards, planning methods, project management procedures, or absence of a workable model (Schubeler, 1996). It is very important for Local counterparts to learn from one to identify the need to have their structure and procedures rooted in their local contexts. Local counterpart funds have common goals and are based on many shared principles, but they need to be shaped according to what works best in every community. Strong, representation of community-driven processes influences local funds respond to local situation. Local funds had worked very well, where there are representation and inclusive community-based organizations formed by urban poor groups and local governments that are sympathetic and capable of being supportive. In most cases these situations do not exist in most low-income and many middle income nations.

This does not mean that local funds cannot work in this areas or countries. But rather it means that care must be taken in setting up appropriate institutional arrangements, including those that support inclusive community-based organizations such as the savings and credit groups that underpin many urban poor federations. Local funds should not be pressed to spend donor funding before the institutional arrangements are in place (satterthwaite, 2002). Slow disbursements of funds have also delayed the potential benefits of many aid programmes, while the real value of the committed resources has tended to decline due to inflation and currency depreciation (Aryeetey and Cox, 2001). This has been a major handicap to local counterpart funding, because most donors have been reluctant to make fresh payments to beneficiary countries or communities were large amount of funds are not disbursed. Other challenges according to Satterthwaite (2002) facing those who manage the local funds which were raised in a discussion are as follows:

- The difficulties in managing expectations and maintaining trust, especially for pilot schemes where funding is only available for a short period;

- Setting appropriate conditions for obtaining matching resources from community groups without discouraging the groups with the least resources;
- Developing the capacity to monitor progress and measure outcomes;
- Avoiding the fund becoming a substitute for what local governments could or should be doing;
- Learning how best to connect the fund to supporting inclusive community processes and skill development (getting the right balance between supporting community groups taking over many key tasks but not dumping all the transaction costs on them).
- There is also a need for all local funds to continually ask such key questions as:
- Whose institutional capacity, political clout and knowledge base is the local fund strengthening? and
- What implications do local funds have for further access by urban poor groups to local capital and other resources?

Local funds have worked well in areas where there has been fair representation and inclusive community-based organizations formed by urban poor groups and local governments that are sympathetic and capable of being supportive to the development of their communities. But these according to Satterthwaite (2002) do not exist in most low-income and many middle-income nations. This does not mean that local funds cannot work, but it does imply a need for caution, for care in setting up appropriate institutional arrangements, including those that support inclusive community-based organisations.

2.1.15 Counterpart Fund

Counterpart funding is a technique for turning foreign aid into reserves of domestic currency. This was used by the Marshall plan of the United States as aid to Western Europe in rebuilding after the Second World War and remains a technique for developmental assistance today (Bruton and Hill, 1991). Counterpart fund refers to the local currency obtained from the sales of commodities or foreign exchange which comes in the form of grants or soft loans received as aid by a government from donor country or international organizations and over whose use the donor has some control (Bruton and Hill, 1991). However, Roemer (1988), defined counterpart funding as funds generated in developing countries when aid- 21 financed commodities, are sold to the public with proceed, deposited in accounts that are usually owned by the recipient government. In setting up counterpart fund, the receiving country need to have a business that will import a commodity in the name of their government, and in another form good donated to a developing nation is sold to the citizenry with the proceed used to open an account which is later used to finance development projects that have been agreed between the aid donor and the receiving government. Counterpart fund can similarly be generating by borrowing from abroad in the commercial markets, where this occurs government sells it for local currency. But under this condition the government has an obligation to repay this loan while the lender in return has an obligation to exercise no control over the use of local currency generated by the government. Where the fund is given as aid grant there is no repayment required, but the recipient agrees to allow the donor some control on the local currency as a condition for the grants.

The International Fund for Agricultural Development (IFAD) reported that lack of counterpart funding slows down implementation of government's projects, this occurs mostly because of reduction of overall government"s income and general restrictions in the levels of spending. The 2013 budget of Ghana gave priority to self-financing of public projects with the use of counterpart fund which represent proceeds from bonds which is expected to be used to finance infrastructural projects, like the Atuabo Gas processing project and many capital expenditure project which was approved by the Ghanaian legislature. This has been made possible due to the approval by parliament for the government of Ghana to issue Eurobond to raise funds from the international capital market to finance developmental projects. Where counterpart funding is inadequate, it will be better to prioritize areas for funding and this will need a detailed budget for locally funded activities. But for the country to achieve economic growth as recognized by this public sector, management needs to be technically inclined (Parliamentary Report, 2013).

In Ghana local counterpart funding has been derived from various forms, where community contributes to the implementation of projects. Most communities had paid their counterpart funds through three main ways; namely, labor power, material contribution and cash contribution. They used their labor to pay, in full or in part, their counterpart fund, depending on the nature of the project. They cleared the site for the project, excavation of foundations, and carrying out concrete works and hardcore filling among others. Aside the labor, they also made material contribution to defray their counterpart funds. They provided sand, stones/gravels, wood especially for roofing, water among others as their input into the implementation of the projects. In some cases, the communities made cash contribution through levies, harvests, donations among others to procure materials like sand and stone for the project as part of their contribution. The District Assembly also pays cash to defray part of the counterpart funds for some communities (Braimah and Obeng-Nti, 2010).

2.1.16 Public Procurements

Public procurement over the years has been delivered through direct service provision. Providers and clients have not used the design format. Phillips et al. (2007) recognized that governance and politicians are likely to be held accountable 23 for public procurement although good governance reflects in public procurement delivery and strategy. This includes the techniques to acquire goods and services from contractors and suppliers outside of the project organization (Borke, 2010). Public procurement is an important function of government, and it is believed that it must satisfy a set of requirements for goods, works, and services in a timely manner (Thai, 2001). All these processes must meet the basic principles of good governance, transparency, accountability and integrity (Wittig, 2003). The aim for public procurement is to achieve value for money, but Thai and Grimm (2000) believed that public sector procurement is very large and complex and accounts for between twenty to thirty percent of Gross Domestic Product (GDP) and traditionally attempts to meet many social and political objectives (Tether, 1977).

Public procurement is the process where public sector organisations acquire goods, services and works from third parties with much support, which includes the work of government and its routine items, to complex areas such as infrastructural development and others (Office of Government Commerce Report OGC, (2008). According to the Oxford Dictionary, procurement is the process of obtaining suppliers for something, especially for government or an organization. Ashwarth and Hogy (2000) define procurement in the construction industry as the process that is used to deliver construction projects. Procurement is a process that involves two parties with different objectives who interact in a given market segment and was classified by Kerner (2006) into traditional and non-traditional systems, where Thwala and Mathons (2012) explained the traditional procurement system as one which has been in existence for a long time and has been the only choice available for most clients in the construction Industry for many years. While Bennet (2003) in opening up this 24 subject, alleged that for client to obtain a construction facility tenderers are invited in one of the following ways, such as open selected and negotiated tendering.

The non-traditional procurement was seen by Masterman (2002) as a diversified modernday procurement system and only considers design and construction, but funding is considered as very important in this classification. For the purpose of this study public procurement may be describe as the process by which government and other publicly funded entities acquire goods, works and services needed to implement public projects. Delays are often experienced in the procurement processes due to the several bottled necks in most of the community initiated projects, which include the delays in the provision of materials, labour which are to be provided at specific specifications and also due to socio-cultural practices of these communities. The order by government to local Assemblies to provide in percentage the counterpart fund on behalf of communities to support communities in donor funded projects has also become a problem since government is not providing funds to these Assemblies on time.

2.1.17 Public Procurement Delivery in Ghana

Public procurement delivery in Ghana over the years has undergone reforms as part of government trying to reduce corruption and to bring about transparency and enhancing service delivery. The Government of Ghana (GOG) enacted the public procurement Act, 2003, (Act 663) in December, 2003 which is currently serving as a guide and provides step, by step procedures to enhance public procurement delivery in Ghana. The passing of the Act (Act 663) in 2003 is to ensure that modern procurement trends is adopted to bring the much needed sanity to local or public sector 25 procurement system which had been blemished by bad procurement practices such as corruption and other malfeasances. This was introducing because Public procurement reforms in Ghana over the years have lack strong legal framework governing the public procurement process (Osei-Tutu et al., 2010). It will be very important if community leaders will understand the procurement process and the need to co fund community projects with donor support to have personal belonging of what the people contribute to. Though they may not be deeply involved in most community development as has been the case in some time past, were communities provide their portions through communal labour and provision of materials to facilitate the projects, now that the local government is providing all these support on behalf of the government for the local communities a critical study must be carried to mitigate undue delays in local counterpart funding and develop measures to speed up the process.

2.1.18 Local Counterpart Funding Delay

Delays in project delivery are very costly, complex and risky, because of its overall effect on the projects for all parties. In project delivery, delay can be referred to, as the happenings that take place at later dates than planned or expected or in other words beyond the date that parties agreed for the delivery of a project (Pickavance, 2005). A delay occurs in every project and is generally believed as the common and costly problem that parties to a contract may encounter. But this delay comes with considerable varying problems from one project to another. There has been a wide range of views on project delay, notable among them are Aibinu et al (2002) where delay was seen as a situation

where the contractor and the client jointly or severally 26 contribute to the non-completion of a project within the agreed contract period. Assaf and Al Hejji (2006) in another studies defined delay as the time overrun either beyond completion date specified in a contract or beyond the date the parties have agreed upon for the project delivering.

However, procurement delays are sources of potential risk and it include ways to manage the technical and socioeconomically aspect of projects. Delays of construction projects have over the years been seen as a universal phenomenon and are usually accompanied by cost overrun which has a devastating effect on clients, contractors and consultant in terms of cash flow and arbitrational problems (Chabota et al., 2008). This has earlier been seen in the work of Akinsola (1996) as major factor that has led to waste in construction resources. This is because in most cases the relationship between parties to a contract is often blemished with disputes which arise as a result in most cases. For the purpose of this studies delay in local counterpart funding can be said to be constraint that prevent fund contribution on the part of one party which may prolong or bring to a stop a community projects which are jointly funded with donor support.

2.1.19 Causes of Local Counterpart Funding Delay

Earlier studies in the area of delay have shown that many countries shared common causes of delay although they are not in the same region. But the most significant issue faced by some of these countries is cash flow and financial difficulties faced by parties to the contract (Abdallah et al., 2002). Delay in Counterpart Funding was defined by Foreign Aid to Africa Report (1997), as the inability of Counterparts to raise the required portion of their local fund for project on time and this can be a major source of delay in most counterpart funding project delivery. But this may vary with projects and terms of implementation. In that report donors were seen as been caught between helping partners developed structures by providing capacity building and helping developed institutional frame work that allow systems to work instead of concentrating on selected individuals, as has been the case in many sector of the economy.

The unavailability of certain key people in project initiation could also cause delays or system collapse, which has been a problem in many local counterpart projects where some community members have come against projects in their communities. Many of the highly trained persons are incompetent in Aid Project Development and this incompetent and inexperienced highly trained staff waste a lot of capital and human resources (Foreign Aid to Africa Report, 1997). Lack of local government support in providing their counterpart funds on time to support the donor aid has been a major problem and this has impaired donor programmes and projects in many communities in the country (Roemer, 1988). In the area of local counterpart funding delay, it can therefore be said that the problem of delay is a serious problem on project delivering and this has affected Public Project Delivery. This is because governments at all levels of the economy have being the major investor of projects with some support from partners. It is however very import to avoid delay in the procurement process which may save time and money (Bagaka, 2008).

2.2 Different Theories

2.2.1 Theoretical Framework

The theoretical framework is an explanation of the phenomenon based on conceptual analysis, previous studies and theories that exist in the literature (Camp, 2001). For this study, Transaction Costs Economics theory, stakeholder theory, the theory of project management and Grey Systems theory were explored to give a basic understanding of the phenomenon.

2.2.2 Stakeholder Theory

The area of stakeholder management was pioneered by Freeman (1984) where he introduced the idea that corporations had stakeholders and outlined the essential features of the stakeholder concept. The stakeholder approach has been described as a powerful means of understanding the firm in its environment. Mitchell et al. (1997) argue that this approach is intended to broaden the management's vision of its roles and responsibilities beyond the profit maximisation function and stakeholders identified in input-output models of the firm, to also include interests and claims of non-stockholding groups.

Donaldson and Preston (1995) elaborated that the stakeholder model entails that all persons or groups with legitimate interests participating in an enterprise do so to obtain benefits and that there is no pre-set priority of one set of interests and benefits over another. Consequently, stakeholder theory argues that in addition to stockholders there are other external Districts involved, including communities, community groups, trade unions, trade associations, environmental groups, governmental bodies, associated corporations, employees, customers, and the public that need to be taken into consideration. The basic idea of stakeholder theory is that the organisation has relationships with many constituent groups and that it can engender and maintain the support of these groups by considering and balancing their important interests (Jones & Wicks, 1999). Overall, a central and original purpose of the stakeholder theory is

to enable managers to understand stakeholders and strategically manage them (Freeman, 1999). The managerial importance of stakeholder management has been accentuated in various studies (Jawahar & McLaughlin, 2001; Mitchell et al., 1997; Rowley & Moldoveanu, 2003) that demonstrate that just treatment of stakeholders is related to the long term survival of the organisation.

Stakeholder theory has been applied to some fields, research management (Bunn, Savage & Holloway 2002; Elias, Cavana & Jackson 2002), water utilities (Ogden & Watson 1999), and construction project management (Bourne & Walker, 2005). Construction management, as a field of research, has tended to focus on planning and managing the complex array of activities required to deliver a construction project, such as a road or building (Morris, 1994). Being able to handle construction stakeholders' expectations and concerns is a crucial skill for managers of construction projects (Vinten, 2000), as failure to address these have resulted in countless project failures (Bourne & Walker, 2005), primarily because construction stakeholders tend to have the resources and capability to stop construction projects (Lim & Lee, 2005). Successful completion of construction projects is, therefore, dependant on meeting the expectation of stakeholders (Cleland, 1995).

Stakeholders include clients, project managers, designers, subcontractors, suppliers, funding bodies, users, owners, employees and local communities (Newcombe, 2003). As a consequence, a robust construction management literature has developed on how to identify and manage stakeholder interests and relationships. An adaptation of Freeman's (1984) original conceptualisation of stakeholders to DACF works procurement include; Suppliers, Media, environmentalists, training organisations, public regulators, local community organisations, clients/owners, local and regional communities, construction firms, employees and other government departments.

Mitchell et al. (1997) argue that, a number of factors can affect the importance a satisfied stakeholder has in a particular project: Legitimacy - the moral or legal claim a stakeholder has to influence a specific plan; Power - their capacity to change the outcome of a given project; and Urgency - the degree to which their claims are urgent or compelling. Newcombe (2003) argues that effective stakeholder management begins "with the identification of key stakeholder. Establishing the strategic importance of stakeholder groups then helps organisations determine what the nature of their stakeholder management strategies should be. Various authors have attempted to operationalise this imperative through the deployment of different static grids and matrices which assess the salience of multiple stakeholders on project outcomes based on their power, legitimacy and urgency. Karlsen (2008) argues that the number of stakeholders interested or involved in the project can increase the complexity and uncertainty of the situation. Each stakeholder usually has different interests and priorities that can place them in conflict or disagreement with the plan thus the way is to ignore them. This lead is hypothesised as; H01. Stakeholder management has no significant role on the performance of projects funded by DACF in Kenya.

2.2.3 Game Theory in Supply Chain Risk Management

Game Theory usually contains three essential elements: the set of players, the strategy space and the payoff functions (Fudenberg & Tirole, 1991). Game theory is divided into two parts; non-cooperative game theory and cooperative game theory. Models in non-cooperative game theory imagine each player in the game improves his own objective and does not take care of the effect of his decisions on others. In comparison, cooperative game theory presumes that players can make binding agreements. Whatever the sort of the overall game, the pursuit of balance and stability of the supply chain is usually the ultimate goal hence equilibrium is created. Nash equilibrium is a profile of strategies such that each player's plan is an optimal reply in response to the other players' strategies.

Despite the broadly known application of Game theory to economic and scientific research problems, recently it is often applied extensively to various disciplines including this of the supply chain risk management. In the context of this study, supply chain associates could be seen as players in a game defined by multiple goals, constraints and different targets, sharing communication channels, resources, information, logistics networks, and customer demands, but also facing common risks. The primary purpose of using the game theory in supply chain risk management is to consider possible supply chain disruptions and mitigating design strategies (Lasaulce & Tembine, 2011). The implication of financial limitation in sharing inventory risk can be studied with the aid of game theory the provider being the leader. The game brings about the provider always preferring the consignment mode, taking full products on hand risk (Lai et al., 2009). Using non-cooperative as well as cooperative game theory the buyer or seller could benefit more from a collaborative framework than a non-cooperative one (Esmaeili, 2008). Similarly, the balance| of the strategies of two rivalling retailers are investigated after the production cost of the manufacturer is interrupted (Xiao & Qi, 2008).

Contracts can be used to improve global performance and decrease risks (Hennet & Arda, 2008). Many different contract types are proven to coordinate this resource chain and arbitrarily break down its profit; buyback contracts, quantity flexibility contracts, sales rebate contracts and volume discount contracts (Cachon, 2003). Game theory also supports the proactive planning of catastrophic incidents in supply chains (Knemeyer et al., 2009). Major

(2002) explains how game theory can be used to approximate the chance of a supply chain disruption from a terrorist attack point of view.

2.2.4 Grey Systems Theory

Grey system theory was first coined by (Deng, 1982) with the need to address strategic choices in uncertain circumstances where information could be scanty. The idea of this theory is entirely different from probability and fuzzy mathematics theories, which solves a problem using certain sample size, known probability distribution and membership function (Deing, 1989). In the real world of business and other fields most decision problems are in grey form due to uncertainty and scanty information (Karmakar & Mujumdar, 2008). Under such circumstances decision still needs to be made. Grey theory provides a useful platform for decision-making problem under such uncertainties (Karmakar& Mujumdar, 2006). It could be difficult to successfully maintain the performance of a firm without considering a suitable set of available suppliers. Quality of materials, consumables, services and sub-components are very critical to the success of any business entity, and thus a firm has to considerably appraise the available set of the supplier's in-order to select the most optimal supplier. The challenge is, supplier selection consists of uncertainties which may not be solved by fuzzy or probability theory. Probability theory-based models require a high volume of data, which may not be available for supplier appraisal. Furthermore, the supplier appraisal problem could arise as a result of the presence of recognition uncertainty due to decision maker subjective judgment thus grey system theory provides a sufficient basis to handle both recognition and stochastic uncertainty.

Sufficient evaluation criteria can help to procure entities to reduce the risks and uncertainties associated with suppliers. For firms to succeed in today's fast-changing technology-based consumer red ocean market is to innovate, which cannot be possible without getting the most optimal suppliers (Kanagaraj et al., 2014) Evaluation criteria is very critical in order to reduce the operational costs by selecting the most optimal supplier (Wang et al., 2009). Though grey theory gives a mathematical framework for selection of optimal supplier, it uses quality, delivery, risk factor, quality standards, logistics service and sustainability as some of the aspects that background check needs to be undertaken as part of supplier appraisal exercise (Muhammad et al., 2012)

2.2.5 MacNeil's Relational Contracts Theory

Macneil's writings before 1968 centred on the specific problems specifically the deficiency of reality of the agreement secured by the rules of approval, agreement of remedies and hired purchase through which traditional law of contract was acutely manifested (Macneil, 1968). The limited extent to which it is possible for folks to consent to all conditions of purchase even a relatively simple and incredibly discrete one soon faces the development of legal fictions expanding the scope of consent significantly beyond anything remotely near to what the parties thought of. This is the highest aim theory of contract. (Macneil, 1978).

Building on the effort of Macaulay (1963), Macneil developed a set of best practice rules that determine the tendencies that do occur in relations, must happen if relationships are to continue, and hence ought to occur as long as their continuation is valued (Macneil, 1980). He defines contracts as no more with no less than the relations among parties to the process of projecting exchange into the future (Macneil, 1980). Macneil (2000) advanced his relational theory to the norms based approach. He questioned lawyer's traditional premise that all contracts are small transactions. In particular, he stressed the role of standards in deciding the way in which commercial exchanges operated in practice and introduced the idea that specific transactions lie on array ranging from discrete to relational. Macneil recognises that contracts vary widely in the depth of the partnership to which they are applied. He argues that some contracts, called here contractual relations are far more relational than others. They will lie towards one end of a relational continuum of contractual behaviour contrary from the non-relational end in which the| discrete transaction is found (Macneil, 1983). Macneil's view is that the reality given to these universal contract norms differ in accordance to where an interaction lies on the contractual spectrum ranging from relational to discrete and indeed that a few of these best practice rules transform according to where they lie (Macneil, 1980).

Macneil details five essential aspects of deal/contract management; cooperation, monetary exchange, planning for the future, potential external sanctions, public control and manipulation (Macneil, 1969). He further appreciates that contracts belong to the complex context of overall exchange relations (Berstrin, 1993). However, Maclin notes that some relationships are much way more relational than others. According to relational term contract theory, there exists a long-range of connections from highly relational, such as long-run contracts to under the radar contracts which concerns sized transaction relations such as hand to mouth purchases of goods and services mostly.

2.4. Historical Thinking

2.4.1. Stakeholder management

A stakeholder is any group or person who can affect or is affected by the achievement of organisation objectives (Freeman, 1984). Clarkson (1994) defines stakeholders through risks as voluntary stakeholders bear some form of risk as a result of having invested some kind of capital, human or financial in a firm. His remarks of involuntary stakeholders denote that for one to be a stakeholder, a relationship with the firm can either be actual or be potential. In a nutshell, a stakeholder might be influenced or is potentially a future influencer of an organisation. Stakeholders are also defined through their informal relationships and moral claims towards the organisation. These views consider the development of honest relationships with stakeholders as the firm's responsibility which resemble the ideas of corporate social responsibility (Upchurch, 1998).

Mitchell et al. (1997) considered stakeholders to possess the power to influence the organization either coercive, utilitarian or normative; the legitimacy of the relationship with the organization either individual, organizational or societal based and the urgency of the stakeholders claim on the organization calling for immediate action; either time-sensitive or critical to the stakeholder. According to Freeman (1999), stakeholders, are those who are either resource providers or those who are dependent on the firm. However, Fassin (2009) criticises earlier stakeholder conceptualisations and proposes that a distinction should be made between stakeholders, stakewatchers and snake keepers. In his categorisation stakeholders are those who have a concrete and real stake in a company. Stakewatchers do not really have a stake themselves, but they protect the interests of real stakeholders. They include local and national unions and community lobby groups. Snake keepers are the independent regulators who have no stake in the firm but have influence and control, and they include government, regulatory agencies, authorities and certification organisations.

For projects funded by District Development Fund, the key stakeholders include; Government, project manager, constituents, DACF parliament committee, District projects committee, contractors, Project Management Committee, District Development Fund Committee, Non Governments Organizations, DACF board, departmental government heads and the public at large. The constituents should play a critical role in decision making because they are the beneficiaries of the projects (Flaman & Gallagher, 2001). The components should be involved at all stages of the project from initiation through planning, implementation and monitoring and evaluation be done at every one of these stages.

According to PMI (2008), stakeholder management is the systematic identification, analysis and planning of actions to communicate with, negotiate and influence stakeholders. McEllroy and Mills (2003) define project stakeholder management as the continuing development of relationships with stakeholders to achieve a successful project. The idea of stakeholders was initially introduced to mainstream general management by Freeman (1984) while Cleland (1986) brought stakeholder thinking into the project management paradigm. The role of stakeholder management is defined through stakeholders as the process of adapting the specifications, plans, and approaches to the different concerns and expectations of the various stakeholders (PMI, 2008). The stakeholder approach has been described as a powerful means of understanding the firm in its environment. This approach is intended to broaden the management's vision of its roles and responsibilities beyond the profit maximisation function and stakeholders identified in input-output models of the firm, to also include interests and claims of non-stockholding groups (Mitchell et al., 1997). Donaldson and Preston (1995) elucidated that the stakeholder model entails that all persons or groups with legitimate interests participating in an enterprise do so to obtain benefits and that there is no pre-set priority of one set of interests and benefits over another. Consequently, stakeholder theory argues that stakeholders who include communities, community groups, trade unions, trade associations, environmental groups, governmental bodies, associated corporations, prospective employees, prospective customers, and the public at large, need to be taken into consideration.

According to Freeman (1999), the original aim of the stakeholder theory is to enable managers to understand stakeholders and strategically manage them. The managerial importance of stakeholder management has been emphasised in various studies that demonstrate that just treatment of stakeholders is related to the long term survival of the organisation (Rowley & Moldoveanu, 2003). The management of project stakeholders is widely acknowledged as a factor contributing to project success (Bourne & Walker; 2005; Olander & Landin, 2005). Besides they have suggested that the inability of project managers to take into account the claims and influences from project stakeholders is a reason for project failure. This forms the basis for H01: stakeholder management has no significant role on the performance of projects funded by DAC. According to PMI, 2008), managing a project includes adapting the specifications, plans and approaches to different concerns and expectations of the various stakeholders. The underlying assumption in project stakeholder literature is that efficient and effective execution of projects requires management to pay attention to stakeholders. However, even though project stakeholder management was introduced to the field of project management already in 1986 by Cleland, project management only recently truly realised the

importance of stakeholder management. Considering the views of (Artto & Kujala's, 2008; Söderlund, 2004), project research has recently been widening from the focus on traditional project management aspects, such as planning and organisation of the single project, to the politics, stakeholders, environments, as well as relationships between different firms. The importance of project stakeholder management can be considered to be especially emphasised in the context of inter-firm projects that are temporary constellations of multiple business and non-business organisations with differing objectives and goals.

Kolltveit et al. (2007) point out that, the stakeholder perspective highlights the effective management of relationships between a project and its key stakeholders to ensure project success. Stakeholders may be classified based on stakeholders' involvement in the project and the nature of their relationship with the project, the nature of stakeholders claim and position towards the project, the stakeholder's role in the project and the degree to which stakeholder's behaviour can be expected. Winch (2004) states that internal stakeholders are the stakeholders who are formally members of the project coalition and hence usually support the project. Such stakeholders have a formal, official, or contractual relationship with the organisation or are directly involved in an organisation's decision making processes (Atkin & Skitmore, 2008). Internal stakeholders are clients, sponsors, contractors, and suppliers. External stakeholders are not formal members of the project coalition but may affect or be affected by the project. Such groups are often referred to as non-business stakeholders or secondary stakeholders (Cova & Salle, 2005).

Winch, (2004) further breaks down external stakeholders into private, and public actors. Examples of individual actors are local citizens, local landowners, environmentalist and conservationists; examples of public actors are regulatory agencies, local governments, Region and national governments. Stakeholder management activities can be divided into two; demonstrating and articulating the managerial importance of stakeholder management and examining the role and value of stakeholder management process (Bourne, 2005; Olander & Landin, 2005) the majority of the research on managerial behaviour with regard to project stakeholders has adopted a practice-oriented view and focused on the conceptual development of different administrative frameworks, tools and processes to identify, categorize and manage project stakeholders.

Stakeholder management tools are crucial in supporting decision-making, to share knowledge, to reduce the level of subjectivity and to remain transparent for project-outsiders. They also facilitate the understanding of stakeholders' expectations and finally monitors if the process is done effectively (Bourne & Weaver, 2010). Considering the views of (Bourne & Weaver, 2010; Olander & Atkin, 2010; Manowong & Ogunlana, 2010), the different terms in stakeholder management tools vary from stakeholder analysis; stakeholder mapping; stakeholder risk assessment; power-interest matrix; power-impact grid; influence-interest grid; impact-probability matrix; stakeholder impact index; vested interest index; stakeholder attribute value; stakeholder position value; stakeholder circle; relationship matrices; stakeholder ethical responsibility matrix; stakeholder-commitment matrix; to stakeholder review techniques. Stakeholder management contributes and synergises with proactive risk management as it anticipates and foresees possible social risks and relationship risks (Bourne, 2009; Bing et al., 2005). Control of stakeholders can be conducted employing traditional risk assessment methods, such as the impact probability-analysis. Conceived similarly, according to (Leung, 2010), the power-interest graph constitutes the bespoken methodology for classifying stakeholders.

2.4.2 Supply Chain Risk Management

According to PPADA (2015), procurement involves 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. This implies that public entities depend on suppliers and other contractors for them to get necessary operational requirements and implement projects geared towards the provision of services to the public. As a result, this poses a high magnitude of risk. Risk management in public procurement is also attracting attention. For instance, Currie, (2005) says that all government procurement actions carry risk and that the effective management of risk is the critical area of focus for modern public management practices.

This forms the basis for H02: Supply chain risk management has no significant role on the performance of projects funded by DACF…….. ……H02

According to (NAO, 2000) risk is something happening that may have an impact on the achievement of objectives. However, uncertainty and risk may be differentiated. Perminova et al., (2008) define change as a context for risks as events having a negative impact on the project's outcomes. A further risk may result from the direct and indirect adverse consequences of issues and events that were not anticipated for or that were not prepared for and concerned their effects on individuals, firms or society. It can result from both internally induced and occurring externally with their effects felt internal' (Kogan & Tapiero, 2007).

Wagner and Bode (2006) assert that supply chain risk is the negative deviation from the expected value of a particular performance measure, resulting in negative consequences for the focal firm. Hence, the risk is equated with the detriment of a supply chain disruption. The notion of risk is purely negative as the one that corresponds best to supply chain business reality. Zsidisin (2003) furthered the definition of supply risk as the probability of an incident associated with inbound supply from individual supplier failures or the supply market occurring, in which its outcomes result in the inability of the purchasing firm to meet customer demand or cause threats to customer life and safety. Moreover, Wu et al. (2006) states that, inbound supply risk is defined as the potential occurrence of an incident associated with incoming supply from individual supplier failures or the supply market, resulting in the inability of the purchasing firm to meet customer demand and as involving the potential occurrence of events associated with inbound supply that can have significant detrimental effects on the purchasing firm.

Supply chain risk management is the systematic identification, assessment, and quantification of potential supply chain disruptions with the objective to control exposure to risk or reduce its negative impact on supply chain performance. Potential disruptions can either occur within the supply chain (e.g. insufficient quality, unreliable suppliers, machine break-down, uncertain demand) or outside the supply chain (e.g. flooding, terrorism, labour strikes, natural disasters, significant variability in order). Taking into consideration the views of (Miller & Lessard, 2008; Keizer, Halman & Song 2002; Zsidisin & Smith, 2005; Cox & Ireland, 2005), supply chain risk can be categorized into; Technological risks which are all those risks that lead to a non-completion, under-performance or false performance of the procured service or product for reasons that lie in the technical operation of the service or product or in its production, and thus originate with the supplier. Technological risks could arise from suppliers not being able to find the solutions as promised, choosing the wrong or a suboptimal technology (it does not work as expected or is not fit for purpose, does not match standards, or it is not good enough, choosing a technology prematurely failing to acknowledge technological compatibilities or failure to develop the solution in-house or buy components and knowledge as claimed in the tender process.

Secondly, organisational risks are all those or under-deliver for reasons situated within the organisation that procures, societal risks are those related to a lack of acceptance and uptake by the users of the new or changed service delivered within society. The first set of both organizational and societal risks are related to recognition, compatibility and absorptive capacity: New products and services applied by public administrations to deliver services to society may meet an unforeseen lack of social acceptance (within or outside the administration), lack of compatibility with existing products and institutional routines, lack of absorptive capacity (skills, awareness, readiness to take on switching costs) in administrations, unfavourable regulatory and institutional framework conditions or unforeseen changes thereof. Additional risks are short-termism in decision organisations (mismatch between short term budgetary frameworks and long-term benefits).

Thirdly market risks are to be found on the supply and demand side. First, Demand risks are risks that are relevant especially – but not exclusively – for catalytic procurement, or PPP (under concession), whereby the (private) not respond in the scale necessary or expected or public markets remain fragmented. Markets are thus not large enough or built quickly enough to justify the capacity investment (capital, labour, technology). Producers might fear to be caught in the market failure trap, i.e. to have invested heavily in R&D and innovation activities without the scale to get the necessary return In terms of risks on the supplier side, one clear danger is suppliers not responding to the tenders at all, e.g. because the specifications are too daring (too risky for the suppliers) or too radical in their demands.

Fourthly the financial risks in public procurement are mainly twofold, one related to uncertainty in meeting target costs, the other the ability to secure the funds needed in the first place. Concerning the first one, there are clear financial risks associated with non-delivery such as the cost of additional auctions, non-completion, cost overruns and costs of non-provision or inadequate provision of the public service as a result of non-delivery. Besides turbulence risks in fact turbulence uncertainties as they are hard to predict and measure are risks that are mainly associated with large scale projects. Risks emerge from a ranging process to re-assess their priorities, to change their expectations, which may lead to further dysfunctional reactions by other actors in the process and so forth. These risks may occur within organisations, but often are a result of the interplay of various actions and actors within the whole project. Manage technological risk is contract design since different contractual modes offer various incentives for the contractor to deliver quality and not to run excessive costs. They are a form of risk sharing between the buyer and the contractor. For instance, fixed price be appropriate for projects involving little complexity and uncertainty. Public bodies also aim to deal with risk by transferring it mainly to the means of financial instruments Public Finance Initiatives (PFIs) which are standard mechanisms for financing infrastructure projects, especially in the UK. Under PFI, the private sector designs, builds, finances and operates (DBFO) facilities based on 'output' specifications decided by public sector managers and their departments (Cox & Ireland, 2005)

However, risks shift, still have to be managed, and the PFI necessitates risk management that extends to the whole phase of providing the service (e.g. constant use of the infrastructure) on behalf of the public body. Besides, for technological risks, Zsidisin and Smith (2005) range of measures around 'early supplier involvement' that may reduce uncertainties and help to ensure that suppliers keep on track. Furthermore, the use of open competitive dialogue procurement procedure has been adopted in EU procurement directives to ensure suppliers understand well the requirements of the buying organisations. To manage organisational and societal risks, transparency of procurement goals for the various actors involved is needed, suitable co-ordination mechanisms linking the three major dimension of service provision, procurement process and relation to market consequences.

For public entities (Districts) over 70% of the cost is associated with purchased goods and services. These organizations may identify some products or services as posing unacceptable supply risk, in the case of supplier's business rationalization, excessive demand, fire, work outage, to mitigate these risks, multiple sources of supply, Strategic agreements or partnerships with suppliers, Collaborative Planning Forecasting and Replenishment CPFR and Joint product design could reduce supply chain risks (SCCR, 2008).

For risk management, SCCR team (2008) give an approach to risk management; Phase 1 - Risk Identification: What can go wrong? What is uncertain? Based on a description of a supply chain with SCOR, every single process should be looked at with regards to potential disruptions that may negatively harm the performance and which countermeasures are already in place. A result of this phase is a list of the relevant supply chain risks and preparation of risk register. Phase 2 - Risk Assessment: How likely is it that a particular potential incident will occur? What is the impact? The likelihood of occurrence and the adverse effects on SCOR performance measures of each supply chain risk should be qualitatively or quantitatively evaluated. A result of this phase is a list of serious risks that can be visualised in a risk portfolio with the dimension probability of occurrence and negative impact. Step 3 – Risk Mitigation: How can the risks be controlled and monitored? Mitigation measures (e.g. improved planning methods, alternative suppliers, response plans, and redundant infrastructure) should be evaluated for severe risks. After having checked the cost-efficiency of the alternative measures, the appropriate measures should be chosen and implemented. A threat can be mitigated by decreasing the likelihood that it will occur or by reducing its impact if it does happen. Alternatives to mitigation include acceptance, transfer, and risk sharing.

2.4.3. Supplier Appraisal

Organisational competitiveness can be seriously doomed without a stable, cohesive and resilient supply chain as the quality of the supplier base is critical to that supply chain effectiveness and competitiveness (Chartered Institute of Purchasing and Supply, 2013). Further supplier appraisal supplier evaluation is an of the procurement function. Both pre- and post-contract activities to more efficient the supplier base. Jessop and Compton (2006) define supplier appraisal as the assessment of a potential supplier's capability to meet delivery schedules, control quality, meet quantity requirements, price, and other terms and conditions to be entrenched in a contract. They further suggest that supplier appraisal is carried out in the pre-contractual phase as a best procurement practice as it helps to give a sense of certainty on the supplier's ability to perform.

PPOA (2009) equitably refers supplier appraisal to prequalification of suppliers where prequalification should be done against a pre-set criteria and in various ways; bidders first bid to prove their qualification and are then short-listed for tendering; Qualification as part of the bidding; where bidders are presenting documentary evidence in their bids, but in such cases, the evaluation of the qualification of the bidders is done separately (technical and financial assessment); Post-Qualification: where bidders present the procuring entity verifies statements, of eligibility as required by the bidding documents on their skill and these statements after evaluation and recommendation of the contract award but before the contract is awarded. Procuring entity has a responsibility to clearly state any qualification criteria in the pre-qualification to ensure that bidders provide documentary evidence to certify their qualifications. Before awarding a contract to a bidder, the Procuring Entity needs to ascertain that the bidder is qualified. (PPOA, 2009)

As part of the appraisal process the procuring entity needs to ascertain that the supplier has the necessary qualifications, experience, capability, resources, equipment, legal capacity to enter into a contract for the procurement, not insolvent, in receivership, bankrupt or in the process of being wound up, is not subject of legal proceedings and is not debarred from participating in procurement proceedings. Further, if a supplier submits false, inaccurate or incomplete information about his qualifications he should be automatically disqualified (PPOA, 2009). Different scholars have proposed several aspects that need to be looked into in the supplier appraisal exercise. Darren (2006) suggests that at the primary level, which is suitable for suppliers of the non-strategic category of items, performance can be appraised concerning quality, delivery, after-sales service and price. However a more comprehensive approach should include an assessment of the level of competence of key personnel within the supplier's organization, the capacity of the supplier, in terms of, intellectual, physical and financial resources, evidence of supplier commitment

to the procuring entity in terms of critical areas such as quality control, process control, , quality assurance, information systems, analysis of the suppliers financial stability and cash resources over a reasonable period of time, measure of the total acquisition cost rather than purchase price, a record of consistency in delivery and quality.

Lysons and Farrington (2006) argue that what to appraise is subject to the requirements of the particular procuring entity but as much as it is possible all appraisals should evaluate potential supplier's human resources, quality systems, finance, production capacity and facilities, organisational structure, Information Technology, environmental and Ethical Considerations. Monczka and Handfield (2005) divided the ways to appraise suppliers into quantitative and qualitative. For the quantitative appraisal, these include delivery performance, quality performance and cost reduction. For qualitative examination, they include suppliers' problem resolution ability, technical ability, ongoing process reporting, corrective actions response, supplier cost-reduction ideas.

Tahriri et al. (2008) narrated that, the categorical suppliers on several criteria which are then combined into a single score. He further noted that the absolute model is a simple, the quickest, easiest and less costly to use. Borrowing from the literature to build the grey system theory, Muhammad et al. (2012), developed some supplier appraisal criteria which include quality, delivery, risk factor, quality standards and sustainability factor. Bello (2003) argued that cost ratio as a supplier appraisal method relates all identifiable purchasing costs to the money received from vendors. The higher the rate to value, the lower the rating applied to the vendor. He further notes cost analysis that considers cost ratios for product quality, customer service, price and delivery. The cost ratio measures the cost of each factor as a percentage of total purchase for the supply. Arsan (2011) supports the use of the cost-based system as the procuring entity can quantify the additional costs incurred if a supplier doesn't perform as agreed.

Saaty (2000) discovered that people often had many issues when it came down to make the individual decision or to prioritise some points of their work. This motivated him to create the analytical hierarchy process so that people would be able to make more complex choices a lot easier and faster. The analytical hierarchy model takes an approach towards the decision making from the rational and intuitive point of view and gives the ability to select the best solution from the various alternatives.

According to Saaty (2000), the reason why this kind of hierarchy is applicable in supplier appraisal is that it is possible to judge the importance of the elements in a given level concerning some or all of the items in the adjacent level above. Analytical hierarchy process utilises major scale which for supplier appraisal it tries to help to show how much of a fraction the one is larger than the other regarding contributing to the general objective.

Darren (2006) advocates supplier appraisal as it enables the procuring entity to identify weaknesses on the part of the supplier, data may be used to evaluate and compare the performance of new suppliers, appraisal can be used as the basis for continuous improvement, evaluation on a two-way basis can highlight the buyer's deficiencies, which may be the source of common problems within many supplier relationships. However, supplier appraisal may require time and resources cost of carrying out, assessing only objective or only subjective criteria could lead to skewed results, a biased buyer can influence the weightings and the actual scores given to suppliers.

Kiruri (2013) in her study concluded that supplier appraisal is a practice highly adopted in the procurement of goods and services for which the criterion used in supplier appraisal varied depending on the nature of products and services being procured. In her findings, 100% of the respondents strongly agreed that financial and technical capability appraisals were given the highest priority in all procurement exercises. Quality appraisals and cost of product/services were considered as supported by 84.9% of the respondents. Production capacity assessment was deemed to be supported by 80.8% of the respondents. Human resource assessment, 63.0%, organisational structure appraisal 61.6%, corporate past performance, were less considered. The findings also supported that supplier appraisal enabled the organisation to manage public procurement effectively.

Mungai (2014) established that site visits and use of reference checks were the most common ways of appraising suppliers. He also determined that the supplier appraisal practices perform in the supply of goods and services. His results indicated that there was a strong positive relationship (r=0.673) between supplier appraisal criteria and procurement performance. The weighted model was the most popular model used to appraise suppliers and further acknowledged that structures and the evaluation process, to avoid selection of unqualified suppliers and reduce subjectivity during the evaluation.

2.4.4 Contract Management

A procurement Contract is a written agreement between a procurement entity and a supplier, contractor or consultant which is enforceable by law (PPOA, 2009). Contract administration (contract management) pertains to the preparation of procurement documentation, the processing and approval of such documentation, monitoring contract implementation, approving and administering contract variations and modifications, and possibly cancelling or terminating contracts. Further weak contract administration is an invitation to corrupt practices (PPOA, 2009). Procurement is a delicate exercise because this is the stage in both public and private institutions during which funds

are most frequently stolen through corruption. It is therefore essential to monitor procurement very carefully in the location and District (Gikoyo, 2008). The study retains H03: Contract management has no significant predictor role on the performance of projects funded by DACF

Contract life cycle management is the process of systematically and efficiently managing contract creation, execution and analysis for maximising operational and financial performance and minimising risk (CIPS, 2007). The foundations for effective and successful post-award contract management rely upon particular comprehensive and thorough implementation of the upstream or pre-award activities. During the pre-award stages, the emphasis should be focused on why the contract is being established and on whether the supplier will be able to deliver in service and technical terms. However, careful consideration must be given to how the contract will work once it has been awarded. Further Management of contracts, particularly partnerships, requires flexibility on both sides and a willingness to adopt the terms of the agreement to reflect changing circumstances (CIPS, 2007).

Public Procurement Oversight Authority manual (2009) points out that, sound contract management of a project revolves around the control of cost, time, quality and resources. Cost Control means the execution and completion of the plan within the contract price; Time Control means implementation and end of the project within the agreed schedule; Quality Control implies the performance of the project in conformance with the technical requirements and/or specifications; Resources control refers to the management of human and material resources (personnel, equipment, and supplies). These critical deliverables in a contract are echoed by Meredith and Mantel (2012), who emphasise on planning, monitoring and controlling of time, cost and scope. For each agreement entered into, the Procuring Entity must designate a member of staff, or a team of staff, as the Contract Administrator responsible for administering the contract. There should be a team approach to the contract management of large and complex projects. National Government Districts Development Fund Act (2015) clearly states that all works and services relating to projects under this Act shall be procured by the provisions of the Public Procurement law. For operationalisation of the Act, the Public Procurement Regulatory Authority gives stipulations for contract management. For each contract entered into, the Procuring Entity must designate a member of staff, or a team of staff, as the Contract Administrator responsible for administering the contract. The Procuring Entity must issue a signed letter naming and appointing the Contract Administrator that must be included in the procurement files and deal.

Public procuring entities shall maintain contract documents regarding contract management which shall include; contract management plan which shall give a background of the contract and capture key focus area of the agreement; a risk register identifying risks and how they shall be monitored. The contract file shall be opened after the procurement contract is signed and the contract manager shall open it. The data shall be used for recording the actual performance of the requirements indicated in the agreement; the Procurement file should be opened to process the procurement before the contract is awarded.

For a sound project contract management Brown and Hyer (2010) identifies some critical success factors which include; the ability to identify metrics relevant to the project, that is, a balanced set of performance indicators; capacity to generate accurate information; visibility to team members to enable every individual player/stakeholder to know what is being measured and have ready access to the data; ability to provide a basis for problem discovery and solution; the system should be in-built into the project plan right from the point of project planning stage; capacity to generate timely information for timely decision making and corrective action.
For management price escalation and contract variations section 31 of PPDA Regulations 2006 states that, any variation of a contract shall be useful only if; the price variation is based on the prevailing consumer price index obtained from the Central Bureau of Statistics or the monthly inflation rate issued by the Central Bank of Kenya; the quantity variation for goods and services does not exceed ten per cent of the original contract quantity; the quantity variation for works does not exceed fifteen per cent of the initial contract quantity; and the price or quantity variation is to be executed within the period of the contract. The contract should require the contractor to notify the PE of any circumstances which may affect the price or the programme as early as possible. These may include unexpected events, the actions or failure to act by the PE or another of its contractors or changes requested by users. In all cases, the Project Management must ask the effect of any change on the price and the time for completion. Only when in possession of this information should a decision be recommended to the Tender Committee. The TC must then authorise any variation to be instructed. If approved, the change should be taught formally in writing by a Variation Instruction or a Variation Order and the effect on the price and the time for completion recognised in a Variation to the Contract price.

For the purposes of contract termination section 32 of PPDA regulations (2006) states that the procurement unit shall obtain the approval of the tender committee (DACF Project Tender committee) prior to terminating the contract, and the request for approval shall clearly state; the reasons for termination; the contractual grounds for termination and the cost of terminating the contract. In large procurement contracts, it is good practice after the deal is completed to conduct a contract close-out review. The contract management team should do this. Some of the

aspects to consider should include; the timeliness of contract performance, cost and quality performance, risks analysis, organisational and operational effectiveness, appropriateness of the procedures and suppliers performance. These should be reviewed against KPI's, and SLA's agreed between the procuring entity and the contractor in the drafting of the contract (PPOA, 2009).

2.4.5 Performance of projects funded by the District Development Fund

A plan is a temporary organisation created by its base organisation to carry out an assignment on its behalf' (Andersen, 2008). A method is thus an undertaking which is officially initiated by a permanent organisation and the members of the project organisation act on behalf of this organisation. The base organisation delegates authority and responsibility to the project organisation concerning the project task. The members of the project organisation are expected to plan and accomplish the project in ways that create benefits for the base organisation and its members.

According to Pinto and Mantel (1990), project failures are caused by a lack of efficiency and external effectiveness. A project is considered a failure "whenever a project does not meet the expectations of the stakeholders". This has lots of impact on both the organisation and all stakeholders to the project. They include cost and time overruns quality degradation, frustration and stress, sometimes resulting in people quitting, low corporate market value, low public opinion and negative media campaigns. Saqib et al. (2008) found out that, procurement related factors such as project delivery system, project bidding method and project contract mechanism were rated as most significant factors and acquisition-related factors were ranked among the top five critical success factors categories in Pakistan.

There are many times when project success measured in time and budget is not sufficient, especially over a more extended period after the project is complete. "Quite often, what seemed to troubled project, with extensive delays and overruns, turned out later to be a great business success" (Shenhar et al., 2001). Shenhar et al. (2001) cite the example of the Sydney Opera House. It took three times longer and five times the cost than anticipated. But it quickly became Australia's most famous landmark, with few tourists wanting to leave Australia without seeing it (Shenhar et al., 2001). With projects reported to be continually failing, Atkinson (1999) questioned this failure concerning the criteria for success, particularly concerning the commonly used 'iron triangle' time, cost and quality. He asserted that the reason for projects to be labelled as failed could be due to the criteria used for success.

Is one area in both developing and developed countries (Raymond, 2008). He further states that "the recipients of clandestine payments may not only be the officials who are but also ministers and political parties". Rege (2001) says that the invite tenders, of the procedures used in awarding contracts and the right with which the agreement is given to aggrieved suppliers to challenge the decisions, restrain both domestic and foreign suppliers from making under-the-table payments and deter public officials and such payments. Rothery (2003) asserts that very strongly linked to the award of government contracts.

Bienkowski (1989) asserts that project failures are caused by; inadequate resources leading to task taking longer than expected to complete, deadlines and milestones get missed, and project completion date comes into jeopardy; Poor risk management meaning that the project initiation stage is not adequately planned and insufficient non-resources are not allocated to the project; for instance, it is not possible for a project to succeed if the right resources are made available for that project. Some scholars and reports (Standish Group, 2009, Kutsch et al., 2011; Sharma et al., 2011) have acknowledged that projects are continuing to fail. For example, (Flyvbjerg et al., 2003) highlighted the Channel Tunnel project (1987-1994) whose estimated cost was £2,600 million but on completion, the damage had blown out to £4,650 million a cost overrun of 80%. Further (Shore, 2008) highlighted the Airbus A380 project which was initiated in the year 2000 was disrupted in the year 2006 when the aircraft was in the assembly stage when a pre-assembled wiring harness produced in Germany failed to fit into the airframe which led to halting of production and deliveries postponed for 2 years and costs escalated significantly.

According to Okungu (2008), 70% of the Districts have reported mismanagement, theft, fraud and misappropriation and that DACF issues are political. Ongoya and Lumallas, (2005) asserted that DACF has the potential of being used by politicians to build their reputation in their Districts and mobilise political support. The fund has no specific development agenda; hence, it stands out as a political tool (Gikonyo, 2008). According to Radoli (2008), 60% of Members of Parliament who had billions of DACF money unspent in the DACF bank accounts, had unfinished and poor projects. Further Kairu (2014) in his study factors affecting effective implementation of DACF projects in Machakos Town District reported that between 2006-2012, the National Tax Payers and Auditor General reports revealed irregularities in procurement procedures and systems led to embezzlement of millions of shillings by skewing resource allocation in the District.

Projects that are classified as challenged usually are completed and operational but over-budget, over the time estimates and offers fewer features and functions than originally specified. Projects that are considered to be impaired or failed are at some point during the development cycle cancelled. This method allows a clear divide between the success and the partial successes that still get completed but not meeting all expectation. It also allows

precise measurements to be taken against budgeted time and cost although the functionality is still relatively subjective (Standish, 2001).

2.4.6 Procurement at the District level

As stipulated by PPOA (2009), all the entities including the Project Committees, District Development Fund Committees, and District Project Committees in DACF are regarded as public procuring entities and as such they are subject to government procurement directives. All DACF procurement is required to be conducted by the tender committee which is responsible for all aspects of the procurement process. This means that the District Procurement Committee (DPC), the District Development Fund Committee (DACFC), and the Project Committee (PC) must establish tender committees to manage their procurement (Gikoyo, 2008). All asset disposal processes shall be handled by different persons in respect of identification, consolidation, preparation of a disposal plan, pricing and the disposal itself. For the avoidance of doubt, all public officers or State officers involved in procurement or asset disposal processes shall bear responsibility for their actions and omissions (PPADA, 2015).

As a requirement, a National Government District Fund Committee for every District shall be established. The District committee shall comprise of the national government official responsible for coordination of federal government functions; two men each nominated of which one of them shall be a youth at the date of appointment: two women of which one of them shall be a youth at the age of election: one person with disability nominated by a registered group; two persons appointed by the District office; the officer of the Board seconded to the District Committee by the Board who shall be an ex-officio member without a vote; one member co-opted by the Board in accordance with Regulations made by the Board. The Public Procurement Asset and Disposal Act (2015) requires public procuring entities to use open tender as the most preferred procurement procedure thus procurement for the District Development Committee is mandated to adhere to the stipulations under the Act. When using this procurement procedure, the procuring entity shall advertise in the dedicated Government tenders' portals or in its own website, or a notice in at least two daily newspapers of nationwide circulation. Upon advertisement, the accounting officer of a procuring entity shall immediately provide copies of the tender documents and following the invitation to tender, and the accounting officer shall upload the tender document on the website

A procuring entity may engage in procurement by means of two-stage tendering when, due to complexity and inadequate knowledge on its part or advancements in technology, it is not feasible for the procuring entity to formulate detailed specifications for the goods or works or non-consultancy services in order to obtain the most satisfactory solution to its procurement needs. In the first stage two-stage tendering proceedings, the procuring entity will require the bidders to submit initial tenders containing their proposals without a tender price. In the second stage, the procuring entity shall invite tenderers whose bids were retained to offer final tenders with costs concerning a single set of specifications and in formulating those specifications, the procuring entity may modify any aspect, initially outlined in the tendering document (PPADA, 2015)

An accounting officer of a procuring entity may use a design competition procedure to determine the best architectural, physical planning and any other design scheme, engineering, graphics or any different design scheme for its use. Before publishing an invitation notice, an accounting officer of a procuring entity shall prepare tender documents and appoint at as part of ad hoc evaluation committee instituted according to this least one independent lay assessor, and technical assessors recommended by the professional regulatory body governing the design competition. The best three assessed design schemes shall receive as a prize an honorarium as provided for in the internal policies of the procuring entity (PPADA, 2015).

An accounting officer of a procuring entity may use restricted tendering if complex or specialized nature of the goods, works or services is limited to prequalified tenderers, the time and cost required to examine and evaluate a large number of tenders would be disproportionate to the value of the goods, works or services to be procured; or if there is evidence to the effect that there are only a few known suppliers of the whole market of the goods, works or services (PPADA, 2015)

PPADA (2015) stipulates that a procuring entity may use direct procurement as long as the purpose is not to avoid competition. Direct appropriation may be used if the goods, works or services are available only from a particular supplier or contractor, or a specific supplier or contractor has exclusive rights in respect of the products, practices or services and no reasonable alternative or substitute exists; due to war, invasion, disorder, natural disaster or there is an urgent need for the goods, works or services, and engaging in tendering proceedings or any other method of procurement would, therefore, be impractical, provided that the circumstances giving rise to the urgency were neither foreseeable by the procuring entity nor the result of dilatory conduct on its part; owing to a catastrophic event, there is an urgent need for the goods, works or services, making it impractical to use other methods of procurement because of the time involved in using those methods; the procuring entity, having procured goods, equipment, technology or services from a supplier or contractor, determines that additional supplies shall be secured from that

supplier or contractor for reasons of standardization or because of the need for compatibility with existing goods, equipment, technology or services, taking into account the effectiveness of the original procurement in meeting the needs of the procuring entity, the limited size of the proposed acquisition in relation to the innovative purchase, the reasonableness of the price and the unsuitability of alternatives to the goods or services in question; for the acquiring of products, works or services provided by a public entity provided that the acquisition price is fair and reasonable and compares well with known prices of commodities, jobs or services in the circumstances (PPADA, 2015).

A procuring entity may use a request for quotations from the register of suppliers for a procurement if the estimated value of the goods, works or non-consultancy services being procured is less than or equal to the prescribed maximum value; the purchase is for products, jobs or non-consultancy services that are readily available in the market; and the procurement is for products, jobs or services for which there is an established market (PPADA, 2015). A procuring entity may use a low-value procurement procedure if the body is procuring low-value items which are not purchased on a regular or frequent basis and are not covered in framework agreement; the estimated value of the goods, works or non-consultancy services being acquired are less than or equal to the maximum amount per financial year for that low-value procurement procedure (PPADA, 2015)

Request for proposals are used for the procurement of services or a combination of goods and services and the services to be procured are advisory or otherwise of a predominately intellectual nature. The procuring entity shall prepare a notice inviting interested persons to submit expressions of interest. A procuring entity shall give a minimum period of seven days for bidders to submit their expressions of interest. After the deadline for submitting expressions of interest, the procuring entity shall examine each expression of interest to determine if the person sending it is qualified to be invited to submit a proposal following the notice asking expressions of interest (PPADA, 2015).

Public Procurement Oversight Authority manual (2009) gives guidelines on the acquisition of projects at District level. The steps include; Feasibility study which enables the procuring entity to determine the scope, duration, financial, procurement method to use, and human resource and material resource requirements; environmental impact assessment; choice of procurement strategy which could be single contractor in a turnkey approach or multiple contractors; preparation of procurement plan; prequalification of bidders; advertisement for tenders; tender opening; tender evaluation; Contract Award; Notification of Award; Contract issuance; contract management of a project revolves around control of, Cost, Time, Quality, Resources.

2.4.7 Empirical Framework

According to Council of Supply Management Professionals (2011), procurement practices are philosophies, methods, and processes adopted in procurement to contain costs, and produce results despite challenging circumstances. With the evolution and growing need to enhance organisation competitiveness organisations have to take the best practices for their survival in the market. In this regard supply chain and more so procurement functions should be given the necessary attention as it plays a vital role in organisation attainment of strategic objectives.

Further CSCMP (2011) has recommended best procurement practices which include; establishing a cross-functional strategic team in the organisation. The purpose is to give direction and help align supply chain strategy with the company's overall strategy. The vital cross-functional team members should include the head of the supply chain, the organisation's executives, business unit managers, and other company managers. The team should hold regularly scheduled meetings; aligning staff in the supply chain organisation. It’s not easy to organise the supply chain function in a way that will maximise its effectiveness and bring similar benefits to the company. However, some companies are best served by embedding proficient supply chain management professionals in various business units, in other organisations centralised operation is most effective. Many of the leading companies have adopted a hybrid approach that combines a centralised strategy to gain tradeoff with decentralised execution to improve service delivery.

Another emerging trend involves placing procurement, logistics, contract management, and demand forecasting under the supply manager. Leading companies hire supply chain managers who have strong communication and relationship management skills and the ability to think strategically and a focus on value creation; adopt a technology, leading companies have embraced technology to help them better manage their supply chains. They find a way to use technology to produce beneficial supply chain information. They recognise the importance of an efficient purchase-to-pay process and have adopted strategies and mechanisms to get the most significant benefits from electronic purchase; working closely with suppliers beyond contract signing (supplier relationship management).

Collaborative strategic sourcing is advocated as a cornerstone of successful supply chain management. Internal customers are actively involved in the decision-making process. They solicit feedback and information regarding their objectives. This approach ensures the availability of supplies and results in streamlined operations, lower total cost and increased responsiveness to customers' changing demands; Focus on total cost of ownership. Procurement teams in leading companies are abandoning the traditional practice of receiving multiple bids and

selecting a supplier directly on price alone to considering other factors that affect the total cost of ownership. Leading companies ask suppliers and internal stakeholders how they can work together to reduce the total cost of ownership; putting contract management under supply chain function in another practice.

Purchasing and procurement teams often negotiate significant potential savings during the sourcing process but never fully realise those savings. The reason for this includes a failure to communicate contract terms to the affected organisations and an inability to monitor contract performance and compliance. However, many companies are moving responsibility for contract management to the supply chain organisation rather than leaving it in, legal, finance, or in the operations division. The advantage to that is the contracts agreed upon are collected and maintained in a central point. The migration of the contract management function to the supply chain organisation also allows the supply chain manager to effectively leverage the companies spend, particularly in the area of procuring services, where there is a very significant opportunity for risk mitigation and reduction of unnecessary costs.

Further, Council of Supply Chain Management Professionals (2011) recommends the establishment of appropriate levels of control and minimising supply chain risk as a good procurement practice. Supply chain management policies and procedures should follow a proper sequence and structure, and it is important to review them frequently and bring them up to date to ensure compliance. Their objective is to streamline them without sacrificing the ability of those controls to curb theft, fraud, and other problems associated with procurement. Risk mitigation goes hand-in-hand with policies and controls, and best-in-class supply chain organisations integrate risk-mitigation methodologies into their sourcing decision process; adoption of green procurement and practising corporate social responsibility. Reducing a supply chain's carbon footprint is a necessary practice. Leading companies require service providers to provide information about their green initiatives. Buyers and consumers are also considering social responsibility when making purchases. Corporate social responsibility is playing an increasingly fundamental role in decision making in purchasing and risk analysis. A company that does not have a meaningful social responsibility program risks criticism from consumers and other stakeholders.

Eskerod and Jepsen (2009) clarified that the aspects underlying project stakeholder management includes making efforts to exert influence on project stakeholders in order to gain their contributions to the project, expanding efforts spread across a range of stakeholders than concentrated on a few and allocating resources in such a way that they achieve the best possible results/output. El-Gohary et al. (2006) assert that project stakeholder management is indispensable as there is a need to control the detrimental impact of stakeholders and maximise the perceived benefits to achieve project success.

Kairu (2014) study on factors affecting implementation of District Development Fund projects in Machakos town District concluded that majority of the respondents were not aware of the importance of community inclusion and participation on the success of the projects funded by DACF. The community was not involved in any decision making of the projects financed by DACF. Ownership of DACF projects was also missing as the plans were not initiated with consideration of the community needs and input. This to an extent shows the management of the DACF kitty doesn't take inclusive approaches to development matters.

In her study, Wamae (2014) concluded that overwhelming 80.95% felt that the technologies were not adequate in enhancing the performance of procurement. This shows that the Machakos Region was yet to provide the necessary techniques that improve performance. Further Aberdeen Group (2010) study found out that about 80% of the participants acknowledged that adequate technologies are essential in enhancing procurement performance. Ochieng et al. (2013) in his study on effectiveness of monitoring and evaluation of DACF funded projects in Kenya concluded that, there is a need for the DACF board and DACF committee at the District level to adhere to monitoring and assessment and to the larger extent contract management in-order order to ensure compliance to quality and standards. This is despite Project Management that the projects were stable, though some plans had stalled. Though the DACF Act of 2013 provided for public participation and implementation, such as the Official Secret Act is a barrier to active community participation in monitoring and evaluation of projects. Further, the DACF Act does not put a requirement on the part of DACFCs and PMC to share information openly. Malala (2011) in his study on effect of procurement on performance of DACF projects found out that, only 12% of the projects funded by DACF were on schedule, and this was attributed to political duress, bureaucratic procurement process, lack of monitoring and evaluation and lack of local community involvement in the execution of the projects. Further, he found out that despite local suppliers lacking adequate capacity to undertake projects in Kikuyu District they were still engaged.

2.4.7 Research Review & Gaps

Several studies have been done in the area of DACF projects in Kenya. For example; Malala (2011) studied effects of procurement on performance of District Development Fund projects, Barasa (2014), examined procurement practices affecting effective public projects implementation for which the main focus was on the procurement practices affecting project implementation, Aketch (2013), did a study on factors influencing procurement performance in

District Development Fund for which he focused on the human aspect and how it affects project performance, Noor (2011) did study the role of procurement practices in effective implementation of infrastructure projects in a developing country through his study was robust it majored on the exploratory bit, Musembi (2012) studied the structure of District development fund and project implementation at the District level within Kiambu Region which was not mainly centred on procurement but on the DACF structure. So its eminent from the different studies done locally, they have been skewed on the implementation aspect of DACF project and the challenges that DACF projects face without the elaborate way of how procurement practices can ensure sound initiation and completion of DACF projects. This formed the gap for which this study sought to fill by studying different procurement practices and the role they play on the performance of projects funded by DACF in Kenya.

2.4.8 Critique of Existing Literature

Driven by the need to unearth different challenges that DACF projects encounter, several studies have been done across different Districts in Kenya. Malala (2011) in his study effects of procurement on performance of District Development Fund projects in Kenya reported that 88% of the projects were rated as being behind schedule, pointing to ineffective implementation process, 35% of respondents held the view that there was no local participation in the DACF Projects further, 90 % of respondents believed that DACF funded projects procurement is unfairly and the entire sourcing process was reported as being not within the procurement law. However, this study was limited to just two variables procurement process and local suppliers who could not adequately bring out sufficient procurement practices in curbing dilemmas in the procurement of DACF projects.

A study by Barasa (2014), on Procurement Practices Affecting Effective Public Projects Implementation in Kenya, specific procurement practices have been brought up which to an extent affect project implementation. In his findings communication 35.9% of the contract monitoring & control, 46.9% mentioned procurement procedure whereas 21.9% did say procurement planning., only 14.1% did say communication as the main factors affecting the implementation of projects. This study, however, focused solely on factors affecting implementation of projects without specifically pinpointing the way or how the procurement practices changed project implementation more so concerning costs and timely implementation of DACF projects.

A study by Aketch (2013), on Factors, influencing Procurement Performance in the District Development Fund, mainly centred on the human and structural aspect of procurement. His variables were DACF Board size and composition, the effect of training and capacity of DACF Committee, managerial skills, organisation structure of Makadara DACF Committee. This was majorly skewed on what determines the performance of procurement function at the District level. Noor (2011) brought a different perspective to his study on the role of procurement practices in the effective implementation of infrastructure projects in a developing country. He looked at the procurement practices and went beyond to look at the barriers that could be experienced in the application of the methods in modern developing nations. However, his study was more skewed to exploratory study forecasting on procurement practices adopted in both developed and developing countries but not actually bringing out how those practices as used in different nations count on the success or failure of projects.

Though PMBOK guide reveals statements concerning project management, theoretically the theories concerning project management are scanty in most of the literature reviewed though (Shenhar, 1998, Turner, 1999) argue that there is no explicit theory of project management. This has been exhibited in (Malala 2011, Barasa 2014, Noor, 2011). Public procurement accounts for about 16% of most countries GDP which signifies how significant it is to efficiently manage both financial and material resources that are channeled through an acquisition of projects and other requirements in the public sector. The DACF was introduced back in the year 2003 with the primary objective of devolving development to the Districts though different studies have highlighted malpractices and lack of concrete projects in some Districts.

To substantiate the objectives of these study theories relevant to the study have been reviewed and to the extent to which they are applicable. These theories include; transactional costs economics theory stakeholder theory which is centred on how different stakeholders have a different expectation from a project, method of project management which has been coined from PMBOK guide. The variables in the conceptual framework have been discussed in depth starting with the dependent variable; the performance of DACF funded projects and four independent variables namely stakeholder management, supply chain risk management, contract management and adoption of e-procurement. Critique of the existing literature has been done highlighting different studies that have been done globally and locally concerning DACF and the role of procurement in the performance of the DACF funded projects.

3.0 METHODOLOGY

The aim is to presents research design, target population, sample and sampling technique, instruments, the data collection procedure, pilot test, statistical model, the operationalisation of variables, data processing and analysis.

3.1 Research Design

Kothari (2004) describes research design to involve decisions regarding what, where, when, how much, by what means concerning an inquiry or a research study. Is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure? A research design is a structure, plan and strategy of an investigation so conceptualised as to obtain answers to research questions or problems. The program is the whole scheme or system of the research (Kumar, 2011). It is the arrangement of conditions for collection and analysis of information in a manner that aims to incorporate relevance to the research purpose with economy in procedure. In this research cross, the sectional survey design was employed. It involves one small assortment of data throughout days and nights, weeks or month's in-order to resolve a research question (Sekeran & Roger, 2010). Cross sectional survey design provides a good picture of the trends and is useful for documenting existing study populace conditions, characteristics, and their view at a specific point in time. It provides the frequency of a particular attribute in a defined population in a particular aspect in time

3.2 Ethical Considerations

Research study philosophy is an over-arching term that relates to the development of knowledge and the nature of that knowledge (Saunders et al., 2009). The study was guided by a positivism research philosophy which is part of epistemological viewpoint. In positivism research belief, the research is carried out in a value-free way. The researcher is external to the process of data collection in the sense that there is little which can be done to alter the substance of the data collected. The researcher is independent of and not afflicted by the subject of the research (Saunders et al., 2009).

The basis of applying the positivism paradigm was that it's directly associated with the idea of objectivism. In this type of philosophical approach, the researchers give their viewpoint to evaluate social world with the aid of objectivity in place of subjectivity (Cooper & Schindler 2008). With this approach, a researcher's own beliefs have no value to influence the research study. Positivism asserts that no only objective reality can be observed and tested without bias using standardised instruments. In the positivist paradigm, the researchers see themselves as neutral recorders. Different researchers using the same tools should reach the same conclusions (Cohen et al., 2007).

Relating to Kasi (2009), positivism paradigms seek to develop standardised instruments that specifically tap just one reality. Relating to Cooper and Schindler (2011) assertions, positivism is indicated by a belief in theory before research and statistical justification of findings from empirically testable speculation, the core of tenets of social science. Positivism helps to test thinking and examines the possible relationship between several variables (Sekeran & Bougie 2010).

3.3 Research Methods

Ngechu (2006) points out that, the target population is a well-defined or specified set of people, group of things, households, firms, services, elements or events to be investigated. This means the target population should fit a particular set of the specification which the researcher will be studying, and it should be homogenous. Greener (2008) further says that the study population is the full universe of people or things from which the sample is selected. In this study target population was the projects funded by DACF in Machakos Region between 2008-2012. The total number of projects was approximately 1200 (www.DACF.co.ke, 2014). The rationale for focusing on the 1200 projects funded by DACF was merely to ensure the projects under the study had gone full cycle and not the ongoing projects.

3.3.1 Sampling frame

The sampling frame is a list of all people or units in the population from which a sample can be chosen (Greener, 2008). The sample frame for this study was the projects funded by DACF in public Secondary and Primary schools in Machakos Region from 2008-2012 for which the total number was approximately 500 (www.DACF.co.ke, 2014). (Appendix III)

3.3.1.1 Sample and Sampling Technique

3.3.1.2 Sample Size

The sample is the section of the population chosen for the study. If a researcher wants to conduct a statistical analysis on his data then, the minimum example for any one category of data should be not less than 30 as this is most

likely to offer a reasonable chance of normal distribution (Greener, 2008). The sample size was picked using the following formulae adapted from Kothari (2004)

Desired sample size =

$$n = \frac{Z^2 p.q.\ N}{e^2 (N-1) + Z^2 pq}$$

N is known (<10,000)

$$n = \frac{1.96^2 * 0.5 * 0.5 * 1200}{0.05^2 (1200-1) + 1.96^2 * 0.5 * 0.5}$$

$$n = \frac{Z^2 pq}{e^2} = \frac{1.96^2 * 0.5 * 0.5}{0.05^2} = 385$$

$$\text{Minimum Sample Size} = \frac{nN}{n+N} = \frac{384*1200}{384+1200} = 290$$

Where;

N = Population size

n= Sample size

Table 3. 1: Sample size

District	Number of projects	No. of projects Selected =N/8	Number of respondents
Machakos Town	76	36	60
Masinga	56	36	50
Ashaima	50	36	55
Kathiani	57	36	55
Mavoko	68	36	50
Mwala	48	36	50
Matungulu	60	36	80
Kangundo	85	38	50
Total	500	290	450

3.3.2. Sampling technique

For this study stratified random sampling was adopted. This technique specifies any characteristics which a research wishes to be equally distributed amongst the sample (Greener, 2008). The sampling frame was broken into geographical areas (Districts) and a simple random sampling was done to get the sample size which was basically the projects funded by District Development Fund in public and primary schools across Machakos Region Districts.

3.3.4 Data Collection Instruments

Kothari (2004) states that, when we do a research of the descriptive nature and perform surveys, which could either be sample or census surveys, then primary data can either be collected through direct communication with respondents or through personal interviews and observation. Further data collection through use of questionnaires is quite popular, particularly in case of big enquiries. For this study questionnaires were used to collect primary data. The questionnaire had both quantitative and qualitative questions. The qualitative questions were open ended with the essence of capturing the actual facts about the subject matter. Likert scale was adopted for the quantitative questions for which 5= Strongly Agree, 4 = Agree, 3 =Neutral 2 = Disagree 1 = Strongly Disagree.

3.3.5 Data Collection Procedure

The researcher first sought permit from NACOSTI for the purpose of authorization to collect data from the public schools. Once the permit was granted the questionnaires were hand delivered to the respective respondents with the help of research assistants. The research assistants were first briefed in regard to the structure of the questionnaire for the purpose of ensuring they understood the subject matter for which they would make clarifications to the respondents if need be. In some schools the response was instant while in other schools the questionnaires were dropped and picked after they were filled.

3.3.6. Pilot Test

Kothari (2004) argues that before using questionnaire as a data collection method, it is always advisable to conduct pilot study the questionnaires. This helps to bring into the light the weaknesses (if any) of the questionnaires and the experience gained in this way can be used to effect improvement. Tayie (2005) suggest that samples of 25-50 are commonly used for pretesting measurement instruments. For this study, two pilot studies were undertaken in Gatundu South District as the District offices were easily accessible due proximity and it had homogeneous projects compared to the target population and thus the research felt it would offer a better basis to test the reliability and reliability of the research instrument. The findings of the first pilot study led to dropping of E-Procurement as a predictor variable which was replaced with Supplier Appraisal. To ascertain the reliability of the instrument after adjustment of the questionnaire second pilot study was undertaken still in Gatundu South District for which ten respondents from ten different projects were involved.

3.3.7 Validity of the research instruments

Validity indicates the degree to which an instrument measures what it is supposed to measure. Its the extent to which differences found with a measuring instrument reflect true differences among those being tested The two main types of validity are content validity which is the extent to which a measuring instrument provides adequate coverage of the topic under study and criterion-related validity which relates to our ability to predict some outcome or estimate the existence of some current condition (Kothari, 2004). From data obtained from the pilot study, an analysis was undertaken for which validity was ascertained leading to dropping of E-Procurement as a variable as it did not meet the threshold.

3.3.8 Reliability of the research instruments

The reliability of a measure concerns its ability to produce similar results when repeated measurements are made under identical conditions. The more variability that you observe, the less reliable is the measure (Kenneth & Bordens, 2010). The reliability of a scale indicates how free it is from random error. The two commonly used indicators of a scale's reliability are test-retest reliability and internal consistency. The test-retest reliability of a scale is assessed by administering it to the same people on two different occasions, and calculating the correlation between the two scores obtained. High test-retest correlations indicate a more reliable scale. Internal consistency is the degree to which the items that make up the scale are all measuring the same underlying attribute (Julie, 2011). Internal consistency was measured using the statistic Cronbach's coefficient Alpha. This statistic provides an indication of the average correlation among all of the items that make up the scale. Nunnally (1978) recommends a minimum level of 0.7 Cronbach Alpha value.

3.3.9. Data Processing and Analysis

Data processing involves, editing, coding, classification and tabulation of data collected before analysis. Analysis implies the computation of certain measures along with searching for patterns of relationship that exist among data-category (Kothari, 2004). After data collection, both qualitative and quantitative data was coded and entered in Statistical Package for Social Sciences (SPSS) version 18. Descriptive statistics were first generated for quantitative data while for qualitative data, computer aided content analysis was done where common themes were assigned a code and entered in SPSS to generate descriptive statistics. Content analysis is highly suitable in unobtrusive and interview data which is not often amenable to analysis until the information they convey has been condensed and made systematically comparable (Bruce, 2011). Further cross tabulation was undertaken which enabled the researcher to compare responses for the different Districts and deduce conclusion.

Test of reliability and normality were done. Further to establish the strength and direction of the relationship between procurement practices and the performance of projects funded by District Development Fund, Correlation analysis was done. Logistic regression was done to determine the predictive role of independent variables and subsequently test of hypothesis. $H_{0:}$ $\beta i=0$ was rejected which meant that Xi (i=1, 2, 3, 4) were taken to be a significant predictors of Y. The corresponding t-values and p-values were used to arrive at a decision that is we rejected $H_{0:}$ whenever p-value <5%. The Logistic regression model is illustrated below; $Y=\beta_0+\beta_1 X_1+\beta_2X_2+\beta_3X_3+\beta_4X_{4+}\varepsilon$

Where Y=Logit (p), p being the probability that a project is successfully implemented (Performance of projects funded by DACF)

$\beta_{0=}$ Constant

$X_{1=}$ Stakeholder Management

$X_{2=}$ Supply chain Risk Management

$X_{3=}$ Supplier Appraisal

$X_{4=}$ Contract Management

β_1 β_2 β_3 β_4 = Regression co-efficients
ε=Error term

4.0 DATA ANALYSIS

This chapter presents the research findings based on the primary data which was collected through sample survey across Machakos Region where questionnaires were hand delivered. Precisely the chapter presents pilot study results, bio data, response rate, descriptive statistics together with reliability statistics for the study variables, correlation analysis, logistic regression, test of hypothesis and discussion of the findings.

4.0 DATA AND INFORMATION DESCRIPTION

The study sample both in the pilot study and in the final study was composed of individuals who were involved in one way or another in the procurement for the projects funded by Districts Development Fund who include DACFC member, project managers, DACF project committee members. This is summarized in the table below;

Table 4.0.1: Designation of respondents

Category	Frequency	Percent
DACF committee member	27	13.8
Project manager	15	7.7
Procurement officer	1	.5
DACF project surveyor	8	4.1
Tender committee member	49	25.0
Fund manager	8	4.1
DACF project committee member	88	44.9
Total	**196**	**100.0**

Other designation

Category	Frequency	Percent
Teacher	17	13.0
Chaplain	1	.8
Parent	3	2.3
Head teacher	32	24.4
BOM	30	22.9
Deputy head teacher	47	35.9
Secretary of the project	1	.8
Total	**131**	**100.0**

4.0.1 Pilot Study Results

For the purposes of validating the research instrument, a pilot study was undertaken in Gatundu North District for which 25 respondents were involved. While different levels of reliability are required, depending on the nature and purpose of the scale, Nunnally (1978) recommends a minimum level of .7 Cronbach alpha values though this is dependent on the number of items in the scale. When there are a small number of items in the scale (fewer than ten), Cronbach alpha values can be quite small. However for this study the reliability statistics for objective 4 which was E-procurement warranted the need to reconsider the variable as it could not be used as a predictor variable with a standard deviation of .862 for the all the measures under the variable. This necessitated the need to drop the variable and second pilot test was undertaken. E-procurement was replaced with Supplier Appraisal and a smaller sample size of 10 respondents was involved in the second pilot test still in Gatundu North Sub Region. For the second pilot study the aggregated reliability statistics were as follows;

Table 4.0.2: Pilot Study Reliability Statistics

S/NO	Objectives	No of items	Cronbach Alpha
1.	The role of stakeholder management on performance of projects funded by District Assemblies' Common Fund (DACF) in Ghana	5	.931

2.	The role of supply chain risk management on performance of projects funded by District Assemblies' Common Fund (DACF) in Ghana	10	.88
3.	The role of contract management on performance of projects funded by District Assemblies' Common Fund (DACF) in Ghana	9	.973
4.	The role of supplier appraisal on performance of projects funded by District Assemblies' Common Fund (DACF) in Ghana	10	.995
5.	Performance of projects funded by District Development Fund	6	.951

According to Norman (2003), Cronbach Alpha coefficients range between 0 and 1, where a high value indicates a high level of consistency among the items. He further argues that value of alpha is influenced by the number of items in a scale; it increases as the number of items increases. His assertion is however contradicted by the reliability statistics for objective one and two where supply chain risk management has a higher number of items than stakeholder management but lower Cronbach Alpha value.

4.1 CONTEXT OF RESEARCH SITE

4.1.1 Response rate

In a previous study by Wamae (2014) in Machakos Region a response rate of (63/80) equivalent to 78.75% was reported. On this basis the researcher adjusted the number of questionnaires from 290 to 450 thus 450 questionnaires were issued but only 302 were filled and returned On aggregate the actual response was (302/450) which was equivalent to 67% response rate.

4.1.2 Demographic information

4.1.2.1 Level of education

The study sought to know the respective academic qualifications of the respondents which was used as an indicator of their understanding pertaining to the subject matter of the study and subsequently used to make conclusion and recommendations.

Table 4. 1.1.1: Level of education

District Name	Level of education					Total
	Primary	**Secondary**	**Diploma**	**Bachelor**	**Masters**	
Accra Metro.	4	12	13	17	2	48
Okaikwei North Municpal	1	5	19	21	1	47
Ablekuma North Municipal	0	3	17	16	2	38
Ablekuma West Municipal	1	5	30	30	5	71
Ayawaso East Municipal	0	2	7	7	4	20
Ayawaso North Municipal	0	2	9	8	8	27
Ayawaso West Municipal	0	1	9	6	1	17
La Dade-Kotopon Municipal	0	0	5	6	0	11
Total	**6**	**30**	**109**	**111**	**23**	**279**

Table 4. 1.2.1 above gave a cross tabulation on respondent's academic qualifications across the Districts. From the findings 87% (243) respondents had at least tertiary education while 9.7% (36) respondents had the basic education while 2.3% didn't indicate their level of education.

Other level of education

District Name	Other level of education			Total
	P I Teacher	ATS I	P1 certificate	
Accra Metro.	1	0	0	1
Okaikwei North Municpal	1	0	1	2
Ablekuma North Municipal	0	1	0	1
Total	**2**	**1**	**1**	**4**

4.1.2. Specialized training in procurement and project management

From the study findings out of 81 respondents who responded to this question only 16% of the respondents had at least specialized form of training in procurement which was at the certificate level. Eighty four respondents had other training but not related to procurement as shown in the table below;

Table 4.1.2: Specialized training in procurement and project management

District Name	Specialized training in procurement and project management					Total
	Certificate in procurement	KEMI	Education management	Diploma in management	ATSI	
Ablekuma West Municipal	6	0	0	0	0	6
Ayawaso East Municipal	5	1	1	0	0	7
Ayawaso North Municipal	2	16	2	8	0	28
Ayawaso West Municipal	0	8	0	0	0	8
La Dade-Kotopon Municipal	0	0	4	3	0	7
Okaikwei North Municpal	0	10	0	0	1	11
Ablekuma North Municipal	0	0	0	6	0	6
Total	13	35	7	17	1	73

These findings are notably worrying as nearly 84% (206) of the people involved in the implementation of projects funded by DACF across the Districts didn't have basic qualifications on the subject matter and could be duped by the educated DACF members in decision making whenever it comes to implementation and execution of projects as noted by (Kairu, 2014).

4.1.3. Respondents as per District

As stated in the scope of the study, the study was undertaken in Greater Accra where the respondents were spread across all the Districts in the Region. The table below summarizes the list of respondents where 96% of the respondents indicated their respective Districts while 4% didn't.

Table 4.1.3: Respondents as per District

District	Frequency	Percent
Ashaiman Municipal	49	16.9
Adenta Municipal	50	17.2
Ga West Municipal	39	13.4

Ga North Municipal	74	25.5
Ga South	20	6.9
Ga South Mun. Ngleshie Amanfro	29	10.0
Ga Central Municipal	18	6.2
Ga East Municipal	11	3.8
Total	**290**	**100.0**

4.1.4. Projects funded by DACF in public primary and secondary schools which were evaluated for the purpose of the study

From the findings it was very clear that most of the public primary and secondary schools were beneficiaries of the DACF kitty as various projects in those schools had been aided by the DACF. The highest percentage of projects funded by DACF was in class room construction with 44% followed by construction of toilets & latrines which was 27.1%. The rest of the projects are summarized in the table below;

Table 4.1.4: Projects funded by DACF in public primary and secondary schools

Project	Frequency	Percent
Classroom construction	134	45.3
Latrine pit	26	8.8
Administration block construction	30	10.1
Water tanks	3	1.0
Laboratory construction	10	3.4
Computer room construction	3	1.0
Electricity installation	5	1.7
Boarding room	1	.3
Hall construction	4	1.4
Toilet construction	56	18.9
Construction of dorms	5	1.7
Feeding program	1	.3
Tree planting	1	.3
Renovation	8	2.7
Purchase of school bus	1	.3
Construction of staff quarters	1	.3
Yikiatine	1	.3
Roof	2	.7
Fencing the school	2	.7
Sports equipments	1	.3
Solar lambs project	1	.3
Total	**296**	**100.0**

4.2 Aanlysis of the Questionnaires

4.2.1 Descriptive and reliability statistics for the study variables

According to Julie (2011), once a researcher is certain that there are no errors in the data file then descriptive phase of data analysis can begin. Descriptive statistics are important as they help to describe the characteristics of the sample and check variables for any violation of the assumptions underlying the statistical techniques to use to address research questions. For categorical variables it is appropriate to use frequencies as it may not make any sense asking for standard deviations and means for factual data like marital status and sex. However, for continuous variables it is appropriate to use descriptives which will provide a summary of statistics such as median, mean, standard deviation. Norman (2003) defines reliability as the capacity of a measure or scale to produce consistent results. A measure will be reliable if all items in the scale are reliable. The classical way to test for reliability is test–retest method which implies that one has to apply a measure to the same individuals on two different occasions but this may lead to inflation

of estimate of reliability. To avoid this limitation, the study used Cronbach Alpha which is presented together with the descriptive statistics.

4.2.2. Performance of projects funded by DACF

The dependent variable had two set of questions; the first set had dichotomous questions and the second set had opinion questions which were used as control questions

(a) Completion of the project on time

Table 4.2.2: Completion of the project on time

Response	Frequency	Percent
No	76	25.4
Yes	223	74.6
Total	299	100.0

The study sought to know whether the respective project was completed on the expected time. Two hundred and ninety-nine respondents responded to the question for which 74.6% of the projects funded by DACF in the respective public schools were completed on time while 25.4% of the projects were not completed on time. This clearly agrees with the findings of NTA (2012) who reported that 25.4% of the projects that were implemented in Machakos Town during 2006/2007 financial year were not completed on time and as a result they were abandoned. Further Kairu (2014) in his study across Machakos Region found out that, most of the projects started were never completed within the stipulated time. A cross tabulation was further undertaken to compare the responses across the Districts. This is presented in the table below;

Table 4.2.2a: Cross tabulation for completion of projects funded by DACF on time

The project was completed on time			
District Name	**No**	**Yes**	**Total**
Ashaiman Municipal	10	37	47
Adenta Municipal	16	33	49
Ga West Municipal	10	29	39
Ga North Municipal	17	57	74
Ga South	4	16	20
Ga South Mun. Ngleshie Amanfro	7	22	29
Ga Central Municipal	4	14	18
Ga East Municipal	2	9	11
Total	**70**	**217**	**287**

Considering the sample size across the Districts, Ashaiman District had the highest number of projects which were not completed on time (16) followed by Adenta District (10).

(b) Completion of the project within budget line: The study sought to know whether the various projects funded by DACF in public schools were completed within the budget allocated for that purpose. The findings are summarized in the table below;

Table 4.2.2b: Completion of the project within budget line

Response	Frequency	Percent
No	72	24.4
Yes	223	75.6
Total	295	100.0

John (2004) emphasizes that one of the overriding project goals is to accomplish work for end-user or client in accordance with the budget. The budget is the specified or allowable cost for the project; ideally it is the target cost of the work to be done which may be under or overestimated. This makes it very important for any project manager to ensure no cost overrun so that the benefits of the project are not overridden by the project cost. From the findings

75.6% of the projects were completed within the set budget while 24.4% were not completed within the budget line. This shows that project budget management is very paramount to the success of a project. This is supported by Kibe and Iravo (2013) who reported that, 52% of DACF projects in Juja District were unsuccessful due to poor budget management hence they were left incomplete and others abandoned. A cross tabulation was further undertaken to compare the responses across the Districts. This is presented in the table below;

Table 4.2.2c: Cross tabulation for completion of projects funded by DACF within budget line

District Name	The project was completed within the budget line		Total
	No	Yes	
Ashaiman Municipal	9	36	45
Adenta Municipal	16	31	47
Ga West Municipal	13	26	39
Ga North Municipal	17	57	74
Ga South	3	17	20
Ga South Mun. Ngleshie Amanfro	6	23	29
Ga Central Municipal	4	14	18
Ga East Municipal	0	11	11
Total	68	215	283

Considering the sample size across the Districts, Ashaiman District had the highest number of projects which were not completed within the budget line (16) followed by Adenta District (13).

(c) **Quality standard of the project:** According to PMBOK (2008), quality is a degree to which a set of inherent characteristics fulfills requirements and leads to customer/ end user satisfaction. This makes it very necessary for any project manager to ensure that there are quality management processes that determine objectives, quality policies and responsibilities so that the project will satisfy the needs for which it was undertaken. The study sought to know whether the projects funded by DACF in the public schools met the expected quality standards. The findings are presented in the table below;

Table 4.2.2d: Quality standard of the project

Response	Frequency	Percent
No	77	26.1
Yes	218	73.9
Total	295	100.0

From the findings 295 respondents gave their feedback for which 73.9% of the projects met the quality standards while 26.1% didn't meet the expected quality standards. This again shows the importance of project quality management to ensure the project deliverables are met (Kibe & Iravo, 2014). A cross tabulation was further undertaken to compare the responses across the Districts. This is presented in the table below;

Table 4.2.2e: Cross tabulation for completion of projects funded by DACF within the expected quality standards

	The quality standard of the project was met		
District Name	**No**	**Yes**	**Total**
Ashaiman Municipal	12	34	46
Adenta Municipal	17	30	47
Ga West Municipal	6	32	38
Ga North Municipal	19	55	74
Ga South	5	15	20
Ga South Mun. Ngleshie Amanfro	9	20	29
Ga Central Municipal	2	16	18
Ga East Municipal	4	7	11

Total	74	209	283

Considering the sample size across the Districts, AshaimanDistrict had the highest number of projects which did not meet quality standards as expected (17) followed by Adenta District (12).

(d) **Factors that led to success/ failure of the project:** Considering the views of John (2004), project failure implies the inability of a project to meet schedule, cost, safety, quality, producing results that are undesirable to those involved with it and failure of the project to meet user or developer expectations, or leaves them worse off than before. He further defines project success as the ability of a project to satisfy project objectives which include; time, cost, and performance. The study sought to establish the actual factors that led to success and failure of some project. The findings are summarized in the table below;

Table 4.2.2e: Factors that led to success/ failure of the project

Factors	Frequency	Percent
Lack of cooperation among stake holders	9	5.9
Good budgetary	12	7.8
Skilled labour	8	5.2
Time management	11	7.2
Commitment of stake holders	23	15.0
Inadequacy of materials	7	4.6
Good relationship between suppliers and stake holders	8	5.2
Good communication	2	1.3
Over estimation of materials	1	.7
Availability of funds	34	22.2
Lack of sufficient funds	12	7.8
Unskilled labour	1	.7
Poor quality of materials	7	4.6
Poor management	2	1.3
Proper coordination	8	5.2
A stable contractor on the side of finance	5	3.3
Proper project planning	2	1.3
Rainy weather	1	.7
Total	**153**	**100.0**

From table 4.2.2e, it was clear that funds availability was the most critical factor in project success with 22.2% followed by acceptability (commitment) of the stakeholders towards the project success with 15% then cost management (good budgetary) with 7.8%. For the projects which were not successful, lack of funds was rated as the major cause with 7.8% followed by lack of proper coordination with 5.2% then inadequacy of materials with 4.6%. These findings concur with the findings of Malala (2011) who found out that, lack of enough funds allocation to various projects and lack of involvement of the local community were the major factors that affected the success of projects funded by DACF in Kikuyu District. Further Oladipo (2008), in his research identified financial constraints as one of the major project challenges that affected their successful implementation.

4.2.3 Stakeholder Management

The study sought to establish whether stakeholder management was done which eventually its role in project performance would be established. Five point Likert scale Statement questions were set for which the responses are presented in the table 4.14;

Table 4.2.3: Stakeholder management

S/N	Statement	N	Mean	Std. Dev
1.	Stakeholder analysis was done before this project was initiated	295	4.00	.855
2.	Stakeholder analysis and management enabled timely completion of this project	299	3.74	1.093
3.	The project stalled due to community rebels and unacceptability	299	1.91	.860

4.	Political leaders interests, in the District were taken care of in awarding this project's procurement contracts	301	3.57	1.344
5.	Stakeholders with high power influence and high interests affected timely completion of this project	300	2.65	1.393
6.	Suppliers and contractors were informed on this project before it was initiated	301	3.69	1.159
7.	Project users were involved in development of procurement plan for this project	297	3.87	.978
8.	Early supplier involvement was done in preparation of the material specifications	301	3.62	1.142

Cronbach Alpha value=.738 with 6 items

From the table above, a ($\bar{x}$ =4) of the respondents agreed that stakeholder analysis was done before the DACF funded projects were initiated. This clearly shows that there was clear understanding that projects performance is affected by different stakeholders and all the stakeholders are not equally important thus the need to undertake stakeholder analysis and put in place strategies to manage the different categories of stakeholders. The study findings concur with Moodley et al. (2008) who found out that, external stakeholder groups; clients, contractors/suppliers and end users were significantly more important than the other stakeholder groups. Further Mahmoud et al. (2014) stated that, stakeholder segmentation was important to enable relevant managerial strategy to be employed. On the other hand, a ($\bar{x}$ =1.91) of the respondents agreed that projects funded by DACF stalled due to community rebels and unacceptability. This showed that in most of the projects funded by DACF, there was acceptability and involvement of stakeholders. However, this finding gives a different scenario compared to Malala (2011) who found out that, most of the projects in Kikuyu District were behind schedule as a result of lack of involvement of the local communities and political interference.

(b) Effectiveness of stakeholder management methods

The study sought to determine the effectiveness of various methods used to manage different stakeholders who in one way or another had an influence on the failure or success of the projects. The summary of the findings is presented in the table below;

Table 4.2.3a: Effectiveness of stakeholder management methods

Stakeholder method	N	Mean	Std. Deviation
Constant communication with contractors and suppliers	301	3.62	.925
Regular meeting with contractors and suppliers	300	3.47	.972
Fostering collaboration with suppliers	300	3.52	1.020
Co-opting all stakeholders in procurement decision making	301	3.53	1.060
Developing rapport with suppliers and contractors	301	3.63	.973

Respondents were requested to rate the effectiveness of various stakeholder management methods on a scale of 0-100%. From the table above creating rapport was the most effective way of managing stakeholders ($\bar{x}$ =3.63) followed by the need to ensure constant communication with all the stakeholders ($\bar{x}$ =3.62) but more importantly the contractors and the suppliers as they are largely responsible for delivering infrastructure/materials which ultimately determine the project performance. Though all the stakeholder management methods were effective, the results obtained slightly differ with the findings of Salah and Nabil (2013) where regular communication with stakeholders was ranked as the most effective stakeholder management method followed by mutual trust and respect amongst the stakeholders.

4.2.4. Supply Chain Risk Management

The study sought to establish the supply chain risk management practices that were in place and the predictability role they would play in project performance. The obtained results are summarized in the table below;

Table 4.2.4: Supply chain risk management

S/NO	Statement	N	Mean	Std. Deviation
1.	Risk register was maintained for monitoring and mitigating supply chain risks	298	3.66	.945

2.	Risk manager was appointed to mitigate risks to avoid delays in completion of the project	295	3.52	1.033
3.	Technological risks (supplier choosing the wrong or a suboptimal technology) led to project abandonment	297	2.29	1.009
4.	Organizational and societal risks (lack of acceptability) led to project abandonment.	297	2.14	.959
5.	Market risks (suppliers not responding to tenders) was mitigated	298	2.94	1.101
6.	Financial risks were assessed and mitigated leading to cost savings	299	3.55	1.036
7.	Specifications were developed with involvement of suppliers to ensure responsiveness of the tender	296	3.83	.982
8.	Penalty clauses for late deliveries from the suppliers were implemented	294	2.84	1.148
9.	To minimize price escalation for the project inputs fixed contract was entered into with the contractors	298	3.46	1.101
10.	To mitigate the risks of non-delivery for the project inputs, multiple suppliers were contracted	296	3.26	1.192

Cronbach Alpha value= .745 with 10 items

From the obtained results, development of specifications with involvement of suppliers was ranked as the most practiced approach in managing supply chain risk and subsequently project success ($\bar{x}$ =3.83) followed by monitoring of supply chain risks by maintaining risk register ($\bar{x}$ =3.66). Further it is also eminent that technological, organizational and societal risks were not a major threat to the performance of projects funded by DACF hence their management was not prioritized. The results obtained support SCRLC (2011) who state that, it's important to prioritize risks by the threat as measured by the likelihood and consequence they can pose to a project or firms operations.

(b) Effectiveness of supply chain risk management approaches

Respondents were requested to rate the effectiveness of various supply chain risk management approaches. The results obtained are summarized in table 4.17;

Table 4.2.4a: Effectiveness of supply chain risk management approaches

Statement	N	Mean	Std. Deviation
Availing of performance bonds by the suppliers/contractors	299	3.32	.999
Fixed price contracts	298	3.15	1.070
Setting price variation limits	296	3.22	1.004
Imposing penalties on late deliveries	298	2.65	1.263
Standardizing inputs specifications	298	3.47	.950
Prior assessment of risks through risk mapping	297	3.25	1.101

Respondents were requested to rate the effectiveness of various supply chain risk management approaches on a scale of 0-100%. From the results presented above a ($\bar{x}$ =3.47) of the respondents agreed that standardizing inputs specifications would serve as the best way to mitigate supply chain risks that can pause a threat to project performance. This implies that the project inputs would be readily available from different sources thus reduced supply risk. This concurs with European Union Expert Group (2010) who acknowledges that, he better the potential market prospect of suppliers, the higher the likelihood that they will deliver and accept responsibilities hence safeguarding the procuring entity from supply chain disruptions.

4.2.5. Contract Management

Generally sound contract management of any project revolves around the control of time, cost and quality (KISM, 2009). Further PPADA (2015) acknowledges contract management as very important integral of supply chain management that is ought not to be ignored so as to create value to meet the objectives of the procuring entity. For this study various aspects of contract management were assessed with the objective of determining their predictability role in project performance. The obtained results are summarized in the table below;

Table 4.2.5a: Contract management

S/NO	Statement	N	Mean	Std. Deviation
1.	Contract manager was appointed to manage the procurement contract for this project	299	3.92	.871
2.	All contract records for this project were maintained	298	4.03	.760
3.	Service Level Agreements (SLA's) were set to ensure contract monitoring	299	3.98	.746
4.	Key Performance Indicators (KPI's) were set to monitor the performance of contractors/suppliers for this project	299	3.92	.803
5.	This project was completed within the set budget as a result of contract monitoring and management	297	3.60	1.141
6.	Dispute resolution mechanisms were incorporated in the procurement contract	295	3.53	1.036
7.	Price variations for this project was managed through contract variation clauses entrenched in the contract document	296	3.72	.943
8.	Procurement plan was prepared before the initiation of the project	296	3.95	.818
9.	Cost audit was done in every phase of the project	296	3.92	.846

Cronbach Alpha .878 with 9 items

From the results above, contract management was highly embraced as a pre-requisite to success of projects funded by DACF. Majority of the respondents strongly Agreed that procurement and other projects records were maintained for contract management purposes ($\bar{x}$=4.03). This was followed by a ($\bar{x}$=3.98) of respondents who agreed that, setting of Service Level Agreements for contract monitoring was done. The findings show that most of the project managers complied to PPADA (2015) Sec (68) which requires maintenance of records for each procurement for at least six years after the resulting contract has been completed or, if no contract resulted after the procurement proceedings were terminated. Further the findings concur with Brown and Hyer (2010) who stated that, for sound project contract monitoring, there should be a control system that sets relevant projects metrics, provides accurate and timely information for decision making and corrective measures.

(b) Effectiveness of contract management practices

Respondents were requested to rate the effectiveness of various contract management practices. The results obtained are summarized in the table below;

Table 4.2.5b: Effectiveness of contract management practices

Statement	N	Mean	Std. Deviation
Weekly inspection of the project progress by inspection committee	299	3.48	1.057
Setting of contractors' KP'I'S/SLA'S	298	3.49	.996
Continuous cost/procurement audits	298	3.54	1.025
Project supervision by the project manager	297	3.64	.991
Incorporating dispute resolution mechanism in the contract	297	3.20	1.073
Setting price escalation limit clauses in the contract	297	3.38	1.043
Impromptu inspections on procured inputs	297	3.55	1.096

Respondents were requested to rate the effectiveness of various contract management practices on a scale of 0-100%. From the output presented above all the contract management practices were rated above average in respect to their effectiveness on performance of the respective projects with most of the respondents agreeing that, project supervision by the project manager was the better way of managing projects' contracts as compared to the others($\bar{x}$=3.64). The findings clearly show that at least most of the respondents were aware of existence of contract management mechanisms for the projects funded by DACF. This is contrally to Barasa (2014) who found out that most of the respondents at KCAA weren't aware of the existence of contract mechanisms for their projects.

4.2.6 Supplier Appraisal

As noted by CIPS (2007), supplier appraisal is a pre-contractual assessment of potential suppliers' capabilities of controlling quality, quantity, price, delivery and other factors to be embodied in a contract. Further, supplier appraisal is an essential aspect of both strategic sourcing and supplier management. As such various aspects of supplier appraisal were assessed with the objective of determining their predictability role in DACF project performance. The obtained results are summarized in the table below;

Table 4.2.6a: Supplier appraisal

S/N	Statement	N	Mean	Std. Deviation
1.	Financial appraisal of the supplier was done	298	3.87	.797
2.	Supplier ability to offer after sale services (maintenance) was appraised	298	3.82	.857
3.	The contractors competency of key personnel was appraised	293	3.74	.968
4.	Contractors technical ability to meet to meet the project requirements was appraised	297	3.66	1.063
5.	Contractors legal capacity was appraised	296	3.79	.911
6.	Suppliers' quality control systems were appraised	297	3.75	.975
7.	Visit to the contractors/suppliers' premises was made	295	3.82	.976
8.	Contractors experience to undertake the project was appraised	298	3.82	.914
9.	Suppliers commitment to supply for the project was appraised	295	3.95	.819
10.	Contractors ability to consistently meet project requirements was appraised	291	3.64	1.059

Cronbach Alpha .929 with 10 items

From the results above, it is eminent that supplier appraisal was practiced for most of the projects funded by DACF. Supplier commitment to supply for the project was the highly rated appraisal with a ($\bar{x}$=3.95). Financial appraisal was the second appraisal that was highly practiced with a ($\bar{x}$=3.87). These findings concur with (Kiruri, 2013; Mungai, 2014) who found out that financial, quality, technical assessments were the main criteria used to appraise suppliers. Further the need for the procuring entity to make visits to suppliers/premises as a way to assess the suppliers capability was practiced as agreed by ($\bar{x}$=3.82) of the respondents. This in line with Mungai (2014) who in his study established that site visit was one of the common ways of appraising suppliers and their performance.

(b) Effectiveness of supplier appraisal on the performance of the contractors

Respondents were requested to rate the effectiveness of various aspects of supplier appraisal. The results obtained are summarized in the table below;

Table 4.2.6b. Effectiveness of supplier appraisal on the performance of the contractors

Statement	N	Mean	Std. Deviation
Financial appraisal	297	3.38	.993
Technical appraisal	297	3.33	1.000
Competency appraisal	296	3.39	1.016
Appraisal of the suppliers quality control systems	297	3.41	.980
Legal capacity appraisal	296	3.39	1.025

Respondents were requested to rate the effectiveness of supplier appraisals on the performance of contractors in a scale of 0-100%. From the results presented above it's clear that all the appraisals were effective in ascertaining suppliers potentiality and subsequently his performance. However it appeared that visit to suppliers/contractors premises was giving clear certainty of the supplier's performance ability as quality control systems in place could be appraised.

4.2.7 Cronbach Alpha Summary

For this study to test the reliability of the scale, Cronbach's alpha was calculated with the aid of SPSS software. The coefficients range between 0-1, with a high value indicating a high level of consistency among the items though the value of alpha is influenced by the number of items in a scale. It increases as the number of items increases. Further with use of SPSS to calculate Cronbach Alpha it is possible to see whether removing any of the items individually will improve its value, thus indicating which of the items are unreliable if any. Once the set of items for

each variable met the Cronbach Alpha threshold, they were aggregated using average to give composite variable. This is summarized in the table below;

Table 4.2.7 Cronbach Alpha aggregated Statistics

S/N	Variable	No of items	Cronbach Alpha	Mean	Std Dev
1.	Stakeholder Management (X1)	6	.738	3.3782	.559
2.	Supply chain risk Management (X2)	10	.745	3.1494	.583
3.	Supplier Appraisal (X3)	10	.929	3.7870	.728
4.	Contract Management (X4)	9	.878	3.8398	.637

2.3 Conclusion from Interviews

2.3.1 Correlation Analysis

Saunders et al. (2009) asserts that, correlation coefficients enable a researcher to quantify the strength of the linear relationship between two or more variables. Correlation is a measure of the degree of relatedness of variables (Ken, 2010). Several measures of correlation are available, the selection of which depends mostly on the level of data being analyzed. For only ordinal-level or ranked data, Spearman's rank correlation (r), can be used to analyze the degree of association of two continuous variables. Pearson product-moment correlation coefficient r, requires at least interval level of measurement for the data (Ken, 2010).

Correlation coefficients provide a numerical summary of the direction and the strength of the linear relationship between two variables. Pearson correlation coefficients (r) range from –1 to +1. The sign at the front indicates whether there is a positive or a negative correlation The size of the absolute value provides information on the strength of the relationship where; (r=.1 to .29 Small; r=.30 to .49 Medium; r=.5 to 1.0 Large). A value of 0 mean that the variables are perfectly independent that is no relationship exists, a value of +1 represents a perfect positive correlation and a value of -1 represents a perfect negative correlation (Saunders et al., 2009). To determine the strength and direction of the linear relationship between independent and dependent variables for this study, Pearson Product Moment Correlation was used and the results obtained are summarized in the below;

Table 4.3.1: Pearson Product-Moment Correlations between procurement practices and performance of projects funded by DACF

Variable		Performance	Stakeholder management	Supply chain risk management	Contract management	Supplier appraisal
Performance	Pearson Correlation	1	.361**	.226**	.550**	.462**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	300	300	298	298	297
Stakeholder management	Pearson Correlation	.361**	1	.475**	.559**	.483**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	300	301	299	299	298
Supply chain risk management	Pearson Correlation	.226**	.475**	1	.497**	.431**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	298	299	299	299	298
Contract management	Pearson Correlation	.550**	.559**	.497**	1	.684**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	298	299	299	299	298
Supplier appraisal	Pearson Correlation	.462**	.483**	.431**	.684**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	297	298	298	298	298

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

The correlation between procurement practices and performance of projects funded by DACF was investigated using Pearson product-moment correlation coefficient. There was positive correlation between the dependent and the set of independent variables (r>0.2, p<.001 in all cases). The strength of the relationship between the independent variables and the dependent variable (performance of projects funded by DACF) varied from small to large. Contract Management (r=.550, Large), Supplier Appraisal (r=.462, Medium), Stakeholder Management (r=.361, Medium) and Supply Chain Risk Management (r=.226, Small). For contract management the findings obtained concur with (Mutua, Waiganjo & Oteyo, 2014) who in their study found out that, there was a positive correlation between contract management and performance of projects. However the strength of the relationship between contract management and project performance in their study was small (weak) compared to large (strong) as obtained from this study findings.

For supplier appraisal, the findings obtained concur with the findings of Kiruri (2013) who found out that, there was positive medium (moderate) relationship between supplier appraisal and procurement performance in the public sector entities. For stakeholder management, the findings obtained concur with (Adan, 2012) who found out that stakeholder management and involvement had a positive large (strong) correlation with projects performance. This is further supported by (Macharia, 2013) who also found out that, involving stakeholders in project implementation as a way to manage them had a positive strong relationship with project success. For supply chain risk management, the results obtained concur with (Craig, 2013) who found out that there was weak (small) relationship between supply chain risk management and project success. He further concluded that though a number of projects were successful it was eminent that the project managers didn't explicitly manage supply chain risk.

4.3.2 Tests of multivariate assumptions

4.3.2.1 Test of Normality

Normality is the assumption that each variable and all linear combinations of the variables are normally distributed though normality of the variables is not always required for analysis. Normality of variables can be assessed by statistical or graphical methods. The values of skewness and kurtosis to an extent can be used to assess normality. Skewness has to do with the symmetry of the distribution; a skewed variable is a variable whose mean is not in the center of the distribution while Kurtosis has to do with the peakedness (Barbara & Linda, 2007). However for this study Explore option of the Descriptive Statistics menu in SPSS was used to test normality. The results are summarized in the below;

Table 4.3.2.1. Tests of Normality

Variables	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Stakeholder management	.139	298	.000	.975	298	.000
Supply chain risk management	.086	298	.000	.987	298	.009
Contract management	.162	298	.000	.942	298	.000
Supplier appraisal	.193	298	.000	.902	298	.000
LogX1	.164	298	.000	.934	298	.000
RootX1	.152	298	.000	.959	298	.000
RecipX1	.181	298	.000	.849	298	.000
SqX1	.110	298	.000	.985	298	.004

The table above gives the results of normality test. This assesses the normality of the distribution of scores where a non-significant result (Significant value of more than .05) indicates normality. In this case the Sig. value was <.05 for each group, suggesting violation of the assumption of normality. This is quite common in larger samples as supported by Julie (2011). However the distribution of the scores doesn't deviate from normality to a very big extent as shown in the normal Q plots below;

(a) Stakeholder management

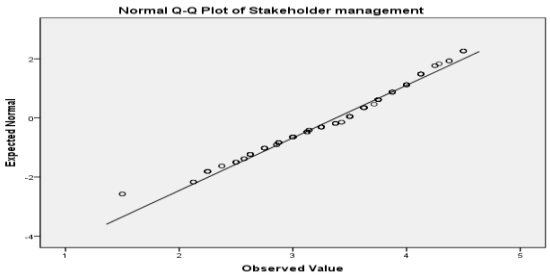

Figure 3. 1: Normal Q-Q plot of stakeholder management

(b)

(c) Supply chain risk management

Figure 3. 2: Normal Q-Q plot of Supply Chain Risk Management

(d) Contract management

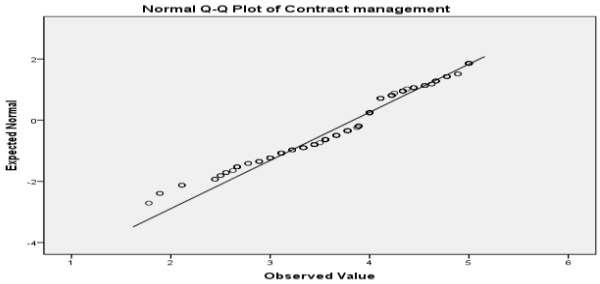

Figure 3. 3. Normal Q-Q Plot of Contract Management

(e) Supplier Appraisal

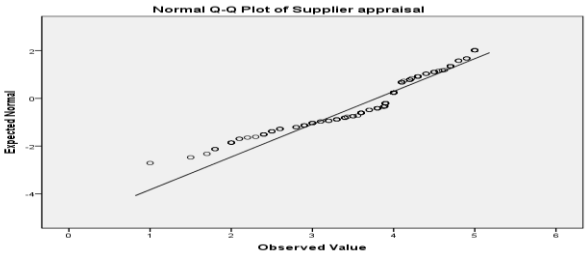

Figure 3. 4. Normal Q-Q Plot of Supplier Appraisal

4.3.2. Test of Multicollinearity

Multicollinearity is a problem with correlation matrix that occurs when variables are too highly correlated. With multicollinearity, the variables are very highly correlated >.90 (Tabachnick & Fidell, 2007). To test the assumption of multicollinearity, collinearity diagnostics was undertaken. The results are presented in the coefficients table 4.25 below;

Table 4.3.2: Collinearity Diagnostics Coefficients

	Collinearity Statistics	
Model	**Tolerance**	**VIF**
Stakeholder management	.624	1.603
Supply chain risk management	.689	1.451
Contract management	.443	2.258
Supplier appraisal	.513	1.950

Dependent Variable: Performance of projects funded by DACF

Collinearity Diagnostics was undertaken to assess the assumption of multicollinearity. In table 4.3.2 two values are given; Tolerance and VIF (Variance inflation Factor). Tolerance is an indicator of how much of the variability of the specified independent is not explained by the other independent variables in the model. If the value is very small (<.10), it indicates that the multiple correlation with other variables is high, suggesting the possibility of multicollinearity. The other value given is the VIF which is the inverse of the Tolerance value. VIF values > 10 would indicate multicollinearity (Julie, 2011). From the results presented in table 4.25 the tolerance value for each independent variable is >.10, and VIF value were <10 for each independent variable meaning that multicollinearity assumption wasn't violated.

4.4. Regression results

Regression analysis is a set of statistical techniques that allow one to assess the relationship between more than one independent variable and one dependent variable (Barbara & Linda, 2007). Regression is often used when the intent of the analysis is prediction. The goal of regression is to arrive at the set of regression coefficients (B values), for the independent variables that bring the Y values predicted from the equation as close as possible to the Y values obtained by measurement. The regression coefficients that are computed minimize the sum of the squared deviations between predicted and obtained Y values and they optimize the correlation between the predicted and obtained Y values for the data set (Barbara & Linda, 2007). Julie (2011) notes that, though multiple regression technique is used to assess the impact of a set of predictors on a dependent variable, unfortunately, multiple regression is not suitable when you have categorical dependent variables. In such cases Logistic regression allows test of models to predict categorical outcomes with two or more categories. The independent variables can be either categorical or continuous, or a mix of both in the model (Barbara & Linda, 2007). For this study Logistic regression was used as the results from the dependent variable were categorical. The predictive power of the set of variables and assessment of the relative contribution of each individual variable was done. The results for every predictor variable are presented;

4.3.3. Test of predictor variable X1 (Stakeholder Management)

Table 4.3.3: Logistic regression result for Stakeholder Management

Omnibus Tests of Model Coefficients				
		Chi-square	**df**	**Sig.**
Step 1	Step	39.434	1	.000
	Block	39.434	1	.000
	Model	39.434	1	.000

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	284.131[a]	.123	.187

Classification Table					
	Observed		Predicted		
			Performance		Percentage Correct
			Below Average	Above Average	
Step 1	Performance	Below Average	16	53	23.2
		Above Average	7	224	97.0
	Overall Percentage				80.0

Variables in the equation

	B	S.E.	Wald	df	Sig.	Exp(B)

Step 1[a]	C1	1.625	.282	33.248	1	.000	5.080
	Constant	-4.086	.904	20.447	1	.000	.017

Direct logistic regression was performed to assess how well the model performed. The Omnibus Tests of Model Coefficients gives us an overall indication of how well the model performed. In this case, the model with stakeholder management as a predictor variable was found to be significant (chi-square value=39.434, df=1, p<.001). Stakeholder management (X1) explained 12.3% of the variation in Y (Cox R square=.123) which is basically the probability of DACF project performance (success). In the classification table the predictor was able to achieve 80% of correct classification. The Variables in the Equation table gives information about the significance of the predictor variable which is used to test the hypothesis. The model is Y=Logit (p) =-4.086+1.625 (X1). Under the null hypothesis which is H_{01}: $\beta 1=0$ versus H_1: $\beta 1\neq 0$, we reject the null hypothesis ($\beta 1=1.625$, Wald=33.248 df=1 p<.001) The odds ratio revealed that those projects where stakeholder management had been done were five times more likely to succeed than those where stakeholder management hadn't done (Exp (B) =5.080).

These findings are in line with (Moodley et al., 2008) who found out that, contractors(suppliers), end users, consultants and the general public were the most important external stakeholders and had a (91%) probability of determining project success. This implied that the projects were stakeholders were not involved had a (9%) chance of success. Further the results obtained from this study also concur with (Malala, 2011) who reported that, 90% of the projects were not successfully implemented in Kikuyu District and one of the main reasons cited by the respondents was lack of stakeholder involvement and management. Stakeholders have the ability to determine the project outcome through their action or inaction; therefore, they are the major determinants of project performance (success/failure) (Bourne & Walker 2010). Thus stakeholder management stood to be a valid predictor of project performance.

4.4.2 Test of predictor variable X2 (Supply Chain Risk Management)

Table 4. 2: Logistic regression result for Supply Chain Risk Management

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	15.612	1	.000
	Block	15.612	1	.000
	Model	15.612	1	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	304.487[a]	.051	.078

Classification Table

	Observed		Predicted Performance		Percentage Correct
			Below Average	Above Average	
Step 1	Performance	Below Average	0	68	.0
		Above Average	6	224	97.4
	Overall Percentage				75.2

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	D1	.970	.255	14.493	1	.000	2.638
	Constant	-1.754	.775	5.125	1	.024	.173

The Omnibus Tests of Model Coefficients gives us an overall indication of how well the model performed. In this case, the model with Supply Chain Risk Management as a predictor variable was found to be significant (chi-square value=15.612, df=1, p<.001). Supply Chain Risk management (X2) explained 5.1% of the variation in Y (Cox R square=.051) which is basically the probability of DACF project performance (success). In the classification table the predictor was able to achieve 75.2% of correct classification. The Variables in the Equation table gave information about the significance of the predictor variable which was used to test the hypothesis. The model is Y=Logit (p) =-

1.754+.970 (X2). Under the null hypothesis which is H_{02}: β1=0 versus H_2: β1≠0, the null hypothesis was rejected (β1=.970, Wald=14.493 df=1 p<.001).

The odds ratio revealed that those projects where Supply Chain Risk Management had been done were 2.6 times more likely to succeed than those where supply Chain Risk Management hadn't been done (Exp (B) =2.638). These findings are in line with Yuasa and Foster (2011) who reported that, Toyota faced worldwide production disruptions due to the Eastern Japan earthquake. The company had sole-sourced most of its sub-assemblies which posed a supply chain risk in the event the sole supplier couldn't deliver. The company has however considered multiple sourcing as a supply chain risk management strategy. Further in 2012 Apple Inc. reported a significant profit loss due to its overreliance on one supplier who couldn't meet the fast-growing demand for the iPhone. Since then Apple has moved to a more risk-averse and flexible dual-outsourcing strategy as a supply chain risk management strategy (Chieh, 2014).

4.4.3 Test of predictor variable X3 (Supplier Appraisal)

Table 4. 3: Logistic regression result for Supplier Appraisal

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	61.229	1	.000
	Block	61.229	1	.000
	Model	61.229	1	.000

Model Summary

Step 1	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
	258.350[a]	.186	.283

Classification table

	Observed		Predicted Performance		Percentage Correct
			Below Average	Above Average	
Step 1	Performance	Below Average	20	48	29.4
		Above Average	15	214	93.4
	Overall Percentage				78.8

Variables in the equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	F1	1.558	.228	46.762	1	.000	4.750
	Constant	-4.439	.824	29.035	1	.000	.012

The Omnibus Tests of Model Coefficients gives us an overall indication of how well the model performed. In this case, the model with Supplier Appraisal as a predictor variable was found to be significant (chi-square value=61.229, df=1, p<.001). Supplier Appraisal (X4) explained 18.6% of the variation in Y (Cox R square=.186) which is basically the probability of DACF project success. In the classification table the predictor was able to achieve 78.8% of correct classification.

The Variables in the Equation table gave information about the significance of the predictor variable which was used to test the hypothesis. The model is Y=Logit (p) =-4.439+1.558 (X4). Under the null hypothesis which is H_{04}: β1=0 versus H_4: β1≠0, the null hypothesis was rejected (β1=1.558, Wald=46.76 df=1 p<.001) The odds ratio revealed that those projects where Supplier Appraisal had been done were 4.8 times more likely to succeed than those where Contract Management hadn't been done (Exp (B) =4.75). The results concur with (Mungai, 2014) who found out that, supplier appraisal criteria, supplier appraisal models and supplier appraisal practices were paramount to procurement performance (project performance)

4.4.4 Test of predictor variable X4 (Contract Management)

Table 4. 4: Logistic regression result for Contract Management

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	98.062	1	.000
	Block	98.062	1	.000
	Model	98.062	1	.000

Model Summary

Step **1**	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
	222.036[a]	.280	.426

Classification table

	Observed		Predicted Performance Below Average	Above Average	Percentage Correct
Step 1	Performance	Below Average	32	36	47.1
		Above Average	15	215	93.5
	Overall Percentage				82.9

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	E1	2.676	.350	58.617	1	.000	14.531
	Constant	-8.559	1.261	46.107	1	.000	.000

The Omnibus Tests of Model Coefficients gives us an overall indication of how well the model performed. In this case, the model with Contract Management as a predictor variable was found to be significant (chi-square value=98.062, df=1, p<.001). Contract Management (X3) explained 28% of the variation in Y (Cox R square=.280) which is basically the probability of DACF project success. In the classification table the predictor was able to achieve 82.9% of correct classification. The Variables in the Equation table gave information about the significance of the predictor variable which was used to test the hypothesis. The model is Y=Logit (p) =-8.559+2.676 (X3). Under the null hypothesis which is H_{03}: $\beta 1=0$ versus H_3: $\beta 1\neq 0$, the null hypothesis was rejected ($\beta 1=2.676$, Wald=58.617 df=1 p<.001).

The odds ratio revealed that those projects where Contract Management had been done were 14.5 times more likely to succeed than those where Contract Management hadn't been done (Exp (B) =14.531). These findings are in concurrence with (Mutua et al., 2014) who found out that, where there were concrete project objectives entrenched in the contract, the projects were highly successfully delivered. This shows how critical contract management is to project performance (success/failure).

4.4.5 Test of predictor variables X1, X2, X3, X4 on Y

Direct logistic regression was performed to assess the aggregated predictability role of the independent variables (Stakeholder management, Supply chain Risk Management, Contract Management and Supplier Appraisal) on the dependent variable (performance of projects funded by DACF). The summarized results are presented in the table below;

Table 4.4.5. Logistic regression result for X1, X2, X3, X4

Variables in the Equation	**B**	**S.E.**	**Wald**	**df**	**Sig.**	**Exp(B)**
Stakeholder management	.359	.395	.827	1	.363	1.432
Supply chain risk management	-.814	.405	4.050	1	.044	.443
Contract management	2.508	.469	28.565	1	.000	12.281
Supplier appraisal	.700	.296	5.590	1	.018	2.014

Constant	-9.151	1.468	38.881	1	.000	.000

Table 4.4.5 gives information about the contribution of each of our predictor variables to the predictive ability of the model. In this case we have three significant variables (Supply Chain Risk Management=.044, Contract Management=.000, Supplier Appraisal=.018) p<.05. Stakeholder Management did not contribute significantly to the model (p=.363). Considering the B values which indicate the direction of the relationship, stakeholder management, and contract management and supplier appraisal positively affect the project performance. However emphasis on Supply Chain Risk Management negatively affects the probability of project performance (B=-814). Looking at the odds ratio, the performance of DACF project where contract management was done has the highest probability of performance (12.28 times) all other factors being equal.

4.5 Test of perceived effect of independent variables

To test whether the perceived effect of independent variables was significantly above or below the neutral position, one sample T-test was used. A one sample t-test allowed to test whether a sample mean significantly differed from a hypothesized value. For the positive effect the null hypothesis was $H_{0:}$ M=3.4 vs $H_{1:}$ M >3.4. In Likert scale of 1-5, four spaces are shared by 5 numbers. Each number occupies 0.8 of space; Neutral space begins at 2.6 and ends at 3.4. The results obtained are summarized in the table below;

Table 4.5: One Sample T- test results for perceived effects

Perceived effects of X1-X4	N	Mean	Std. Dev	Std. Error Mean	t	p-value
Perceived effect of stakeholders management	298	3.6560	.96486	.05589	4.581	<0.001
Perceived effect of contract management	298	3.6527	.96801	.05608	4.506	<0.001
Perceived effect of appraisal of suppliers	297	3.6633	.92603	.05373	4.900	<0.001
Perceived effect of supply chain risk management	298	3.6409	.96064	.05565	4.330	<0.001

df=297, Test value=3.4

One sample T-test was conducted to compare the perceived effects of independent variables on the dependent variable where the test value was 3.4. All the independent variables were significant (Stakeholder management; Mean diff =0.256, t=4.581, df=297, p<0.001, Contract management; Mean diff=0.25268, t=4.506, df=297, p<0.001, Supplier appraisal; Mean diff=.26330, t=4.900, p<0.001, Supply chain risk management; Mean diff= .2409, t=4.330, p<0.001). However, the magnitude of the differences in the means was not very big. These results are in line with the results obtained from logistic regression. Test of perceived effect of independent variables on the performance of projects funded by DACF based on level of education. The study sought to determine the different perceptions of respondents based on their level of education. To achieve this, one sample T-test was undertaken. The results are presented in the table below;

Table 4.6 One sample T-test for perceived effect of independent variables on the performance of projects funded by DACF based on level of education

Level of education		N	Mean	Std. Deviation
Primary	Perceived effect of stakeholders management	6	3.3333	.81650
	Perceived effect of contract management	6	3.1667	.75277
	Perceived effect of appraisal of suppliers	6	3.4167	.66458
	Perceived effect of supply chain risk management	6	3.6667	.51640
Secondary	Perceived effect of stakeholders management	30	3.4333	.95352
	Perceived effect of contact management	30	3.6667	.85433
	Perceived effect of appraisal of suppliers	29	3.5172	.89125
	Perceived effect of supply chain risk management	30	3.4167	.92925

Diploma	Perceived effect of stakeholders management	115	3.7478	.93042
	Perceived effect of contact management	115	3.6522	1.02207
	Perceived effect of appraisal of suppliers	115	3.7087	.95509
	Perceived effect of supply chain risk management	115	3.6870	.99882
Bachelor	Perceived effect of stakeholders management	114	3.6491	1.04528
	Perceived effect of contact management	114	3.7061	1.00620
	Perceived effect of appraisal of suppliers	114	3.6886	.94399
	Perceived effect of supply chain risk management	114	3.7105	.94047
Masters	Perceived effect of stakeholders management	23	3.5217	.81851
	Perceived effect of contact management	23	3.5435	.63806
	Perceived effect of appraisal of suppliers	23	3.6087	.75312
	Perceived effect of supply chain risk management	23	3.3478	.93462

Test value=3.4

The table above presents the perceived effect of independent variables on dependent variable based on level of education. Generally, the respondents who had primary level of education didn't see the positive effect of independent variables on the performance of projects funded by District Development Fund (Mean < 3.4) except for the perceived effect of supply chain management. For the other levels of education, there was high feeling that the independent variables had influence on the performance of projects funded by District Development Fund (Mean >3.4). However, the respondents who had Masters level of education had a perception that supply chain risk management had no significant positive effect on the performance of projects Funded by District Development Fund

Test of perceived effect of independent variables on the performance of projects funded by DACF as per District. The study sought to determine how respondents based in different Districts across Machakos Region perceived the effect of independent variables on the performance of projects funded by District Development. To achieve this one sample T-test was undertaken. The results are presented in the table below;

Table 4. perceived effect of independent variables on the performance of projects funded by DACF

Constituency Name		**N**	**Mean**	**Std. Dev**
Ashaiman Municipal	Perceived effect of stakeholders management	48	3.7708	.88701
Adenta Municipal	Perceived effect of contact management	48	3.7604	.81860
Ga West Municipal	Perceived effect of appraisal of suppliers	47	3.6277	.81739
Ga North Municipal	Perceived effect of supply chain risk management	48	3.8125	.87291
Ga South Ga South Mun.	Perceived effect of stakeholders management	48	3.0729	1.04673
Ngleshie Amanfro	Perceived effect of contact management	48	3.4271	.97298
Ga Central Municipal	Perceived effect of appraisal of suppliers	48	3.3958	1.08156
Ga East Municipal	Perceived effect of supply chain risk management	48	3.3750	1.08911
La Nkantanang	Perceived effect of stakeholders management	39	3.7821	.92334
Madina Municipal	Perceived effect of contact management	39	3.8077	1.05516
Ada East Ada West	Perceived effect of appraisal of suppliers	39	3.6923	.94323
Shai/Osudoku	Perceived effect of supply chain risk management	39	3.5769	.91435

Ningo/Prampram	Perceived effect of stakeholders management	74	3.6689	1.05102
Ashaiman Municipal	Perceived effect of contact management	74	3.6622	1.05372
Adenta Municipal	Perceived effect of appraisal of suppliers	74	3.7297	.98686
Ga West Municipal	Perceived effect of supply chain risk management	74	3.5676	1.03475
Ga North Municipal	Perceived effect of stakeholders management	20	3.6000	.91191
Ga South Mun.	Perceived effect of contact management	20	3.2750	1.12945
Ngleshie Amanfro	Perceived effect of appraisal of suppliers	20	3.6250	.91587
Ga Central Municipal	Perceived effect of supply chain risk management	20	3.6500	.93330
Ga East Municipal	Perceived effect of stakeholders management	29	3.8276	.38443
La Nkantanang	Perceived effect of contact management	29	3.3793	.68992
Madina Municipal	Perceived effect of appraisal of suppliers	29	3.7241	.59140
Ada East Ada West	Perceived effect of supply chain risk management	29	3.6207	.68992
Shai/Osudoku Ashaiman	Perceived effect of stakeholders management	18	4.1389	.76323
Municipal Adenta	Perceived effect of contact management	18	4.0833	.79057
Municipal	Perceived effect of appraisal of suppliers	18	4.0000	.89113
	Perceived effect of supply chain risk management	18	3.9444	.92178
Ga West Municipal	Perceived effect of stakeholders management	11	4.0909	.83121
	Perceived effect of contact management	11	4.1818	.75076
	Perceived effect of appraisal of suppliers	11	3.8182	1.05529
	Perceived effect of supply chain risk management	11	4.3636	.50452

Test value=3.4

The table above presents the perceived effect of independent variables on dependent variable as per District. Respondents in Masinga, Mwala, Kathiani, Machakos, Matungulu, Mavoko and Kangundo were of the opinion that all the independent variables had positive influence on the performance of projects funded by District Development Fund (Mean > 3.4). However, respondents in Ashaima District felt that the independent variables had no positive influence on the performance of projects funded by District Development Fund.

5.0 EVALUATION OF THE RESEARCH

This chapter summarizes the information obtained from the field on the role of procurement practices on the performance of projects funded by the District Development Fund. The review captures the key findings which are categorized based on the study objectives; stakeholder management, supply chain risk management, stakeholder management and supplier appraisal. Further conclusions are presented which are based on the study findings and finally recommendations drawn from the results and as per study objectives are presented.

5.1 Findings and Discoveries

Role of stakeholder management on the performance of projects funded by the District Development Fund

From the findings, it came out clearly that stakeholder analysis was done before the initiation of most of the projects in different Districts. This gave a clear indication that project success is highly determined by stakeholders and thus the need to decide all the stakeholders who may be affected by the project and subsequently formulate stakeholder management strategies to avoid disruptions and unacceptability of the projects by stakeholders. Project end users, contractors and suppliers were kept at close bay right from the pre-initiation of most projects, preparation of procurement plan, preparation of material specifications to the award of the procurement contract and this were common in the projects which had succeeded. Creating rapport with stakeholders was the most effective method of stakeholder management followed by constant communication.

Results obtained from correlation analysis showed that there was a medium (moderate) correlation between stakeholder management and performance of projects funded by DACF. From logistic regression results, it came out that for the projects where stakeholder management had been done, the probability of their success was five times over those where stakeholder management had not been done. However, where all the predictor variables were aggregated together, stakeholder management didn't significantly contribute to the model, but it had a positive effect on the performance of projects funded by the District development fund. From one sample T-test, the findings showed that stakeholder management was significant in influencing the success of the projects financed by the District Development Fund. The respondents who didn't have a tertiary level of education felt that stakeholder management didn't change the project's success.

Role of supply chain risk management on the performance of projects funded by the District Development Fund

The study sought to establish various aspects of supply chain risk management and their role in determining the performance of the projects financed by the District Development Fund. From the obtained results, the involvement of suppliers in the preparation of specifications was rated as the most effective method of managing supply chain risks followed by use of risk register. Mitigation of technological, organisational and societal risks was given least priority as they didn't pose a high probability of occurrence and impact on the performance of the project. The effectiveness of various supply chain risk management approaches was rated by the respondents for which standardising of inputs specifications was considered as the best approach to mitigate supply chain risks that could affect project performance. This was followed by availing of performance bonds by the suppliers/contractors. Results obtained from correlation analysis showed that, though supply chain risk management had a positive correlation with project performance, the strength of the relationship was small (weak). From the regression results obtained, supply chain risk management was found to be a significant predictor variable. The null hypothesis was rejected and from the odds ratio, projects that had embraced supply chain risk management had two times probability of success over those where supply chain risk management wasn't done. Based on the contribution of supply chain risk management to the predictive ability of the model, supply chain risk management was significant though the emphasis on supply chain risk management would negatively affect the probability of project performance. The results from one sample T-test showed that supply chain risk management was a significant variable in determining project failure or success.

Role of supplier appraisal on the performance of projects funded by the District Development Fund.

Supplier appraisal, been an essential aspect of strategic sourcing was assessed with the objective of determining its predictability role on the performance of projects funded by the District Development Fund. From descriptive statistics results, supplier's financial capacity and his commitment to supply for the project were the current appraisals that were done across all the projects. Visits to the supplier's/contractors premises came out as the most commonly used practice of appraising supplier's capability. Respondents also rated the effectiveness of various supplier's appraisal practices on the contractor's/suppliers performance, and it came out that visit to the supplier's/contractors premises served as a reasonable basis to evaluate supplier's quality control systems in place which is a precursor to the supplier's performance.

To determine the correlation between supplier appraisal and performance of projects funded by the District development fund, Pearson Product Moment Correlation was used. The results showed that supplier appraisal was positively correlated with the performance of the projects financed by the District Development Fund. The strength of the relationship between supplier appraisal and the production of the projects funded by the District Development Fund was medium (moderate). The scores for supplier appraisal were not correctly distributed as shown in the Q-Plots.

Logistic regression was performed to determine how the model performed with supplier appraisal as a predictor variable. The results showed that supplier appraisal was significant predictor thus the null hypothesis was rejected. The odds ratio revealed that those projects where supplier appraisal had been done were 4.8 times more likely to succeed than those where contract management hadn't been done. To assess the aggregated predictability role of independent variables supplier appraisal was found to be significant and positively affected the project performance. Results obtained from one sample T-test revealed that supplier appraisal was a significant variable in predicting the performance of projects funded by the District Development Fund.

Role of contract management on the performance of projects funded by the District Development Fund.

Various aspects of contract management were assessed with the objective of determining their predictability role on project performance. Results obtained from the descriptive statistics showed that maintenance of procurement and contract records was done for most of the projects that were successfully followed by the setting of service level agreement for contract monitoring. Various contract management practices were in place, and the respondents were requested to rate their effectiveness. From their responses, it came out clear that the work of contract management was highly vested in the hands of the project committee where there was appointed project manager who had the role of supervising the projects. Impromptu inspections and continuous audits were also found to be effective contract management practices.

Results from Pearson product moment correlation showed that Contract management was positively correlated with the performance of projects funded by District Development Fund and the strength of the relationship between contract management and the dependent variable was strong (broad). Distribution of scores for contract management was not entirely healthy. To assess how well the study model performed, linear logistic regression was conducted where the model with contract management as a predictor variable was found to be significant. The odds ratio revealed that those projects where contract management had been done were approximately 14.5 times more likely to succeed than those where contract management hadn't been done. Aggregate analysis on the contribution of each of the predictor variable to the predictive ability of the model was done where contract management was found to be significant which led to a rejection of the null hypothesis. Results obtained from one sample T-test showed that contract management was a significant variable in determining project success/ failure

Performance of Projects funded by the District Development Fund

Dichotomous and Likert scale questions were set to evaluate the performance of the projects financed by the District Development Fund. From the results obtained from descriptive statistics, 74.6% of the projects funded by DACF in the respective public primary and secondary schools were completed on time, 75.6% of the projects were completed within the budget allocated, and 72.2% of the projects met the expected quality levels. Further other factors that determined the success or failure of the projects funded by the District Development Fund were established. It came out clearly that availability of funds was the most critical factor that determined the success of the projects followed by user acceptability of the projects.

From the findings, the projects that were not successful, lack of timely disbursement of funds was the primary cause for their failure followed by lack of proper project coordination and inadequacy of materials for the projects. For the perceived effect of predictor variables on the performance of projects funded by the District Development Fund, one sample T-test was used. The results obtained showed that the observed impact for all the independent variables was positive and significant.

5.2. Recommendations

Projects that had embraced stakeholder management had a probability of 5 times succeeding over those where stakeholder management was not done. Further, it came out that there was more emphasis on involving suppliers/contractors and end users in the execution of the projects funded by DACF. However, the study recommends that management of stakeholders should not be left to the discretion of project committee; there should be a framework that cuts across to ensure stakeholder management is done for all the projects funded by District Development Fund and as per set guidelines.

Supply chain risk management was not so paramount to project success thus the study recommends that, the project and procurement committees should reduce resources meant for supply chain risk management and concentrate more on other procurement practices as more emphasis on supply chain risk management would negatively affect the performance of the projects funded by DACF. Supplier appraisal was also found to be practised across most of the projects. The criteria used for supplier appraisal seemed to be the same across most of the projects although there were some variations. The study recommends from a national perspective there should be approved list of

contractors/suppliers for various inputs/services which would eliminate the dilemma of non-performance and the need for appraisal at the grassroots which would take a lot of time and resources.

Contract management happened to be the significant driver of project performance. Several contract management practices were in place, and each positively contributed to project execution. Although there was a clear framework on contract management, change of regimes led to the loss of some procurement and contracted records which made it difficult to trace the performance of some contractors. Therefore, the study recommends the use of e-contract management systems to monitor supplier's/contractors performance which would even ease records retrieval. Respondents who did not have tertiary education felt that the procurement practices didn't have any positive contribution to the performance of projects funded by DACF which was contrary to the responses of those who had Diploma and Bachelors. The study recommends that the project and procurement committee members should be nominated based on their qualifications and further they should undergo training in procurement for projects. More interestingly despite of the respondents from Ashima having tertiary education, they felt that procurement practices had no influence on the performance of projects funded by DACF compared with the other Districts which in fact comparatively showed that, most of the projects that had failed were in that District. This warrants the need for further training in procurement for the personnel involved in procuring for the projects funded by DACF in Ashima District.

5.3 Further Study and Research

The study's general objective was to examine the role of procurement practices on the performance of projects funded by DACF where the respondents involved were mainly the people who were involved in the implementation of those projects. It would be of importance for a similar study to be undertaken but the respondents to be sampled from the stakeholders who were not involved in any way in the execution of the projects. This would give a reasonable basis for triangulation.

Further, from the review of the literature, it came out clearly that DACF was not a prominent initiative in most countries. This made it difficult for the researcher to compare some of his findings with other scholars. Locally the studies done on procurement of projects funded by DACF were inadequate in their analysis and therefore with the enactment of the National Government Districts Development Fund Act (2015) and Public Procurement Asset and Disposal Act (2015) further studies should be done on procurement of projects funded by DACF specifically focusing on Ashima District where there was a high number of projects that were not completed on time, within the budget line and did not meet quality standards.

5.4. Conclusions

The general objective of the study was to examine the role of procurement practices on the performance of projects funded by the District Development Fund. The specific goals included the part of stakeholder management, supply chain risk management, contract management and supplier appraisal on the performance of projects Funded by DACF. The primary stakeholders for the projects funded by DACF included; suppliers, users, Government, project manager, constituents, DACF parliament committee, District projects committee, contractors, Project Management Committee, District Development Fund Committee, Non-Governments Organizations, DACF board, departmental government heads and the public at large.

From the study findings, it was eminent that project end users contractors and suppliers were intimately involved in the execution of most of the projects funded by the District Development Fund. Based on the findings on stakeholder management, the study concluded that the involvement of suppliers/contractors from the initiation of the projects, preparation of material specifications was a clear indicator that the project procurement committee members were not incognizant of the supply market hence highly relying on the suppliers/contractors market knowledge. Further establishing a close rapport with suppliers/contractors appeared to be maliciously driven as in cases where the projects funded by District Development Fund had stalled, one of the reasons given was the contractor wasn't in agreement with the project committee members.

The relationship between supply chain risk management and performance of projects funded by DACF was small which meant that there was no need to concentrate efforts in supply chain risk management as it did not have much bearing on the project success. As much as the management of supply chain risk was undertaken through requesting performance bonds from the suppliers/contractors and standardising inputs, it was clear that most of the dangers were left for the suppliers to address.

For each contract entered into, the Procuring Entity must designate a member of staff, or a team of staff, as the Contract Administrator responsible for administering the contract. There should be a team approach to the contract management of large and complex projects. Looking at the study findings on contract management the study concluded that administration of contract and procurement records was the most critical aspect of contract management together with establishing performance indicators that would be used to monitor the performance of the

contractors/suppliers continuously. More interestingly contract management was highly embraced in most of the projects across the Districts. This can be attributed to the fear of project failure by the project committee and other stakeholders though in most of the cases it was not possible to trace all the procurement and contract records that were relating to the projects.

From the analysis, financial appraisal and supplier commitment were the most common form of supplier appraisals that were done for most of the contractors for various projects. From the regression results, the study concludes that supplier appraisal if done well can be an excellent tool to eliminate non-committal suppliers before entering into a contract which could profoundly affect project performance.

In the comparison of the perceived effect of independent variables on the performance of projects funded by DACF, the respondents with the primary level of education felt that the independent variables had no impact on the performance of the projects financed by DACF. The study concluded that the respondents with a lower level of education didn't clearly understand procurement practices which made them to feel they had no role in the performance of projects.

Further, the respondents from Ashima District had a feeling that the independent variables had no positive contribution to the performance of projects funded by DACF. The study concludes that those respondents in Ashima District didn't appreciate the critical independent variables on the execution of the DACF projects. Considering the number of projects that were not completed on time, within the budget line and didn't meet quality standards, the highest number was in Ashima District. This probably was the main reason why most of the respondents felt that the procurement practices were not of vital importance in project performance.

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