QUALITY MANAGEMENT IN KENYA'S DEVOLVED FUNDS: THE CASE OF CONSTITUENCY DEVELOPMENT FUND

BY

Emma W. Kiilu

A MANAGEMENT RESEARCH PROPOSAL SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF BUSINESS ADMINISTRATION (MBA) UNIVERSITY OF NAIROBI.

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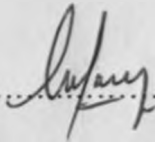
NOVEMBER 2011

DECLARATION

Student's Declaration

This project is my original work and has not been presented for a degree in any other University.

Signature.. Date. 23 – 11 – 2011

Emma W. Kiilu

Supervisor's Declaration

This project has been submitted for examination with my approval as a University Supervisor

Signature..Date ....23/11/11......

Dr. X.N. IRAKI

Lecturer

UNIVERSITY OF NAIROBI

DEDICATION

This study is dedicated to my grandmother Damaris who passed on long before I thought of going back to school, the unknown Constituent who might one day benefit from it and to those who intend to undertake a degree course in the latter years of their lives.

ACKNOWLEDGEMENT

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ABSTRACT

There is no doubt that devolution of funds is a novel concept and one that is expected to have major positive impact on development at the grassroots. Constituency Development Fund was designed to fight poverty through the implementation of development projects at the local level particularly those that provide basic needs and also to increase citizen involvement in planning and execution. Citizen involvement, participation, empowerment and focus are aspects that are at the core of quality management principles. The purpose of this survey is to establish both the extent to which quality management practices are applied and also the extent to which quality management tools are known and applied in the management of the CDF program.

The survey obtained information from 25 constituencies spread throughout the country, six from Nairobi, six form Central, three from Nyanza, eight from Eastern, two from Rift-Valley Provinces. Data was collected through a structured questionnaire some of which were sent through email while others were hand delivered. They were received through various transport companies, email and some were hand picked. SPSS and Excel software was used to calculate percentages, frequencies, mean, standard deviations, variances and to produce the charts.

The findings of the survey were that the CDF Board employs mostly graduates to manage the fund at Constituency level, CDF relies on Government officers to manage and supervise projects, quality management expertise is lacking and more so, use of quality management tools is almost absent. Useful tools like pareto analysis is scarcely known, not used and there is no intention to use it. Quality management practices are applied to a

moderate extent by non- trained officers. This project recommends a policy paper on the literacy level of those with jurisdiction over the fund similar to the CDF Board, massive civic education of the citizens to participate in the implementation of the fund, posting of quality assurance officers and training of all management officers on the use of quality management tools. This report recommends ISO Certification of Constituency Development offices including Committees.

The report also recommends further research on the education levels of the CDF Committee members. A research should also be conducted to establish whether the Government has increased technical personnel at the Districts to cater for the increased CDF workload.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Kenya's Vision 2030 aims to transform Kenya into a newly industrializing middle-income country providing a high quality life to all its citizens by the year 2030(Kenya Vision 2030, 2008). As the country makes progress to middle income status it is also expected to meet its Millennium Development Goals whose deadline is 2015. This has put pressure on the government to uplift the standard of living of the poorest citizens in line with Vision 2030. "Devolved funds, deployed in a more efficient and transparent manner, is expected to play a key and enhanced role in correcting existing economic and social inequalities" (Kenya Vision 2030 ,2008). With the promulgation of the new constitution and the devolution of Central Government Funding amongst the Counties, quality management of devolved funds will be a major determinant of the prosperity of the Counties. The new Constitution provides for citizens to not only possess powers of self governance but also have a constitutional right to participate in the management of their own affairs to further development (The Constitution of Kenya, 2009). 15% of all revenue collected by the national Government is to be devolved to the County Governments equitably under the management of Commission on Revenue Allocation (The Constitution of Kenya, 2009). Like other devolved funds in Kenya there is no reference to quality in the utilization of devolved funds in the new constitution

Decentralization as conceptualized by Bray (1991) and Hawkins (2004) involves authorization of lower (subordinate) levels in an organizational hierarchy to take decisions regarding the utilization of organizational resources. Decentralization has been well examined by several scholars including Rondinelli(1989) and Ejiogu (2004) and from the existing literature; three key forms of decentralization are discernable. These are deconcentration, delegation and devolution.(Ikoya.2008) Decentralization in Kenya has been tried in the past. Special Rural Development program was introduced in the 70's on a pilot basis then rolled out to the whole country in the 80's as District Focus for Rural Development. This was meant to shift planning and development from the Ministry Headquarters to the Districts. (SPAN & KHRC, 2010) Most of the previous efforts towards fiscal decentralization were not effective as the Ministries and Provincial Administration retained control of funds.

Devolution has been defined as a socio-political process that transfers authority and responsibility in planning, management and decision-making from central government to local authorities   (Regmi et al, 2010) Devolution is a type of administrative decentralization which occurs when governments devolve functions and transfer authority for decision-making, finance, and management to quasi-autonomous units of local government with corporate status (Ikoya, 2008) in this case the Constituency development Committee. Since 2003 several devolved funds have been introduced with the aim of alleviating poverty and bringing decision making closer to the people.

Since the inception of devolved funds, more gains have been seen at the grass roots in terms of employment opportunities, school enrolments and increased construction of local infrastructures than at any other time in Kenya's history(Ogolo,2009). Given the colossal amounts being channeled to the public through devolved funds. the fiscal devolution may, like others before, be rendered ineffective if quality management is not incorporated. This study attempts to incorporate quality management in devolved funds.

1.1.1 Quality Management

Quality Management is a concept that was initially championed by three Engineers Edward Deming, Philip Crosby and Joseph Juran. They introduced pillars to support the quality improvement process to reflect a philosophy that places customer satisfaction as the organization's primary goal, with the word "customer" referring to internal customers (workers in other departments who are dependent on receiving high quality work to do their jobs successfully) as well as to external customers (the ultimate users of the product or service) (Crumrine and Runnels 1991). Regular assessment of customer satisfaction is necessary in order to continuously improve both products and services. Quality in devolved funds management would make the products and services especially projects clearly visible to the customer and the customer would be actively involved in the selection and management process. Devolved Fund managers must focus on the customers they serve for the devolved fund to be sustainable. They must not only satisfy customers but delight them(Chase.1995) through value addition.

According to Deming quality is conformance to customer requirements. Quality management will create clear system processes which must incorporate the customer's needs, expectations and provide a means of getting feedback for continuous improvement. The system processes must involve the customer from project identification, selection, implementation, and possession after completion. In order to attain customer satisfaction the CDF management will need to focus on the organization's processes, employees and customer expectations. Apart from focusing on the customer, quality also focuses on the characteristics of quality service and dimensions of quality. The system processes would also include a means of assessing the quality of projects. This will bring a form of ownership and assign responsibilities and targets to be driven by customer requirements. A process owner must have a means of determining their actual performance typically through inspection and measurement. The same process owner must have a means of making corrections if the variance is beyond the permitted tolerance(Gryna et al, 2007).

Quality management in devolved funds will include leadership, people and supplier management in addition to impact on society. People's culture within a Constituency, especially in rural areas is fairly homogenous as they possess certain common inherent culture with a common history, language, cultural values, food, dress code and who engage in certain trades, rituals and traditions. However there will also be an emerging culture among the fund managers, a culture that will define the way things are done. The Constituency development Committee leadership fundamentally influences the culture developed within the fund management to deal with external and internal problems for survival and prosperity. Schroeder et al (2011) researched on the impact of quality culture in Customization of quality practices and found that quality exploration practices are significantly associated with operations performance after quality culture plays a critical role in organizational culture. The Member of Parliament therefore has a duty to provide the kind of leadership that will positively influence the type of operational culture upon which quality practices thrive.

Continuous improvement or Kaizen is a Japanese word for a system of implementing many small improvements on the system processes by the employees whose overall effect is substantial. There are two types of problems, sporadic and chronic. Sporadic is sudden, adverse and of a big magnitude usually caused by a disturbance of the control processes. This requires restoration of status quo. A chronic problem however is long standing and is addressed by continuous improvement process through a project by project approach. The quality improvement tools are used to measure and monitor this continuous improvement proposal. This method would transcend the change of guard at every election or by election or frequent committee members turnover.

There will be need to craft a devolved fund model in line with Baldrige National quality award in USA, EFQM in Europe and Deming prize award in Japan to enable CDF committees to carry out self evaluations of their quality practices (Tari, 2005) and hence compete and benchmark with other Constituencies. This model needs to be contextualized to Kenya's unique situation. This study attempts to depict such a model.

1.1.2 Devolved Funds in Kenya

Devolved funds are established based on the belief that government at the local level has a better understanding of community needs, and is more capable of delivering improved, responsive and relevant services. Specifically, devolved funds, are established to increase community participation in decision-making where local affairs are concerned, enhance government transparency as more people become aware of (and involved with) these funds and speed up government's responsiveness and improve the quality of its service delivery.

The Government has provided devolved funds in the form of social protection measures for the poorest of the poor using cash transfers in addition to devolved funds from Central Government. These include Cash transfer for the Elderly and people with disabilities, Orphans and Vulnerable Children(OVCs), The National Development Fund For Persons With Disability, School Feeding Program(Homegrown) Global fund for HIV& Aids, Free Primary Education Fund, National Health Insurance Fund, Njaa Marufuku Kenya, Rural Electrification Levy Fund, Road Maintenance Levy Fund, The Water Services Trust Fund, The Poverty Eradication Fund Constituency Development Fund (CDF), Local Authority Transfer Fund Constituency Bursary Fund and the economic Stimulus Package(Pearson and Alviar,2007)

Figure 1. Kenya's devolved funds .

Fund for Disabled . 0.5B, 0%

Kazi kwa Vijana, 15B, 15%

Free Secondary Education Fund 16B, 16%

Women Enterprise Fund , 1.3B, 1%

Youth Enterprise Fund , 2.25B, 2%

Free Primary Education , 5B, 4%

HIV/AIDS Fund , 1B, 1%

PELF, 1.7B, 2%

LATF, 10.1B, 9%

SSBF, 1B

Rural Electrification Levy, 1.5B, 1%
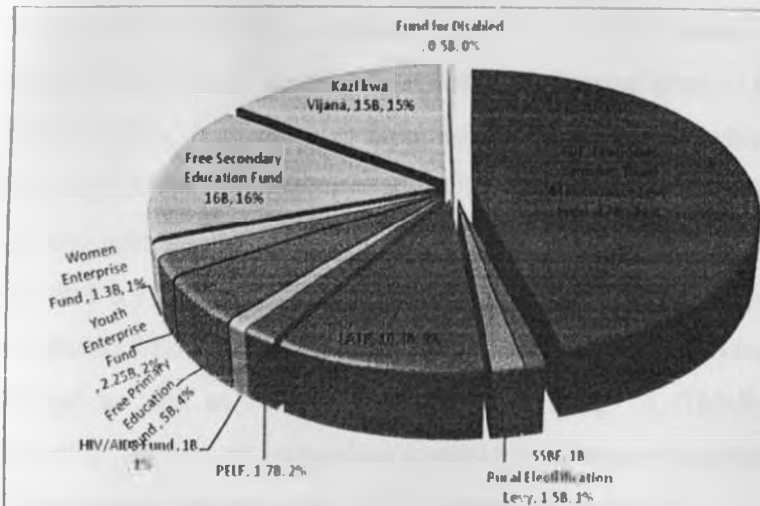
Source: The Nairobi Social Audit Report, October 2010.

The proportionately large percentage of devolved funds channeled through CDF influenced the decision to choose CDF to represent devolved funds in this project. The CDF Act 2003 ensures that 2.5% of the government annual revenue is devoted and channeled directly to the constituency level to support development projects as identified and prioritized by members of that particular constituency. The fund aims to control imbalances in regional development brought about by partisan politics. It targets all constituency-level development projects, particularly those aiming to combat poverty at the grassroots. CDF was established through an Act of Parliament in 2003 and comprises an annual budgetary allocation equivalent to 2.5% of the government's ordinary revenue. 75% of the fund is allocated equally amongst all 210 constituencies. The remaining 25% is allocated according to the constituency poverty level against national poverty level. CDF is managed through four committees, the CDF Board (formerly National Management Committee and the Parliamentary Committee called CFC at national level and Constituency Development Committee together with District Projects Committee at Constituency level.

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The actual CDF allocation has been increasing steadily and this year (2011) alone CDF allocation amounted to Sh17.2 billion, up from Sh14.5 billion in the previous fiscal year. Another Sh1.8 billion in arrears owed to the CDF raised the total allocation to Sh19 billion. The Treasury further extended a conditional grant to the CDF Board amounting to Sh3.7 billion bringing the total to ksh22.7 Billion which will work out to about ksh.100Million per Constituency. CDF has inevitably attracted a lot of attention for several reasons. First the amount has become substantial. Secondly the MP has been granted a lot of controlling power over CDF without much pre-requisite checks and balances. Also the MP is both judge and jury by approving the allocation through the budget as well as being in charge of spending it. Thirdly 2012 is an election year. Fourthly There is an impending transition to County Governments. Quality management model would increase the effectiveness and efficiency of the CDF which may be increased with the new constitution.

1.1.3 Current Management of CDF

Members of the public, social audit organizations and auditor general have expressed a lot of criticism towards management of devolved funds because the needs and expectations of the Constituents are not being met. Agolo (2009) notes that the appointment of the Constituency Development Fund Committee for example, does not allow for community participation in a free and fair election. As such the members of parliament exercise their own discretion in the appointment of people to the committees thereby giving the MP great influence and control over the fund. There is no mention of quality in the management of the fund within the Act. Adoption of Quality management practices will boost community participation and make the constituent a more prominent consumer of CDF products.

In Kenya a lot of criticism has been leveled at the elected members of Parliament. Observations made by Chwele Centre, Bungoma highlights some of the shortcomings felt by the public. New MPs shun development projects initiated by their predecessors whom they view as their opponents. Some fund management committees do not manage the

funds in a transparent and accountable manner. Some fund management committee members are not fully conversant with the policies guiding their specific devolved funds. Fund management committee members are changed frequently. Low technical capacity among management committees, and sometimes they do not consult relevant government departments for technical back-up.

Too many projects funded with little funds, so projects are not completed. Some Bursary funds are given to undeserving students, while those who deserve it are left out. Non-compliance to procurement procedures by some committees. (Chwele Centre, 2008)Lack of awareness by the public who are the target beneficiaries is also a challenge. A baseline survey that was done on inclusive governance project by Cities in Partnership with Communities (CIPAC, 2009) to examine the rate of public participation in local governance process ascertained that 74.6% of the people that were interviewed had never made personal efforts to solve the problems facing them including poverty, lacked information, and did not participate in government based community initiatives. 88.9% of the people had knowledge of the widely publicized CDF, LATF, Constituency Bursary Fund and women development fund but had very little information on the other fund regimes, and only 7.1% of the people had taken personal initiative to establish whether the disbursed funds were planned and used in the interest of the public.

Agolo(2009) Observes nevertheless, some members of the community are also very resistant to the new transformations hence are unwilling to participate in these community led initiatives. Abject poverty in most communities is also a course of concern to the initiatives as most people are perpetually tied to low income jobs hence their focus is skewed to meeting their immediate basic needs as opposed to the long term development projects targeted by devolution, such people usually have very limited time out of their income generating activities to participate in the new establishments. Even if they participate there is no reference to quality.

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1.2 Statement of the Problem

A number of problems encountered in the management of CDF have been widely reported in the print media, and by several audit organizations such as Nairobi Social Audit, The Controller and Auditor General, Sodnet and National Tax Payers Association. According to audit reports, some Constituencies have utilized their CDF kitty in ways that have impacted positively on their customers. However most problems in management of CDF fund can be summarized as, payment to ghost projects, neglect of project inspection, blatant flouting of procurement rules, inflated rates, funds that are unaccounted for,(Njagi & Nzioka, 2010), Unused materials, lack of transparency, lack of involvement of locals and use of projects to siphon funds, and corruption among those with vested interests in tender awards, implementation of projects prohibited by the Act, Payments to Contractors before commencement of work, lack of supporting documents for expenditure, poor quality workmanship or Conflict of interest where CDF officials double up as Contractors(Odhiambo, 2010).

Some consequences of these shortcomings are, initiated but incomplete projects, initiated and abandoned projects, projects in progress but delayed, abandonment of projects in progress, projects funding from multiple sources, projects turning into white elephants(Nyabiage & Otieno, 2010) lack of Utilization of completed projects for various reasons such as lack of manpower and equipment, recurrent costs by line Ministries not taken into account at the time of project selection. All these indicate lack of quality in CDF and other devolved funds. This project seeks to establish whether CDF management practices as well as deploy quality improvement tools in their work.

Obuya (2008) has explored the financial implications of fiscal decentralization policies on the central government's operating budget in Kenya. He noted that when the CDF for instance is used to construct a Health Centre the Central Government's operating budget increases due to the funds required to equip the HC, salaries, drugs, utilities, and general maintenance expenses. Nyamori (2009) studied CDF systems of accounting and accountability and found that the said systems are skewed towards the needs of

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centralized national planning and development, contrary to its expressed aim of bringing about citizens' participation in development.

(Kimani et al, 2009) researched on best practices where he recommends creation of forums in which the local community can identify priorities before local project committees submitted proposals to the Constituency Development Committee. Kimani recommends that the politicized nature of CDF funds be addressed so that projects begun in one mandate will be completed regardless of electoral result. Baskin (2010) has researched on Constituency development fund as a tool of decentralized development and found that project duplication, poorly designed projects and incompetent administration are some of the challenges facing CDF development efforts. No research has been done on application of quality management practices. This leads to the following research questions;

    a) What are the main quality issues in CDF?

    b) Which quality improvement tools are used in the implementation of CDF?

    c) What potential tools can improve quality in CDF?

1.3 Objectives of the Study

    a. Identify the main quality issues in CDF.

    b. To establish which quality improvement tools are used in the implementation of CDF

    c. To establish the potential tools that can improve quality in CDF .

1.4 Value of the Study

The findings of the study are expected to benefit the three main players in CDF, the Government who is the source of funds, the Constituent who is the taxpayer, the beneficiary(customer) and the CDF management team including the MP. Quality management promotes transparency and accountability which is desired by all three parties.

i. Future researchers will not only use this study as a form of reference for future studies but also suggest other research activities that can be explored.

ii. The project will add value to improved customer focus and project management not only for the CDF Board but also for the yet to be formed County Governments.

iii. The outcome of this study will assist the CDF Board collect, measure, analyze, improve and control CDF management of all Constituencies.

iv. We shall add to the body of knowledge on how Quality management can be applied in the public sector.

CHAPTER TWO

LITERATURE REVIEW

2.1   Introduction

Devolved funds concept has been incorporated in the New Kenyan Constitution (2010). The same constitution has expanded the bill of rights to the citizens whose demands on the Government will compel excellence in the implementation of devolved funds. The objective of the study is to utilize quality management practices and tools to address the quality problems faced by Managers of CDF fund. The tools can be used to measure the performance, output, variation, identify root causes of problems and by so doing monitor the processes in the management of CDF. Measurement will form the basis for continuous improvement. This section will also develop the conceptual framework of the study in determining the methodology and the choice of variables used in the study. Topics covered under literature review include quality management, quality management tools and countries where devolved funds are under implementation.

2.2   Quality Management

One of the most popular definitions of quality is meeting or exceeding customer expectations. Quality management is defined as that aspect of the overall management that determines and implements the quality policy(Garvin,2011). Quality begins and ends with a customer (Ross & Klatt,1986). According to Deming, quality is conformance to customer requirements. Customers satisfaction is the result of a three-part system, Organization's processes (operations), employees who deliver the product/service and Consistency of the product/service with customer expectations. Customer satisfaction is also a product of effective customer focus.

Products from a quality conscious institution are a balance of three characteristics, faster, better and cheaper (Chun, 2006). The products aim at the eight dimensions of quality and the determinants of service quality. Garvin gave eight dimensions of quality as performance, features, reliability, conformance, durability, serviceability, aesthetics, and

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perceived quality. Johnson(1995) came up with eighteen determinants of service quality as Access, Aesthetics, Attentiveness/helpfulness, Availability, Care, Cleanliness/tidiness: Comfort, Commitment, Communication, Competence, Courtesy, Flexibility, Friendliness, Functionality, Integrity, Reliability, Responsiveness and Security. Customer value develops once products meet customer's needs. This value is measured through customer satisfaction assessment.

Cultures emerge in organizations because of the need to deal with the external and internal problems of survival and prosperity. Schein (1997) defined organizational culture as a system of norms, shared values, concerns, and common beliefs that are understood and accepted by the members of an organization. Culture has both internal and external adaptation. Internal adaptation deals with the language, group boundaries, rewards and punishments, ideology and religion and internal integration. Good internal integration permits development of cultural solutions that facilitate external adaptation. External adaptation deals with investors, suppliers, regulators and other social institutions. Through this adaptation an organization attains a sense of mission, acquires goals to fulfill the missions, obtains a means of accomplishing the goals, measures their performance and corrects and amends the courses of action.

There is the role of the founders or leaders who can impose values, beliefs in the organization culture. Leaders have culture embedding mechanisms such as what they pay attention to, measure, and control on a regular basis, how leaders react to critical incidents and organizational crises, criteria by which leaders allocate scarce resources. Criteria by which leaders allocate rewards and status, criteria by which leaders recruit, select, promote, retire, and excommunicate organizational members. Such is the profound impact of a leader on the organizational culture(Schein.1997)

Continuous improvement or Kaizen is a Japanese word for a system of implementing many small improvements on the system processes by the employees whose overall effect is substantial. Problems are divided into two, chronic and sporadic. It is the chronic ones that use the continuous improvement process with the most effective way

being the project by project approach. Setting up the approach for quality improvement comprises three main steps, proving the need, identifying the projects and organizing project teams. Carrying out a quality improvement project involves, verifying the project need, diagnosing the causes, providing the remedy and proving its effectiveness, dealing with resistance to change, and instituting controls to hold the gains(Gryna et al, 2007). Other approaches to improvement include plan, do, study, act and six sigma. Quality improvement tools are applied to the project improvement processes.

In order to verify the project need, the process is certified statistically out of control using control charts. Check sheets are used to collect data. Cause and effect diagrams are used to diagnose the causes. A pareto analysis will expose the cause of the highest number of defects. A scatter diagram will be used to show any correlation between the variables. A control chart will be used to monitor the improvement. A flow chart will be used to document the process. The cost of quality related losses is estimated and amount of savings calculated. Investments necessary for improvement are worked out and the return on investment calculated(Evans,2005).

A company's success depends on the knowledge, skills and motivation of its workforce which are fostered and promoted by employee engagement and teamwork. Employee empowerment means workers have authority to make decisions. This encourages them to take risks, learn from mistakes and promote change. Quality improvement is built on getting everyone to do it right the first time. Peter Drucker is quoted as having said that Knowledge has to be improved, challenged, and increased constantly, or it vanishes. The secret of prevention is to look at the process and identify opportunities for error (Crosby, 1979). Quality management will reduce waste, improve service delivery, reduce poverty, delight the Constituents and fulfill the Government's vision of high quality life for Kenyans. Quality requires continuous improvement which demands performance measurement. Measurement and management are tied inextricably together (Oakland, 2003). Impact of implementation of quality management is evident in most of the successful companies both in manufacturing and service industries such as Motorola, General Electric, Allied Signal, Texas Instruments, Boeing, 3M, Caterpillar IBM, Xerox

among many other American companies Evans, (2005). Japanese companies adopted quality management principles much earlier thereby acquiring a competitive advantage over their American counterparts. They survived the global recession without layoffs while their American counterparts had to be bailed out by the Federal Government. Success and survival of Japanese companies is to a large extent attributed to adoption of quality management practices. We can apply quality management in public sector which is the focus of this project.

2.3 Quality Improvement Tools

Quality Tools (QTs) refer to techniques or ways of doing a specific task or achieving an objective related to quality improvement(Bamford & Greatbanks, 2005) There are seven simple statistically based tools used extensively to gather and analyze data, check sheets, histograms, cause-and-effect diagrams, Pareto diagrams,flow charts, control chart and scatter diagrams(Evans,2005). The seven basic QTs provide fundamental methods for collecting and analyzing quality related data. Ishikawa (1986) stated that as many as 95 per cent of quality related problems in an organization can be solved with seven fundamental Quality Tools, which reveals their importance. The consequences of systematically utilizing Quality Tools are related with important decisions about processes based on collected data, in evaluation of improvements and in a reduction of variability(Fotopoulos and Psomas, 2009)

2.3.1 Check Sheet

Check sheets are data collection forms that facilitate the interpretation of data. A Check Sheet is a data recording form that has been designed to readily interpret results from the form itself. It needs to be designed for the specific data it is to gather. Used for the collection of quantitative or qualitative repetitive data. Adaptable to different data gathering situations. In the management of CDF check sheets can be used to collect data on the attributes that contribute to delays in project completion. Such data can be

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compiled quarterly and used for pareto analysis. This would guide the management on where to concentrate corrective efforts.

2.3.2   Control charts

A control chart is a graphic comparison of process performance data to computed "control limits" drawn as limit lines on the chart. The process performance data usually of groups of measurements selected in regular sequence of production. A prime use of the control chart is to detect assignable causes of variation in the process. Process variations are traceable to two kinds of causes : (1) random, due solely to chance and (2) assignable due to specific special causes. Ideally only random causes should be present in a process. As long the process variation is within the control limits the variation is inherent in the system and will persist regardless(Aguayo,1991). In such a case the process is said to be in a state of statistical control. The chart distinguishes between random and assignable causes of variation through its choice of control limits. These are calculated from the laws of probability so that highly improbable random variations are due to not to random causes but to assignable causes. When actual variation exceeds the control limits it is a signal that assignable causes entered the process and the process should be investigated. Variation within the control limits means that only random causes are present. (Gryna et al, 2007) .Process Control Chart Control Chart also called: statistical process control is a Statistical technique also used for monitoring and evaluating variations in a process. It identifies the allowable range of variation for a particular product characteristic by specifying the upper and lower bounds for the allowable variation. Upper Control Limit (UCL), Lower Control Limit (LCL), process average: the mean of the averages for the samples taken over a long period of time. Below are visual patterns indicating out-of-control state or a condition that requires attention.(Coast Guard Process Improvement Guide, 1994)

Indications that special causes of variations are present

.... upper limit	....	upper limit
process average	process average	
.................Lower limit	.................Lower	limit
x		
One or more points a row s Outside the control limits.	Seven or more consecutive Points on one side of the Centre line.	Six or more points in steadily increasing or Decreasing .
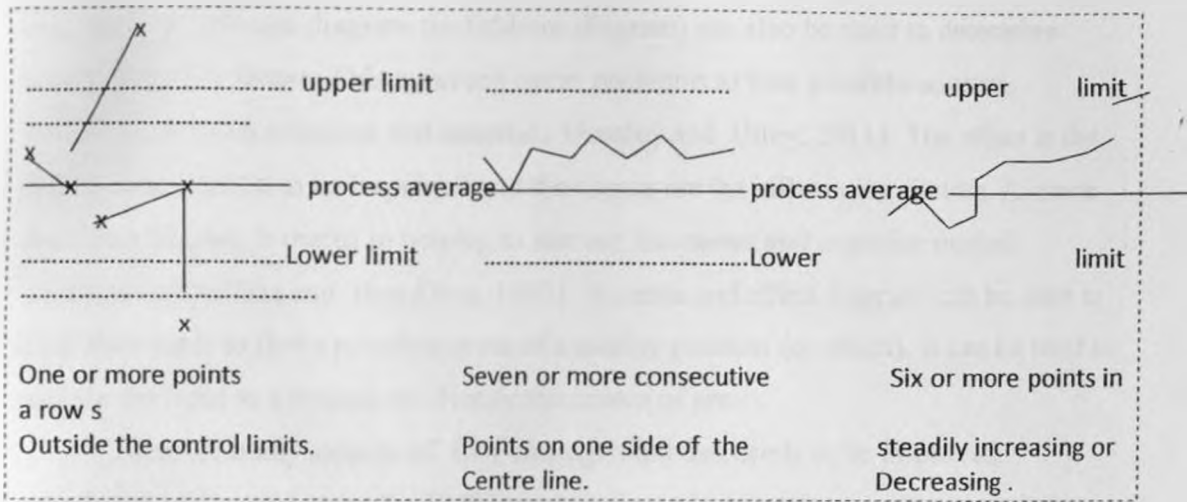
Upper and lower control limits are not specification limits. They have a mathematical relationship to the process outputs. Specification limits are based on product or customer requirements. Having a data point fall outside the control limits is only one of many different signals that indicate a process is out of control as shown in the the patterns above.

In the management of CDF the control chart can be used to monitor how the process of implementing projects changes over time. Every project is expected to have a given duration. The difference between projected and actual project duration would form the data which will be plotted sequentially. The mean, upper and lower control limits are determined from historical data. By comparing current data to these lines, you can draw conclusions about whether the process variation is consistent (in control) or is unpredictable (out of control, affected by special causes of variation). Control charts can also be used to gauge time taken to utilize completed projects, time taken to process payments and also in assessing number of uncompleted projects.

2.3.3   Cause and Effect Diagrams (fishbone diagrams or Ishikawa diagrams)

In order to improve the quality of implementing CDF projects, the reasons for substandard quality must be identified. A diagram that is utilized in process control for

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this purpose is the cause and effect diagram, also known as the Ishikawa or fishbone diagram. The Ishikawa diagram (or fishbone diagram) can also be used to determine causes of service failure. This approach traces problems to four possible sources, manpower, method, machine and material.(Hensley and Utley, 2011). The effect is the quality characteristic to be improved and the causes are the influencing factors. A cause and effect diagram is useful in helping to sort out the causes and organize mutual relationships(Duffuaa and Ben-Daya, 1995). A cause and effect diagram can be used to track backwards to find a possible cause of a quality problem (or effect). It can be used to analyze the Input to a process to identify the causes of errors.

There are many aspects of CDF management that needs to be improved, submission of documents to the CDF Board, project identification, project completion times, Accounting, Operationalization of completed projects, Assessment of needy students for education bursary. Cause and effect diagrams can also be used to find out causes of large amounts of unspent funds and numerous incomplete or ghost projects.

2.3.4   Pareto Analysis

Pareto principle as applied to cost of poor quality states that a few contributors to the cost are responsible for the bulk of the cost. (Gryna et al, 2007) These vital few consumers need to be identified so that quality improvement resources can be concentrated in those areas. Pareto analysis is a QC tool that ranks the data classifications in the descending order from the highest frequency of occurrences to the lowest frequency of occurrences. The total frequency is equated to 100 per cent. The "vital few" items occupy a substantial amount (80 per cent) of cumulative percentage of occurrences and the "useful many" occupy only the remaining 20 per cent of occurrences. Pareto analysis divides the factors causing problems into three classes. Class A usually contains around 20 per cent of the factors that are causing 80 per cent of the problems. Class B contains factors causing between 15% per cent of the problems. The rest (5%) of the factors are in class C. Resources must be utilized to improve factors in class A first and then those in class B in order to eliminate the most severe problems (Duffuaa, and Ben-Daya, 1995). Apart from the frequency in form of percentage in descending order, a

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pareto diagram will also include a cumulative curve from which the 80%/20% point can be obtained.

In management of CDF Funds Pareto analysis can be used to identify the main causes of non completion of projects. The causes identified in the Shikawa fish bone diagram will be used to gauge their effect on projects empirically. By collecting data the causes can be classified in percentages and arranged in descending order starting with the highest. Total causes will be equated to 100%. This will bring out the cause with the greatest effect and therefore guide the priority focus by management. It would be expected that 80% of the uncompleted projects will be due to 20% of the causes. Another application of the Pareto principle in management of CDF funds will be in the expenditure. It would be expected that 80% of the allocation is consumed by 20% of the activities. Also Pareto Analysis can be used to assess the total unspent funds at the end of a given financial year. It is expected 20% of the Constituencies contribute 80% of the total unspent funds.

2.3.5   Histograms

A histogram is a graphical representation of the variation in a set of data. It shows the frequency or number of observations of a particular value or within a specified group. Histograms provide clues about the characteristics of the population from which a sample is taken. Using a histogram the shape of the distribution can be seen clearly and inferences can be made about the population.(Evans, 2008). The histogram makes it easy to find the shape, the central value and the extent of dispersion(Duffuaa, Ben-Daya, 1995).   In the case of management of CDF Funds, the histogram can be used to compare performance of Constituencies in their various activities. From data collected on unused funds, a histogram will show the distribution curve on that particular aspect. give the central tendencies, mean, median, mode, and dispersion. The data obtained can be used challenge the outliers to improve. The histogram will be used to compare the finance distribution among the various sectors, health, education, water, environment. sports, and training. The statistics obtained will be useful in informing achievable standards by the Constituency Development Committees.

2.3.6   Scatter diagrams

Scatter diagrams are used to determine the relationship between two or more pieces of corresponding data. The data are plotted on an "X-Y" chart to determine correlation (highly positive, positive, no correlation, negative, and highly negative). In CDF scatter diagrams can be used to illustrate the relationships between completed projects and hours of training or show the correlation between expenditure on social strategies like education, health, water and sanitation verses school completion rates, immunization levels and access to water.

No.
of
completed
projects

Hrs of training
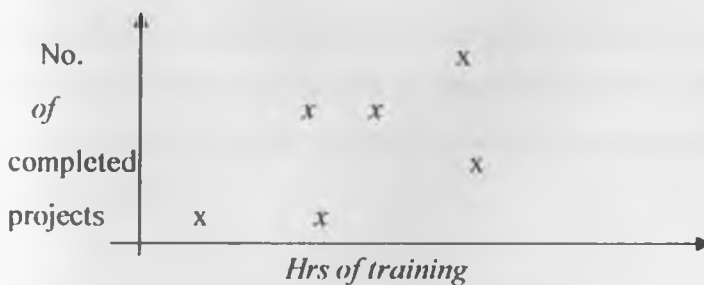
2.3.7   Flowchart

It is a tool to generate a picture of how work gets done by linking together all relationship steps taken in a process. It helps also identify the "moment of truth" within the service process. All members who carry out the process should have a common understanding of that process(Zineldin, 1999).

A flow chart in management of CDF would give a description of the steps taken for projects approval as well as those taken by the corresponding finances. This would help to allocate a time schedule for each step. Using check sheets actual time taken can be recorded setting the stage for corrective action.

2.3.8   Summary

The study will seek to investigate the extent to which these tools are used and their potential in Quality Management. Alsaleh (2007) surveyed 83 food processing and manufacturing companies in Saudi Arabia, the majority of which had been certified to some type of quality system. Quality tools such as the control chart, run chart, histogram,

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Pareto chart, and cause and effect chart appeared to be utilized throughout the production stages, starting from receiving the raw materials to the marketing of the end-products, which revealed some early signs of TQM implementation. Based on these results, he states that the willingness to implement more advanced quality procedures and tools in the future indicates an encouraging future for the food industry. Trehan & Kapoor (2011), researched on MilkFed, a major milk producing cooperative in Punjab, Northern India and demonstrated that the project-by-project approach used in conjunction with the basic seven Quality Control tools is an excellent approach for building a culture of continuous improvement. The paper demonstrates that It has many important lessons for organizations, which are starting their quality improvement journey apart from the cost savings accrued.Stephens (1997) researched and found that implementation of ISO 9000 in Ford Motor Company Australia increased the application of TQM principles and quality tools.

2.4 Devolved funds: A Global Perspective

Decentralization is considered to be essential for the effective implementation of the Millennium Development Goals. (Bardhan and Mookherjee, 2003). Countries the world over are deploying devolved funds to empower the people and reduce poverty. The devolved Funds concept has been deployed in different Countries under several titles all aimed at giving a life line to the poorest of the poor and a stimulus to communities. Indonesia, Cambodia, Bangladesh, India, Pakistan and over 90% of Latin and Central American Countries implement cash transfer programs. to alleviate poverty (Fiszbein and Schady, 2009).

Cash transfer programmes have recently been introduced or are being piloted in several African Countries as shown below:-

Table No. 1 – Cash Transfer funds deployed in different African Countries

Devolved fund	Countries implementing the program
Cash transfer to poorest households	Lesotho, Malawi, Mozambique, Zambia, Zimbabwe
cash relief grants to food-insecure households	Ethiopia
Child support grants	Ethiopia, Namibia, South Africa,
Child care focusing on orphans and other vulnerable children	Lesotho, Malawi, South Africa Tanzania
Disability Grants	Lesotho, Namibia, South Africa
Non contributory Social Pensions	Botswana, Lesotho, Namibia, S.Africa
Barrientos and DeJong(2004) provided strong evidence from 15 countries around the world that transfers to households that qualify for transfer because they are considered among the most vulnerable and house children result in a reduction in rates of childhood poverty in developing countries. Cash transfer programmes in Mexico, Nicaragua and Bangladesh. for example, have reduced the incidence of illness among 0-5 year olds, reduced rates of stunting, and increased school enrolment and attendance.	

Source: Allen, et al, (2007) UNICEF, Division of Policy & Planning

Table No. 2 Success stories as a result of cash transfers

Country	Successes registered in different countries worldwide
Malawi	Marked reduction of Child mortality rates
Tanzania	Increase in primary school completion rates,
Senegal	remarkable progress towards water target
Pakistan	Conditional Cash Transfer Program improved School enrollment for 11-14yr olds increased by 11%.
Mexico	Opportunidades program decreased dropout rates between the 6th and 7th grade by 9 %.
Honduras	a Conditional Cash Transfer (CCT) program increased the proportion of children who had at least one preventive health visit by 20% .
Brazil	Bolsa Familia Program
Latin American Countries	Over 95% of Latin American Countries have conditional cash transfer programs. With documented successes per country.

Source: MDG Africa Steering Group (2008)

2.5 Implementation of Constituency Development Fund in other Countries

Another form of devolved fund, the Constituency Development Fund is practiced in other countries under different names :

Table No. 3 Countries with Constituency Development Funds

COUNTRY	NAME OF CONSTITUENCY DEVELOPMENT FUND
Ghana	Comprehensive Development Framework
Uganda	Constituency Development Fund – Uganda
Zambia	Constituency Development Fund Zambia
Papua New Guinea	European Development Fund
India	Members of Parliament Local Area Development Scheme (MPLADS)
Bhutan	Constituency Development Grants(CDG)

Source: (Steve, 2010)The role of Parliamentarians in facilitating grassroots projects

Just like democracy, Cash Transfer Funds and Constituency Development Fund Scheme concept is failing in some countries, not because of its inherent faults but because quality is not factored in these funds management. This paper seeks to establish the extent of application of quality management improvement tools and quality principles in management of devolved funds.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This Chapter discusses the methodology that was used in the survey. The topics covered include; the research design, population, data collection methods, and use of the Continuous Improvement Tools.

3.2 Research Design

This is an application of applied research to address challenges raised in the statement of the problem in the management of CDF funds. It was in the form of a survey to establish the tools known and currently used to manage CDF funds and the quality issues faced by CDF Managers. This is a non-experimental design which focused on studying the existing situations, through a survey using a structured questionnaire as a survey instrument. The questionnaire which is composed of closed ended questions was divided into three parts, part I dealt with the Constituency office profile, part II covered quality aspects of the fund management and part III dealt with quality management tools. The empirical data obtained in the non-experimental designs was primarily exploratory in nature and provided descriptive measures which were appropriate for analysis. In order to establish the tools used, data will be collected on the known tools and the extent to which they are used. The main variables will be the tools used, the quality practices deployed, human resource, education level, gender mix, main contributors to project delays.

3.3 Sampling

From a total population of 210 constituencies, random sampling will be deployed as no framework for categorization has been developed by the CDF Board. The advantage of probability sampling is that sampling error can be calculated. Sampling error is the

degree to which a sample might differ from the population. Using the central limit theorem which states that "for sufficiently large samples (N=30) the sample means will be distributed around the population mean approximately in a normal distribution. Even if the population is not normally distributed, the distribution of the sample means will be normal if there is a large enough set of samples.(Cooper & Schindler,2003) The cost increase in samples above 30 compared to the increase in accuracy, is considered uneconomical. The sample of 30 was picked randomly.

3.4 Data Collection Methods

Primary data was collected using a structured questionnaire. The respondents were mainly Constituency Managers. Administration of the questionnaire was through email and hand delivery to those in and around Nairobi. Some of them sent their replies through email, others sent the completed questionnaire through public means like G4S and Easy Coach among others while the rest were picked. Follow up was mainly through telephone calls and personal visits.

The questionnaire was divided into three parts:
Part I was used to obtain information on the office profile like number of employees and the departments present. Part II (a) contained questions to do with quality management practices in use, Part II (b) explored quality management approach to projects and Part II(c) focused on causes of project delays. Part III (a) was used to obtain information on knowledge of tools, Part III (b) on use of tools and III(c) on planned use of tools. They were also required to indicate means of receiving customer complaints, reasons for choice of tools and whether or not they were ISO Certified.

3.4.1 Primary Data

Most of the data collected was primary with a combination of nominal and Likert scale. In part 1, data on the number of employees was a selection from groups of a range of five provided while percentage female employees was also a selection from groups of ten percent range provided. Information on departments was through insertion of 1 for yes in

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the department in the questionnaire is present and 0 for no. There was space for writing others not specified.

Table No. 4 - Office Profile

Data required	Selection	Relevant part of the questionnaire
Total number of employees	5and below, 5-10,10-15,15-20 20 and above	Part 1(a) (i)
Percentage female employees	10and below, 10-20, 20-30,30-40, 40and above	Part 1(a) (i)
Qualifications of the CDF Manager	To be stated	Part 1 (b)
Departments present	Human resource, Accounts, Technical/Projects, Procurement, Quality Assurance, Others.	Part 1 (c)

Part II (a) and (b) respondents were required to indicate how often they applied the given attributes of quality on a scale of 1-5 where 5 represented <all the time>, 4<Occasionally, 3<Sometimes> 2<rarely>, 1<never>. Respondents were also asked whether they have a suggestion box and also state the mechanism used to receive customer complaints.

In Part II(c) Likert scale was used. Respondents were to indicate to what extent the specified causes of project delays contributed to project completion on a scale of 1-5 where 5represented <Very large extent>, 4<large extent, 3<moderate extent> 2<small extent, 1<no extent>. The managers were also state whether they have an administration vehicle by inserting 0 if no or 1 if the answer is yes.

Part III was dedicated to information on tools. The seven quality improvement tools and also three other frequently used tools to widen the selection. In Part III(a) the CDF Managers were to indicate if they knew the tool by inserting 0 if the answer was no and 1 if the answer was in the affirmative. Part III (b) respondents were required to select on a scale of 1-5 the extent to which they utilized the tools in their operations, where 1

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represented <never>, 2<small extent>, 3<moderate extent>, 4<large extent. 5<Very large extent>.

In Part III (c) was to obtain information on those tools that the managers planned to use in the next financial year. To tools were to be stated in the space provided followed by reasons why.

Information on ISO Certification was to be given by ticking yes or no in the space provided.

3.4.2 Secondary Data

Population and allocations for 2011/2012 statistics for each Constituency were obtained from the Kenya data Network and CDF website respectively.

3.5   Data Analysis

Data was analyzed using SPSS software together with excel. Part I was analyzed using frequency and distribution and percentages. Some charts have been inserted to give a visual display. Part II and III were analyzed using frequency distribution. percentages, mean scores, standard deviation. In addition to the methods already mentioned variance was also used to calculate the significance of the differences between the knowledge of tools. The mean scores were rated as follows: $0<m<1.5$ no extent, $1.5<m<2.5$-small extent, $2.5<m<3.5$- moderate extent, $3.5<m<4.5$-large extent, $m>4.5$- very large extent.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSIONS`

4.1 Introduction

This chapter comprises the data analysis and findings. Data was obtained from questionnaires administered to Fund Managers in Constituencies spread throughout the country. A total of 38 questionnaires were sent out while responses were received from 25 Constituencies. A sample of 30 Constituencies was being sought which leaves the response at 83.3%. With a total population of 210, the study sample represents 12% of the total population. This was considered adequate for the study.

4.2 Information on the profile of the CDF Office

4.2.1 No of employees

Respondents were required to indicate the number of employees in the office from the 5 categories given. The purpose of this was find out the general profile of the office to which the constituents seek service.

Figure .2
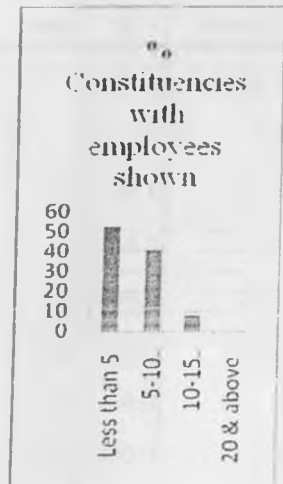
Table 5   Total employees

		Frequency	%
Valid	<=5	13	52.0
	5-10	10	40.0
	10-15	2	8.0
	Total	25	100 0

% Constituencies with employees shown

It was however found that most constituencies maintain skeleton staff irrespective of the Constituency population or the number of projects. It was also found that some Constituencies share the office with the Constituency office which is funded from the Parliamentary Service Commission. This makes a lot of economic sense. Given some of these advantages and the fact that the projects are implemented by Government officers(CDF Act,2003) it is not surprising that over 50% of the CDF office employees are less than 5. The role of the CDF Manager is give monthly and annual returns to the Board as defined in the CDF Act and coordinate the activities of the various parties involved in the implementation.

4.2.2 Percentage female employees

Respondents were required to select the percentage of female employees from the given categories.

Figure 3: % Female Employees
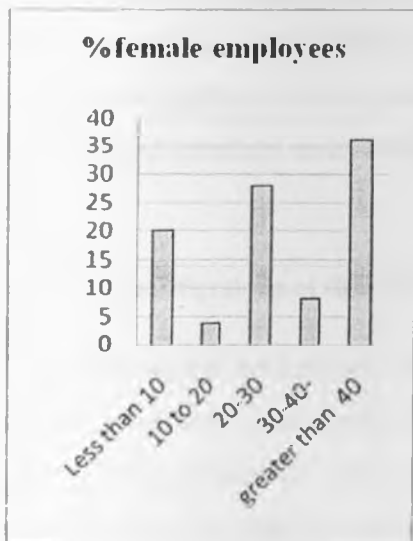
%female employees

Table No. 6 percentage female employees

		Frequency	%	Valid Percent	Cumulative %
Valid	<=10	5	20.0	20.8	20.8
	10-20	1	4.0	4.2	25.0
	20-30	7	28.0	29.2	54.2
	30-40	2	8.0	8.3	62.5
	>=40	9	36.0	37.5	100.0
	Total	24	96.0	100.0	
Missing	System	1	4.0		
Total		25	100.0		
Mean = 3.38					

The 33.8% mean female employment looks satisfactory. This is however not the case with deployment of CDF Managers.

Table No. 7 Gender proportions of CDF Managers

	Frequency	Percent
Male	20	80.0
Female	5	20.0
Total	25	100.0

Only 20 % of the CDF Managers are female. An audit carried out by the National Tax Association in 2008 and follow up audit conducted in 2011 on the ten best performed Constituencies in 2008. The audit was based on well used, badly used, wasted and unaccounted for funds. Six constituencies had improved, three of which had female members of Parliament(Napisa, 2011). Although the sample is not representative of the Constituency population there was an inference that felinity may have something to do with prudent fund management. In addition the one third gender principle in the constitution applies to elective and appointive bodies which includes the CDF Board as a fully fledged parastatal under Ministry of Planning(Constitution , 2010).

4.2.3 Qualifications of the CDF Manager,

Qualifications and background training of the employees is central to the quality of service given to the customers(Constituents). The purpose of this data is to find out the qualifications of the CDF Manager. Respondents were requested to state their qualifications. The table below shows the distribution of education levels between the given categories which were obtained from the respondents.

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Table No. 8   Qualifications of the CDF Manager

		Frequency	Percent	Valid Percent	Cumulative %
Valid	Graduate and above	22	88.0	88.0	88.0
	CPA	1	4.0	4.0	92.0
	DIPLOMA	1	4.0	4.0	96.0
	High School	1	4.0	4.0	100.0
	Total	25	100.0	100.0	

Out of twenty five respondents only three were non graduates. Some have attained masters while some are at various stages of pursuing their post graduate degrees. In some constituencies the personnel employed by the MP are also graduates.

Figure 4: Qualification of CDF Manager
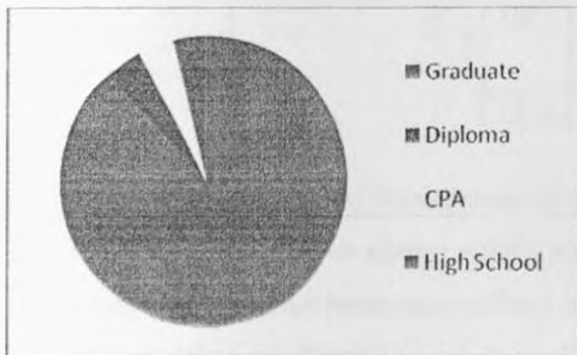
The pie chart above is to emphasize the fact that the CDF Board is represented by very educated officers with 88% of CDF Managers being graduates. Some of the determinants of service quality suggested by Walker (1990) is a quality environment and delivery systems that work together with good personal service – staff attitude, knowledge and skills. The findings suggest that knowledge and skills are not a challenge in management of CDF in the Constituencies.

4.2. 4 Departments Present

Respondents were requested to indicate if the departments listed were present in their offices.

By filling in 0 for no and 1 for yes. They were also to state others that were not listed. The purposes of this data was to establish the support services available for implementation of the projects which contribute to the quality of both service and projects.

Figure 5: Departments Present   **Table No. 9 Departments present**
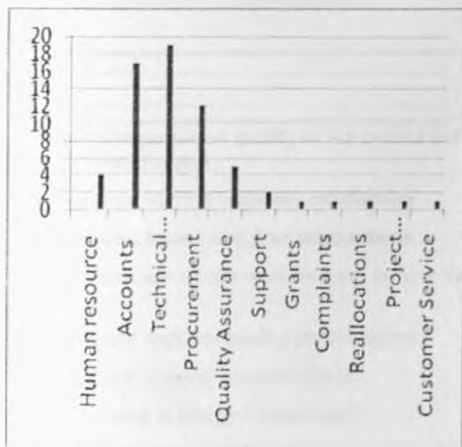
Item	Department		Yes	%
1	Human Resource		4	16
2	Accounts		17	68
3	Technical/Projects		19	76
4	Procurement		12	48
5	Quality Assurance		5	20
6	Others	Support	2	8
7		Grants	1	4
8		Complaints	1	4
9		Re-allocations	1	4
10		Project Implementations status	1	4
11		Customer Service	1	4

The findings are that most of the departments necessary for quality services are present in the Constituencies. However conspicuously missing is the quality assurance department, a sign that quality has not been accorded any importance in management of CDF funds. Grants, complaints, re-allocation, project implementation status and customer service departments are present in only one Constituency. This is a sign of innovativeness in response to the demands of the CDF Manager's reporting requirements and improved customer service. CDF website shows project implementation status and re-allocations as part of the monthly report. Commendably one Constituency has a complaints department which is a giant step towards satisfying customers.

4.3 Management Practices

4.3.1 Attributes of quality in customer service

Respondents were required to select the extent to which management applies the listed quality management practices on a scale of 1 to 5 where 1 represents "never" and 5 represented "all the time." The purpose of this data was to find out the extent to which quality management was already being applied.

Tabel No. 10 Quality management practices deployed in management of CDF Descriptive Statistics

	N	Sum	Mean	Std. Deviation
Consults the people on quality of the project during project identification	25	107	4.28	1.100
Management surveys customer satisfaction	25	79	3.16	1.214
Management knows customer expectations	25	102	4.08	1.038
Management allows the workers a say in how the fund is run	24	92	3.83	1.239
Management supports quality improvement	25	111	4.44	.870
Do you have a quality control officer?	25	61	2.44	1.685
Do you intend to hire or consult one?	22	55	2.50	1.439
Do you measure the quality of services offered by management to Clients?	25	75	3.00	1.354
Do you monitor quality of goods procured?	24	114	4.75	.532
Do you monitor the quality of workers	25	95	3.80	1.291
Do you measure project actual completion against expected time?	25	105	4.20	1.225
	20			
Average mean			3.68	

From the data collected on attributes of quality, fund managers have to a large extent adopted quality practices. Consulting the people and knowing their expectations has a mean of 4.28 and 4.08 respectively. This is however contrasted by a lower mean of 3.16 on conducting customer survey. This mean should have been higher than the other two. This means that although the people are largely consulted and their expectations known there has not been an effective mechanism of establishing their satisfaction with the Manager's efforts. In addition measurement of quality of services offered to Clients is

only moderate with a mean of 3. Monitoring the quality of goods procured is to a very large extent with a mean of 4.75 with the lowest standard deviation of 0.532 showing a strong agreement by the respondents on that item. Sharply contrasting this, is the finding that most Constituencies have no quality control officer as shown by the low mean of 2.44. This implies that monitoring of goods procured and quality of workers is done by officers with no quality expertise. Support for quality improvement practices is to a large extent with a mean of 4.44. The average mean is 3.68 implying that quality management practices are applied to a large extent (definition in Chapter 3, data analysis techniques). Without conducting customer survey and measuring the quality of service given to customers it is difficult to qualify most of the other attributes despite their having higher means.

4.3.3   Mechanism of receiving customer complaints

Mechanisms enumerated by the respondents are tabulated in appendix II can be summarized into 4 categories.

1. Through telephone
2. Through letters either to the Chairman or to the CDF Manager.
3. Direct personal presentation to the office
4. Expressed during location meetings

The receipt of complaints is an excellent opportunity for an organisation to restore customer confidence and to capitalize on this feedback for assistance in organizational improvements (Johnston, 2001, Ramsey, 2003). Complaint feedback can be used to identify root causes of problems that lead to customer dissatisfaction. (Hallen and Latino 2003) Accessibility is one of the constraints of CDF offices yet access is one of the six criteria of perceived good quality service postulated by Grönroos (1990). Most Constituencies especially in rural areas do not have working telephone lines and some constituency offices are very difficult to trace. Receipt of complaints needs to made more customer friendly.

4.4 Quality in project management

4.4.1 Attributes of quality in project management

Respondents were required to indicate on a scale of 1 to 5 the extent to which the following attributes of quality apply to current management of projects. 1 represented never while 5 represented all the time.

Table 11 Quality Management Practices in related to Projects: Descriptive Statistics

	N	Sum	Mean	Std. Deviation
The Councillors determine the quality of projects suitable for their wards	25	77	3.08	1.288
The CDF officer in conjunction with the Chief holds a baraza to discuss the quality of projects	25	104	4.16	.943
Does the Ministry provide any quality manual?	24	84	3.50	1.474
Does CDF use their expertise to estimate project quality?	25	113	4.52	.963
Is quality used as a bases of procurement of goods and services?	25	114	4.56	.870
Have you established a continous improvement program?	24	85	3.54	1.414
Are there efforts to develop a culture of quality?	25	103	4.12	1.201
Average mean			3.93	

With a mean of 3.08 Councilors only moderately determine the quality of projects. This means that there are other players determining project quality which is good. The Chief and CDF Officer discuss with the people about the quality of the projects to a large extent with a mean of 4.16 and a standard deviation of 0.943 which reflects a strong agreement. But the Ministry only provides a manual to a moderate extent with a mean of 3.5 and standard deviation of 1.474 which shows there is no strong agreement on this item. In addition the CDF uses their own expertise to estimate both project quality and quality of goods with a mean of 4.52 and standard deviation of 0.963 showing a strong agreement by most respondents. The finding here is that the whole aspect of quality is presided over by officers who may not necessarily posses any quality expertise. The

average mean is 3.92 implying that the given management practices are applied to a large extent(definition in Data analysis techniques in Chapter 3).

4.4.2   Sources of project delays

CDF Managers were requested to indicate on a scale 1 to 5 the extent to which the listed attributes contribute to project completion. The table below has been drawn from the check sheets attached in the appendix.

Table No. 12   Sources of project delays   Descriptive Statistics

Item		N	Sum	Mean	Std. Deviation
1	Late receipt of projects from locations	25	61	2.44	1.417
2	Delays in deliberations on the forwarded project proposals from locations	25	75	3.00	1.555
3	Delayed approvals by the Board	24	85	3.54	1.474
4	Delays in procurement	25	93	3.72	1.173
5	Lack of documentation	25	81	3.24	1.480
6	Late disbursements from the Board	25	92	3.68	1.435
7	Lack of monitoring and evaluation	25	71	2.84	1.375
8	Late payments to Contractor	25	77	3.08	1.320
9	Inadequate allocations for monitoring	24	74	3.08	1.381
10	Inadequate means of transport	25	71	2.84	1.313
11	Delays in approval by CDFC	25	61	2.44	1.294
	Overall average			3.08	

The results show that delays in procurement contribute to project delays to a large extent by returning a mean of 3.72. Many respondents are in agreement as this item has the

lowest standard deviation of 1.173. This is closely followed by delays in disbursements from the CDF Board with a mean of 3.68. But the standard deviation of 1.435 suggests that there is no strong agreement on this item. Contribution to project delays by inadequate means of transport is to a very small extent with a mean of 2.84. The average mean is 3.08 implying the stated sources of project delays are true to a moderate extent. The standard deviation ranges from 1.173 to 1.555 which is sources of delays have a mean above 2.5 except approval by CDFC which implies that the respondents are in agreement that the attributes described contribute to project delays to a large extent. Analysis of such causes can reveal where to concentrate the effort.

4.5   TOOLS

4.5.1 Knowledge of Tools

Respondents were required to respond with a no by inserting 0 in the box provided if they do not know the tool and yes if they know the tool by inserting 1 in the same box. The results which are tabulated in the check sheets

Table No. 13 Descriptive Statistics on knowledge of Tools

	N	Sum	Mean	Std. Deviation	Variance
Do you know Check sheets?	25	21	.84	.374	.140
Do you know Histogram?	25	18	.72	.458	.210
Do you know Flow diagram?	25	20	.80	.408	.167
Do you know Control charts?	25	15	.60	.500	.250
Do you know Scatter diagrams?	25	17	.68	.476	.227
Do you know Pareto analysis?	25	7	.28	.458	210
Do you know Benchmarking?	25	21	.84	.374	140
Do you know Focus groups?	25	17	.68	.476	.227
Do you know Cause and effects?	25	12	.48	.510	.260
	25				

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From the mean the descending order of knowledge of the tools is, Check sheets and benchmarking, Flow diagrams, Histogram, Scatter diagrams & Focus groups, Control charts, Cause and effect and Pareto analysis. From the sum column in the table, check sheets and benchmarking are the most well known tools while pareto and cause and effect diagrams are the least known.

4.5.2 Significance value calculation of knowledge of tools

In order to remove the possibility of the difference being attributed to chance a t-test was undertaken. The t-test was also used to establish whether the difference between them is significant. The test was applied to two tools at a time. With nine tools there are

$\dfrac{9!\ 7!}{2!}$ = 36 combinations. For the purpose of this project only the above will be tested.

From the means 0.84 is higher than 0.68. But we want to test the hypothesis that those who know check sheets and those who k now scatter diagrams do not differ significantly. Assumption: Those who know check sheets belong to a population whose mean=μ_o and those who know scatter diagrams belong to a population whose mean= μ_1 Under the null hypothesis

$\mu_o = \mu_1$

Let $\bar{X}$ = The mean of the most well known tool, check sheets = benchmarking = 0.84

while $\bar{Y}$ = The mean of scatter diagrams = 0.68

$$T = \frac{(\bar{X} - \bar{Y})}{\sqrt{(S^2)(\frac{1}{n1} + \frac{1}{n2})}}$$

Where S is the variance defined as $\quad S^2 = \dfrac{(n_1-1)S_1^2 + (n_2-1)S_2^2}{n_1 + n_2 - 2}$

For both tools $n_1=n_2= 25$=sample population

S_1 and S_2 are the variances of check sheets and pareto tools respectively.

From the table $S_1^2= 0.14 \quad S_2^2= 0.227$

$$S^2 = \frac{(25-1)(0.14) + (25-1)(0.227)}{25 + 25 - 2} = 0.1835$$

$$T = \frac{(0.84 - 0.68)}{\sqrt{(S^2)(\frac{1}{25} + \frac{1}{25})}}$$

$$T = \frac{(0.84 - 0.68)}{\sqrt{(0.1835)(\frac{1}{25} + \frac{1}{25})}}$$

$T = 1.32$

From t-tables $t/_{\alpha, \ 48} = 1.645$

Therefore since 1.32 is less than 1.645 which implies the null hypothesis is accepted. The difference is therefore not significant which means that those who know the check sheets and benchmarking are not significantly higher than those who know scatter diagrams. This implies that check sheets and scatter diagrams are basically in the same group in terms of level of knowledge by the respondents.

Table 14   Calculated Significance values of knowledge of tools.

Item	Tools under comparison	T-value calculated	Table Value	Significance
1	Significance between check sheets & pareto analysis	4.732864	1.645	Significant
2	Significance between Check sheets & control charts.	1.921538	1.645	Significant
3	Significance between Check sheets & scatter diagrams .	1.320556	1.645	Not significant
4	Significance between Scatter diagrams & pareto	3.025445	1.645	Significant
5	Significant between cause and effect & pareto	1.45864	1.645	Not significant
6	Significance between Control chart & pareto	2.359071	1.645	Significant
7	Significance between control charts & Cause & Effect	0.840168	1.645	Not significant
8	Significance between scatter and control charts	0.579163	1.645	Not significant

From the table results it emerges that the tools can be divided into two groups, known and the unknown. The known tools are check sheets, benchmarking, flow diagrams, histograms and focus groups while the unknown are Cause and effect diagrams and pareto analysis. Knowledge of Control charts is somewhere in between.

41

4.5.3 Use of quality tools

The Managers were requested to indicate on a scale of 1 to 5 the extent to which they used the stated tools where 1 represents no extent and 5 represents to a very large extent.

Table No. 15 Use of Tools Descriptive Statistics

Tool	N	Minimum	Sum	Mean	Std. Deviation
The extent to which you use Check sheets	25	1	79	3.16	1.625
The extent to which you use Histogram	25	1	38	1.52	.963
The extent to which you use Flow diagrams	25	1	45	1.80	1.258
The extent to which you use Control charts	25	1	46	1.84	1.491
The extent to which you use Scatter diagrams	25	1	36	1.44	.961
The extent to which you use Pareto analysis	25	1	28	1.12	.600
The extent to which you use Benchmarking	25	1	62	2.48	1.295
The extent to which you use Focus groups	25	1	47	1.88	1.201
The extent to which you use Cause and effects diagrams	25	1	41	1.64	1.075
The extent to which you use Questionnaires	25	1	65	2.60	1.555

Results from the use of tools paints a different picture from knowledge of tools.

Only check sheets, questionnaires and benchmarking are used in a small to moderate extent with means of 3.16, 2.6 and 2.48 respectively. Apart from pareto analysis, all the remaining tools are between 1.5 and 2. From our definitions of the means in chapter 3 pareto analysis is not used to any extent. The others in this category are used to a small extent. For pareto analysis with a mean of 1.12 and a standard deviation of 0.6 there is a strong agreement among the respondents that pareto analysis is not used at all. This

finding answers the second objective which was to show which quality improvement tools are used in the implementation of CDF.

The third objective was to find out which potential tools can improve quality in CDF. Check sheets are the most appropriate tool to collect and facilitate data analysis and interpretation. Variable data are collected by numerical measurement on a continuous scale. Attributable data like the causes of project delays in table 12 can be collected using tally marks on check sheet forms. (Evans, 2005). The information is then plotted on a histogram to show the variation in a given set of data. The output from the histogram is arranged in descending order starting with the highest with cumulated frequency. The outcome is a pareto analysis which can separate the vital few from the trivial many. 20% of the factors will usually cause 80% of the problems hence the 20-80 rule A Pareto analysis indicates which factor we should improve first in order to eliminate defects and get the biggest possible improvement.(Duffuaa & Ben-Daya, 1995). The most appropriate tool for identifying the cause of the problems is cause and effect(fishbone) diagrams. These can be prepared using focus groups(68%) respondents knew focus groups made up of CDF Managers to brainstorm the causes. The control chart can be used to check the data against a given mean, upper and lower control limits. This can be applied to project cost, end year account balances, or time taken to complete projects. The data points should be certified statistically out of control before investigation. Flow charts can be used to define the process. Scatter diagrams can be used to find out the relationship if any between project completion and hours spent on training the staff. Scatter diagrams can also be used to establish any two variables one independent and the other dependant. For instance, the increase in Standard eight or form four leavers in schools within the Constituency due to electrification of or increased construction of schools.

4.5.4 Intention to use the tools

The CDF Managers were asked to state the tools that they intended to use in the next financial year by inserting 0 if there was no such intention and 1 if the answer was in the affirmative.

Table No. 16   Frequency Table showing intention to use tools

Item	Intention to use a tool	Yes	%	
1	Do you intend to use Check sheets in the next financial year?	15	60	
2	Do you intend to use Histograms in the next financial year?	1	4	
3	Do you intend to use Flow diagrams in the next financial year?	4	16	
4	Do you intend to use Control charts in the next financial year?	8	32	
5	Do you intend to use Scatter diagrams in the next financial year?	2	8	
6	Do you intend to use Pareto analysis in the next financial year?	0	0	
7	Do you intend to use Benchmarking in the next financial year?	12	48	
8	Do you intend to use Focus groups in the next financial year?	18	72	
9	Do you intend to use Cause and effect in the next financial year?	1	4	
10	Do you intend to use Questionnaire in the next financial year?	9	36	

The tools that have been selected to be used are also among the well known established in Part III (a). From the response the order of popularity is as follows:-

Focus groups (72%), Check sheets(60%) Benchmarking(48%) Control charts(32%) Below 30% Flow diagrams(16%) Histograms(4%), Cause and effect diagrams(4%) and Pareto analysis(0%) Below is chart comparison between knowledge of tools and intention to use.

Figure 6 Knowledge of tools   **Figure 7 Intention to use tools**
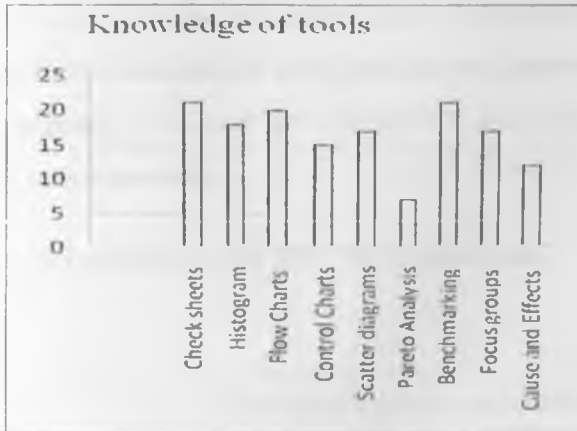
4.5.5 ISO Certification

From appendix II reasons for planning to use the selected tools can be summarized into 4 categories, . Obtaining information from Constituents, Comparing their performance with other Constituencies, as a means of analyzing Bills of Quantities, easy to use and understand. It therefore follows that the other five do not fit into this description.

Table No. 17 ISO Certification

Question	Yes	%
Are you ISO Certified?	0	0
Do you intend to apply for ISO Certification?	14	56

This outcome is an indication that quality management has not taken root in CDF management. The fact that 44% did not even intend to apply for certification is a pointer to the urgency of the need for sensitization and awareness of application of quality management practices.

Figure .8 Population and 2011/2012 Allocation
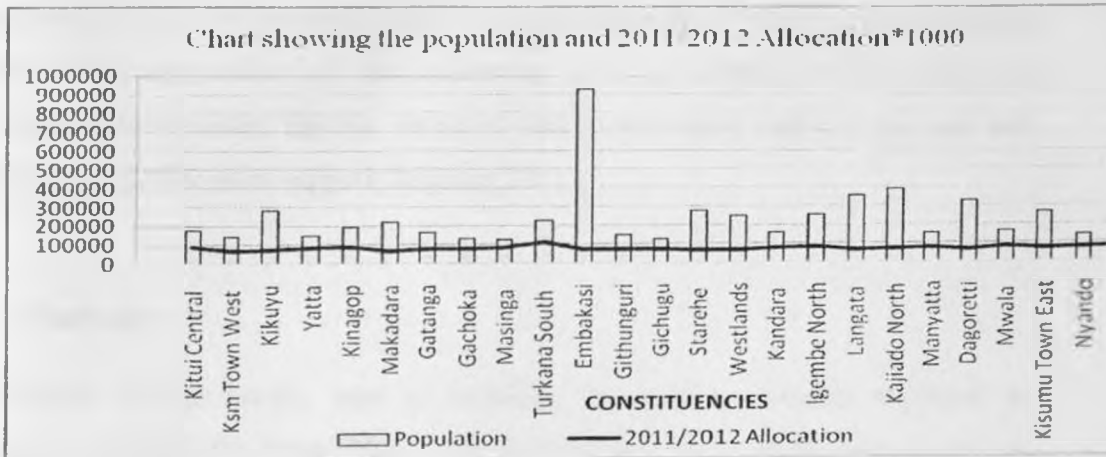
Secondary data from the CDF website of population and 2011/2012 allocations have been plotted on the chart above. The allocation line diagram is almost horizontal while the population fluctuates. The CDF Act 2003 defines how the money should be divided among the constituencies, 75% equally and 25% based on poverty levels. But the challenges of service delivery to Makadara residents cannot be equivalent to those of Embakasi with more than four times its population but with a difference of only seven million in allocations purely on the basis of higher poverty levels yet both Constituencies are in Nairobi County. This consideration should improve the quality of service to the customer.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1   Introduction

Truly Excellent organizations are those that strive to satisfy their stakeholders by what they achieve, how they achieve it, what they are likely to achieve and the confidence they have that the results will be sustained in the future (EFQM, 2005). In this new millennium, qualities of services have become as important as those of quality of goods and products. Also, it has become imperative to satisfy customers by assessing their needs and expectations and ensuring that those are met or even exceeded. (Narasimhan,2011) It is important to use tools and techniques to identify and understand the needs and expectations of the customers, how to translate those needs and expectations into products' (goods, services, and experiences) features, produce and deliver them with after sales support(Bergman,2011).

5.2   Conclusions

The objective of the survey was to establish the quality practices deployed in management of CDF, the knowledge, use of tools and ISO Certification. It can be concluded that the CDF Managers do not have quality management expertise, do not know some of the tools and do not use most of them. They however form a valuable pool of human resource, with a good academic background and the CDF Board has a great opportunity to train this group on quality management to make a turning point at improving development in the country.

From the survey it can be concluded that the whole issue of quality is implemented on an adhoc basis. There is no concrete program aimed at promoting quality practices neither is there a deliberate effort or focus on quality by the CDF Board. There are no quality control officers and there are no intentions of hiring them. A quality program is required to make the CDF management more customer focused.

5.3   Recommendations

It is recommended that the CDF Board develops regulations pursuant to the CDF Act to enable it deal with those aspects that are not explicitly spelt out in the Act. For instance the Board can require the nominees to the CDFC to be of certain education level. It is recommended that a mandatory bill board of defined dimension be fixed showing a clear direction to the CDF Office. The office should also ensure there is a working telephone line. Constituents also require massive education to enhance their participation. The Board should institute mandatory customer satisfaction questionnaires annually as is the case with performance contracts.

It is recommended that the Board considers quality management as one of the means of improving the Fund management. It should consider employing a quality control or assurance officer, who should also receive and distribute complaints to the relevant people for solutions. Training of all CDF Managers should be mandatory including training and exposure to the use of the seven quality management tools. Thereafter the Board should draw out a schedules that will enable data gathering and end of year analysis of project management per Constituency. A scheme of giving points should be established which will form some basis for competition. This will drive towards ranking and award for best performers.

The CDF Board should craft a devolved fund model in line with Malcom Baldrige National Quality Award (MBQNA) in USA, European Foundation for Quality Model (EFQM) in Europe and Deming prize award in Japan to enable CDF committees to carry out self evaluations of their quality practices and hence benchmark and compete with other Constituencies. This model needs to be contextualized to Kenya's unique situation to come up with a Kenyan performance based award.

5.4   Future Research

The effectiveness of engaging line Ministry human resource and whether the government has increased their human resource in proportion to the increased workload in the Constituencies. Projects are a major output of the Fund. A research on the factors that

contribute to the huge backlog of incomplete projects annually nationally would be useful to the Board.

5.5   Limitations

The findings show that the CDF Board mostly employs graduates as Fund Managers. Given that the main decisions are made by the Constituency Development Fund Committee, obtaining qualifications of the Fund Manager alone does not present a complete picture of the literacy level of the fund management. The limitation was getting CDFC members leave alone obtaining a disclosure of their credentials. Although not employees of the CDF, Government Officers play a big role in the implementation of CDF projects. It was not possible to take their participation into account as they are based elsewhere and visit the sites directly if and when need arises.

The other limitation is getting respondents to spare time to fill the questionnaire, a detested item. With more cooperation there would have been a larger sample to represent the population. There is also a possibility of bias when responding to the questions, limitation in accessing constituencies in far flung areas. Some offices do not have electricity hence communication via email was not possible. There is also a restriction on the extent to which information can be sought. Finance related information was avoided as it could jeopardize even the non confidential information.

REFERENCES

Aguayo, R.,(1991), Dr Deming. The American who taught the Japanese about Quality. Simon & Schuster New York. pp 58

Allen,K., Campbell,P., Chatterjee, S., Ismail, OCA., Pearson, R., Renshaw,M. (2007) UNICEF, Division of Policy & Planning: "Can the Kenyan State put 300,000 most vulnerable children in the country on a cash transfer programme by the end of 2010? pp 12 Working Paper Retrieved May 15, 2011 from http://www.unicef.org/ Can the Kenyan State put 300k Most Vulnerable Children on cash(4).pdf

Alsaleh, N.A. (2007), "Application of quality tools by the Saudi food industry", *The TQM Magazine*, Vol. 19 No.2, pp.150-61.

Bamford, D.R., Greatbanks, R.W. (2005), "The use of quality management tools and techniques: a study of application in everyday situations", *International Journal of Quality & Reliability Management*, Vol. 22 No.4, pp.376-92.

Bardhan, P., Mookherjee, D. (2003), "Poverty alleviation effort of West Bengal Panchayats",available at http://globetrotter.berkeley.edu/macarthur /inequality/papers /BardhMookhPanchayats.pdf (accessed May 20th 2011).

Barrientos,A., DeJong,J., (2004) Childhood Poverty and Policy Centre (CHIP) Report No. 4 Child Poverty and Cash transfers, Retrieved April 20th 2011 from http://www.pcelearlyyears.com/pdf/childpovertyandcashtransfers.pdf

Baskin, M., Samrat, B., Ashe.R., (2010 September 10-19) *The Role of Parliamentarians in Facilitating Grassroots Projects- Constituency Development Fund* paper presented at the 56th Commonwealth Parliamentary Conference in Nairobi Kenya.

B. Bergman,B., Klefsjo, B.(2011), "Quality: From Customer Needs to Customer Satisfaction,"*The TQM Journal* **Vol** 23 **No.** 3 **pp.** 358-359

Bray. M. (1991), "Centralization versus decentralization in educational administration: regional issues", *Educational Policy*, Vol. 5 No.4, pp.371-85.

CDF Act. (2003), Clause 30

Centre for international Development, Rockefeller College of Public Affairs and Policy. CDF Workshop Dec 8-9 2009 Retrieved May 14 from www.cid.suny.edu/publications1/CDF%252 kmjl0Albany%2520workshop%2520Report.pdf

Chase,R.B., (1995) Production and Operations Management. Manufacturing and Services, Massachusetts, Irwin Mc-Graw Hill.

Chun.M., (2006) Faster Better Cheaper, The Iron Triangle of Education Assessment The Council For Aid to Education

Chwele centre, (2008) Challenges facing management of devolved funds Monday 10th November 2008 Retrieved April 16, 2011 from http://chwelecentre.org

Coast Guard Process Improvement Guide, (1994, January) United States Coast Guard Process Improvement Guide; Total Quality Tools for Teams and Individuals

Cooper,R., Schindler,P.S.,(2003), Business Research Methods. New York:McGraw-Hill Publishers.

Constitution Constitution of Kenya, Section 174

Constitution of Kenya, Section 203(2)

Constitution, (2010), Clause 27(8) - Gender

Creed,A.S., Zutshi,A., Swanson,D.J.,(2008)," Power and passion: remoulded teamwork in a plastics factory", *Team Performance Management* Vol. 14, No.5/6, pp 196-213

Crosby, P.B. (1979), *Quality is Free: The Art of Making Quality Certain*, Hodder & Stoughton, New York, NY, .

Drucker, F.P.,(1985), Management Tasks, Responsibilities practices, Harper Business, New York.

Duffuaa, S.O., Ben-Daya, M.(1995), "Improving maintenance quality using SPC tools", *Journal of Quality in Maintenance Engineering*, Vol 1 No. 2 pp 25-33

Ejiogu, A.M. (2004), "Decentralization as a panacea for Nigerian education misadventure", in Fagbamiye, E.O., Babalola, J.B., Fabunmi, M., Ayeni, A.O. (Eds),*Management of Primary and Secondary Education in Nigeria*, Codat Publications, Ibadan, .

European Foundation for Quality Model, 2000

European Foundation for Quality Model,2005

Evans, J.R.,(2008) *Quality & Performance Excellence*, Management, Organization and Strategy, Thomson South-Western, Cincinnati

Fiszbein A., Schady, N., (2009)."Conditional Cash Transfers: Reducing Present and Future Poverty". Policy Research Report World Bank.

Fotopoulos,C., Psomas, E., (2009) "The use of quality management tools and techniques in ISO 9001:2000 certified companies: the Greek case.," *International Journal of Productivity and Performance Management*. Vol 58 No.6 pp: 564-580

Garvin, D., (2011) Rethinking the MBA: Business education at a crossroads. Journal of

Management Development, *Journal of Management Development*, Vol 30 No.5 pp:451-462

Gryna,F.M., Chua R.C.H., Defeo, J.A., (2007) Juran's Quality Planning and Analysis,

McGraw-Hill Publishers, Singapore. Pp 69.

Hallen, G., Latino, R.J. (2003), "Eastman Chemical's success story", *Quality Progress*, Vol. 36 No.6, pp.50-4.

Hawkins, J.N. (2004), "Centralization, decentralization and recentralization: educational reformsin China", *Comparative Education Review*, available at:www.journals.ucnicagn.edu/cek/home.html, .

Herbert, D., Curry, A., Angel, L. (2003), "Use of quality tools and techniques in services", *The Service Industries Journal*, Vol. 23 No.4, pp.61-80.

Hensley, R.L., Utley, J.S(2011), "Using reliability tools in service operations", International Journal of Quality & Reliability Management The Authors Vol 28 Number: 5 Year: 2011pp: 587-598

Hilder,P.,(2006), Young Foundation Local Government Association, Devolving Funds to Local Communities, A Neighbourhood Action Network Paper for IDeA and the Local Government Association. Retrieved March 26th 2011 from http://www.youngfoundation.org/files/images/YF_devolving_finances_final_11 0808_2.pdf

Ikoya,P.O.,(2008) "Centralization and decentralization of schools' physical facilities management in Nigeria"*Journal of Educational Administration*, Vol 46 No. 5 pp: 630-649

Ishikawa, K. (1986), *What Is Total Quality Control? The Japanese Way*, Prentice Hall, London, .

Juran, J.M. (1964), *Managerial Breakthrough*, McGraw-Hill, New York, NY, .

Johnston, R. (2001), "Linking complaint management to profit", *International Journal of Service Industry Management*, Vol. 12 No.1, pp.60-9.

Karuppusami, G., Gandhinathan, R., (2006) "Pareto analysis of critical success factors of total quality management" *The TQM Magazine*, Vol. 18 No. 4 pp: 372-385

Kenya Institute for Public Policy Research and Analysis (2006, December) Baseline Survey Report on Decentralized Funds in Kenya,(Report No. 12), Retrieved August 2011 from http://www.kippra.org/docs/sp12.pdf

Kenya Vision 2030,(2008)[1], A Globally competitive and prosperous nation with a high quality of life by 2030 , Introduction.

Kenya Vision 2030, (2008)[2]. A Globally competitive and prosperous nation with a high quality of life by 2030, clause 3.3

Kimani, F. Nekesa P., Ndungu. B., (2009) "BEST PRACTICES in CONSTITUENCY DEVELOPMENT FUND (CDF) Collaborative Centre for Gender and Development.

MDG Africa Steering Group (2008) Achieving the Millenium Development Goals in Africa, Recommendations of the MDG Africa Steering Group, June 2008. Retrieved on May 15, 2011 from http://www.arab-hdr.org/publications/other/undp/mdgr/ regional /africa/mdg-africa-08e.pdf

Nairobi Social Audit Report, October 2010

Napisa, M.(2011) "Launch of NTA Citezen's follow up audit of CDF Funds" Retrieved on 7th October 2011 from http:www.nta.or.ke/reports/crc/Nairobi/nta

Njagi,D.& Nzioka, P. (November 12) The Standard

Ndegwa,A.(2011. August 13). Transition polls put Sh45b CDF kitty at risk. The Standard
P 21Nyabiage,E..& Otieno, J.,(2010, October 28). 445M lost in CDF scandal

Nyamori, R.O., (2009), "Making development accountable: critical analysis of the
systems of accounting and accountability for the Constituency Development Fund
in Kenya", *Journal of Accounting & Organizational Change* Vol 5 No. 2, pp:
197-227

Oakland,J.S., (2003) Total Quality Management: text with cases pp 103 Butterworth
Heinmann Publishers, Massachusetts.

Obuya, B., (2008) Fiscal Decentralization in Kenya: The Constituency Development
Fund and the Growth of Government

Ogolo, A. (2009)   "Devolved Funds in Kenya, a blessing or a curse", Peace and
Collaborative Development Network.

Odhiambo,A.,(2010,November 12). Poor management and corruption threaten future of
devolved funds, Daily Nation.

Pearson, R., Alviar, C., (2007) The Evolution of the Government of Kenya Cash Transfer
Programme for Vulnerable Children between 2002 and 2006 and prospects for
nationwide scale-up.

Peckham, S., Exworthy, M., Powell, M., Greener, I. (2005), *Decentralisation as an
Organisational Model for Health Care in England*, SDO, London, .

Regmi, K., Naidoo,J., Greer, A., Pilkington,P., (2010), "Understanding the effect
of decentralisation on health services,". *Journal of Health Organization and
Managemen* Vol 24 No.4 pp: 361-382

Ramsey, R.D. (2003), "How to handle customer complaints", *The American Salesman*, Vol. 48
No.10, pp.15-20.

Rondinelli, D., McCullough, J.S., Johnson, R.W. (1989), "Analysing decentralised policies in developing countries: a political-economy framework", *Development Change*, Vol. 20 pp.50-87.

Ross,J.E.,Klatt,L.A.,(1986), "The Competitive Edge", *Management Decision. Emerald Group Publishing Ltd.*

Schroeder, R.G., Zhang,D., Wu,S.J., (2011) "Customization of quality practices: the impact of quality culture",*International Journal of Quality & Reliability Management* Vol 28. No.3 pp:263-279.

Schein, E.H. (1997), *Organizational Culture and Leadership*. Jossey-Bass, San Francisco, CA. .

Social and Public Accountability Network and Kenya Human Rights Commission, (2010) Towards Alignment, Citizen Engagement and Enhanced Accountability", Harmonization of Decentralized Development in Kenya. A Joint Collaborative Research Report

Stephens, B., (1997), "Implementation of ISO 9000 or Ford's Q1 Award: effects on organizational knowledge and application of TQM principles and quality tools", *The TQM Magazine.* Vol 9 No.3 pp: 190-200

Steve, L.(2010,September) *The Role of Parliamentarians in facilitating grassroots projects.* Paper presented at the Commonwealth Parliamentary Association, Nairobi, Kenya.

Tari, J.J.,(2005), " Components of successful total quality management", *The TQM Magazine* Vol 17 No. 2 pp: 182-194

The Constitution of Kenya, (2009)[1] Section 174.

The Constitution of Kenya, (2009)[2] Section 203(2)

United Nations (2008), "The millennium development goals report", available at www.un.org/millenniumgoals/pdf/The%20Millennium%20Development%20Goal s%20Report%202008.pdf (accessed 12 Dececember 2008), .

Trehan M., Kapoor V., (2011) "TQM journey of an Indian milk-producing cooperative", *The TQM Journal*, Vol 23 No. 4 pp: 423-434

World Health Organization (2008), *The World Health Organization Report 2008. Primary Health Care – Now More than Ever*. Retrieved May 15,2011 from http://www.who.int/whr/2008

World Bank (2004), *World Development Report 2004: Making Services Work for Poor People*, Report No. 26895 Retrieved May 18th from http://www-wds.worldbank.org

Zineldin, M. (1999), "Exploring the common ground of total relationship management (TRM) and total quality management (TQM)". Management Decision Journal Vol 37 No.9 pp: 719-730

APPENDICES

APPENDIX 1 INTRODUCTION LETTER

University of Nairobi
Faculty of Commerce
Department of Business
Administration
P.O. Box 30197
Nairobi
Date ....

Dear Respondent,

RE: COLLECTION OF SURVEY DATA

I am post graduate student at the University of Nairobi. In order to fulfill the degree requirements, I am undertaking a survey on the quality management application in management of Constituency Development Fund. The study is entitled:

"Quality management in Kenya's Devolved Funds: The case of Constituency Development Fund".

Your Constituency ....has been selected to form part of the Study. This is to kindly request you to assist me collect the data by filling the questionnaire attached which I will collect from your premises.

The information data you provide will be used exclusively for academic purposes. My Supervisor and I assure you that the information you give will be treated with strict confidence.

You cooperation will be highly appreciated.

Thanking you in advance,

Yours faithfully,

Emma Kiilu   Dr. X. Iraki
Student   **Lecturer/Supervisor**

PART I

Name of Constituency ……………………………….. County …………………………..

   (a) Profile of CDF Constituency office

Put a tick inside the box that applies to your office.

   (b) Total no of employees

5 and Below [   ]   5 -10 [   ]   10-15 [   ]   15-20 [   ]   20 and above [   ]

Put a tick inside the box that applies to your office.

   c) % Female employees.

10% & below [   ]   10-20% [   ]   20-30% [   ]   30-40% & Above 40%   [   ]

   (d) Qualifications of CDF Board representative

Education qualification e.g Bachelors degree ……………………………………………

   (e) Departments: Indicate 0 or 1 where department present =1 department
      absent = 0

Human resource [   ]   Accounts [   ]   Technical/Projects [   ]   Procurement   [   ]

Quality Assurance   [   ]

Others ……………………………………………………………………………………

PART II

(a) Please tick appropriately the extent to which Management does the following

Attribute	All the time (5)	Occassionally (4)	Sometimes (3)	Rarely (2)	Never (1)
Consults the people on quality of the project during project identification					
Management surveys customer satisfaction					
Management knows customer expectations					
Management allows workers a say in how the fund is run					
Management support quality improvement?					
Do you have a quality control officer?					
Do you intend to hire or consult one ?					
Do you measure the quality of services offered by Management to Clients?					
Do you monitor quality of goods procured?					
Do you monitor the quality of workers/employees?					
Do you measure project actual completion against expected time?					

Do you have a suggestion box?   Yes ☐   No ☐

State the mechanism of receiving complaints from Constituents

....

....

(b) Please tick appropriately the extent to which the Constituents are involved in project selection.

Attribute	All the time (5)	Occassionally (4)	Sometimes (3)	Rarely (2)	Never (1)
The Councilors determine the quality of projects suitable for their wards					
The CDF officer in conjunction with the Chief holds a baraza to discuss the quality of projects?					
Does the Ministry provide any quality manual?					
Does CDF office use their expertise to estimate project quality?					
Is quality used as a basis of procurement of goods and services?					
Have you established a continuous improvement program?					
Are there efforts to develop a culture of quality					

c) **Please tick appropriately to what extent the following contributes to project completion time.**

Attribute	Very large extent (5)	Large extent(4)	Moderate extent(3)	Small extent(2)	No extent(1)
Late receipt of projects from locations					
Delays in deliberations on the forwarded project proposals from locations.					
Delayed approvals by the Board.					
Delays in procurement					
Lack of documentation					
Lack of monitoring and evaluation					
Late payments to Contractor					
Inadequate allocations for monitoring					
Inadequate means of transport					
Delays in approval by CDFC					

Does CDF Office in the Constituency have a vehicle(s) for administration purposes?

Yes [ ]   No [ ]

PART III

(a) **Knowledge of Quality Tools: Mark with 1 the tools known to you and mark with 0 those unknown to you.**

Check Sheets   [ ]   Flow diagrams   [ ]   Scatter diagrams   [ ]

Histograms   [ ]   Control Charts   [ ]   Pareto Analysis   [ ]

Benchmarking   [ ]   Focus Groups   [ ]   Cause and effect diagrams [ ]

(b) **Use of Quality Tools**

Indicate the extent to which your Management uses the above quality tools on a scale of 1-5 where   5= Very large extent 4= Large extent   3= Moderate extent

2= Small extent   1= No extent

Check Sheets   [ ]   Flow diagrams   [ ]   Scatter diagrams   [ ]

Histograms   [ ]   Control Charts   [ ]   Pareto Analysis   [ ]

Benchmarking   [ ]   Focus Groups   [ ]   Cause and effect Diagrams [ ]

Questionnaires and surveys   [ ]

c) Which 3 tools above do you intend to use in the next financial year?

(1)……………………………………….   (2)………………………………..

(3)………………………………………….

Please explain the rationale for choosing the above tools.

…………………………………………………………………………………………………

....

....

Are you ISO Certified?   Yes [   ]   No [   ]

Do you intend to apply for ISO Certification?   Yes [   ]   No [   ]

APPENDIX III CONSTITUENCY POPULATION/2011/2012 ALLOCATION

	Constituency	Population	2011/2012 Allocation
1	Kitui Central	175,633	87531
2	Ksm Town West	139,933	64923.544
3	Kikuyu	279970	71836.391
4	Yatta	147,579	82,483
5	Kinagop	192,379	86417.153
6	Makadara	218,641	65259.662
7	Gatanga	163,597	75487.864
8	Gachoka	130,185	75909.462
9	Masinga	125,940	79800.938
10	Turkana South	226,379	112706.281
11	Embakasi	925,775	72170.116
12	Githunguri	147763	70056.527
13	Gichugu	124672	68801.216
14	Starehe	274607	64814.599
15	Westlands	247102	63758.452
16	Kandara	156663	74196.491
17	Igembe North	252885	81299.338
18	Langata	355188	65664.857
19	Kajiado North	387538	71322.387
20	Manyatta	154632	73869.453
21	Dagoretti	329577	65938.351
22	Mwala	163032	85078.022
23	Kisumu Town East	264227	68003.761
24	Nyando	141037	77969.443
25	Igembe South	229871	81299.338

APPENDIX IV: MECHANISM OF RECEIVING COMPLAINTS

ITEM	CONSTITUENCIES	County	Province	Mechanism of receiving complaints
1	Kitui Central	Kitui Central	Eastern	Project sub-committees
2	Ksm Town West	Kisumu	Nyanza	Thro L.D.C
3	Kikuyu	Kiambu	Central	1. Direct reporting at the CDFC off. 2. Thro the locational representatives 3. M&E Committees
4	Yatta	Machakos	Eastern	Letters, meetings, telephones
5	Kinagop	Nyandarua	Central	Through writing, face to face, internet
6	Makadara	Nairobi	Nairobi	Thro L.D.C. ; Presentation by complainant's personally or Thro the phone, written etc.
7	Gatanga	Murang'a	Central	Thro letters, telephone, personal visits in the office, public barazas
8	Gachoka	Embu	Eastern	Thro letters, verbal communication
9	Masinga	Masinga	Eastern	During locational meetings, barazas.
10	Turkana South	Turkana	Rift Valley	Mechanism not stated.
11	Embakasi	Nairobi	Nairobi	Lodged thro writing and put in suggestion box, which is opened by Cdf and sorted out.
12	Githunguri	Kiambu	Central	Thro letters
13	Gichugu	Kirinyaga	Central	Thro written letters addressed to the MP, Fund Man. Or Chairperson

APPENDIX IV: MECHANISM OF RECEIVING COMPLAINTS(Cont'd)

Item	Constituency	County	Province	Mechanism of receiving complaints
14	Starehe	Nairobi	Nairobi	Complaint desk at Secretary's office
15	Westlands	Nairobi	Nairobi	Verbal thro any committee member. In writing to Manager.
16	Kandara		Central	Thro correspondencies, website & phones.
17	Igembe North	Meru	Eastern	There is an open door policy where the complaints are brought to the office by complainant or rep. Immediate follow up and problem handled in presence of complainant.
18	Langata	nairobi	Nairobi	Direct reports to the office.
19	Kajiado North	Kajiado	South Rift	Through correspondence, locational meetings & monitoring visits by the CDF- C.
20	Manyatta	Embu	Eastern	Presented directly to the staff either verbally or written
21	Dagoretti	Nairobi	Nairobi	Letters, self presentation to management in person
22	Mwala	Machakos	Eastern	Letters, phone, verbal
23	Kisumu Town East	Kisumu	Nyanza	Written complaints in suggestion box
24	Nyando	Kisumu	Nyanza	Thro Locational development committee members
25	Igembe South	Meru	Eastern	Thro Public barazas Thro written complaints to the Chairman /Manager Complaint box

APPENDIX V: REASONS FOR INTENTION TO USE SELECTED TOOLS

Constituencies	Reasons for intentions of using selected tools
Kitui Central	Check sheets for M&E, Questionnaires for customer satisfaction, &control charts for project work plans.
Ksm Town West	No explanation
Kikuyu	Appropriate & within budget plans of the Mngt Easy to conduct & can be done conveniently
Yatta	Easy to understand by the common Mwananchi
Kinagop	Learn from others Deliberate on challenges Engaging stakeholders on expectations
Makadara	No selection on use of question & surveys tool Easy to use & can be understood by people of low literacy levels.
Gatanga	
Gachoka	No plans
Masinga	Benchmarking:the management is able to compare and contrast what other constituencies have done. Questionnaires: Mngt gets 1st hand info from the locals on the level of satisfaction & the impact CDF projects have had on their lives & what they expect in the future.
Turkana South	Benchmarking will show our standing against other Constituencies while maintaining our focus groups in the Constituecy.
Embakasi	Easier to gather correct info, quick access, precise & consume less time.
Githunguri	No plans to use any tool.
Gichugu	To compare performance against set plans. To aid in monitoring and evaluation of projects.

APPENDIX V: REASONS FOR INTENTION TO USE SELECTED

TOOLS(cont'd)

Constituencies	Reasons for Intensions of Choice of Tools
Starehe	Applicable to our daily operations and analysis
Westlands	They are easily understood by CDF Committee.
Kandara	To get the best the priorities of projects that cross cut wide coverage of the community.
Igembe North	This is mostly what rhymes with the activities of implementation at the contituency level.
Langata	No comment
Kajiado North	Check list helps in identifying parameters or values. As they appear in the bill Of Quantities & measurements in drgs & designs . Benchmarking comparison as the cost of particular in different areas.
Manyatta	
Dagoretti	Easy to use
Mwala	These tools offer comparative platform on the projects and thus introducing challenges to improve on quality of implementation
Kisumu Town East	To be more explicit in an explanation to the Constituents
Nyando	Consulting from procurement officers and Contractors
Igembe South	To illustrate the distribution of projects in the constituency per location, per sector Comparison of project implementation with other Constituencies with similar characteristics

APPENDIX VI: DATA SHEETS

id	CONSTCY	CONTY	Province	No of employess Pla.1	Pla.2	Plb	Plc.1	Plc.2	Plc.3	Plc
1	Kitui Central	Kitui	Eastern	2	5	3	1	1	1	
2	Kisumu Town Wes	Kisumu	Nyanza	2	5	2	0	1	1	
3	Kikuyu	Kiambu	Central	1		1	1	1	1	
4	Yatta	Machakos	Eastern	2	1	1	0	0	1	
5	Kinagop	Nyandarua	Central	2	3	2	0	1	1	
6	Makadara	Nairobi	Nairobi	2	5	2	1	1	1	
7	Gatanga	Muranga	Central	2	4	1	0	1	1	
8	Gachoka	Embu	Eastern	2	4	1	0	1	0	
9	Masinga	Machakos	Eastern	2	1	3	0	0	1	
10	Turkana south	Turkana	Rift Valley	2	5	7	0	0	0	
11	Embakasi	Nairobi	Nairobi	2	1	3	0	1	1	
12	Githunguri	Kiambu	Central	1	5	1	0	1	1	
13	Gichugu	Kirinyaga	Central	1	1	4	0	0	0	
14	Starehe	Nairobi	Nairobi	1	3	2	0	1	1	
15	Westlands	Nairobi	Nairobi	1	3	5	0	1	0	
16	Kandara	Muranga	Central	1	3	6	0	1	1	
17	Igembe North	Meru	Eastern	1	5	4	0	0	1	
18	Langata	Nairobi	Central	1	5	1	0	1	1	
19	Kajiado North	Kajiado	Rift Valley	1	5	4	0	1	1	
20	Manyatta	Embu	Eastern	1	2	1	0	0	0	
21	Dagoretti	Nairobi	Nairobi	1	3	3	0	0	1	
22	Mwala	Machakos	Eastern	1	3	2	1	1	1	
23	Kisumu Town EAs	Kisumu	Nyanza	3	3	2	0	1	1	
24	Nyando	Kisumu	Nyanza	3	1	1	0	1	1	
25	Igembe South	Meru	Eastern	1	5	1	0	0	0	

Constituency	P1c.5	P1c.6	P1c.7	P1c.8	P1c.9	P1c.10	P1c.11	P2a.1	P2a.2
Kitui Central	1	0	0	0	0	0	0	5	3
Kisumu Town West	0	0	0	0	0	0	0	5	4
Kikuyu	0	0	0	0	0	0	0	5	3
Yatta	0	0	0	0	0	0	0	5	4
Kinagop	0	0	0	0	0	0	0	4	4
Makadara	0	0	0	0	0	0	0	2	1
Gatanga	1	0	0	0	0	0	0	5	4
Gachoka	0	0	0	0	0	0	0	4	4
Masinga	0	0	0	0	0	0	0	4	4
Turkana south	0	1	0	0	0	0	0	5	3
Embakasi	1	1	0	0	0	0	0	4	5
Githunguri	0	0	0	0	0	0	0	2	1
Gichugu	0	0	0	0	0	0	0	4	1
Starehe	0	0	0	0	0	0	0	4	3
Westlands	0	0	0	0	0	0	0	5	1
Kandara	1	0	0	0	0	0	0	5	3
Igembe North	0	0	0	0	0	0	0	5	2
Langata	0	0	0	0	0	0	0	5	3
Kajiado North	0	0	0	0	0	0	0	5	3
Manyatta	0	0	0	0	0	0	0	4	2
Dagoretti	0	0	0	0	0	0	0	5	4
Mwala	1	0	0	0	0	0	0	4	5
Kisumu Town EAs	0	0	0	0	0	0	0	1	4
Nyando	0	0	0	0	0	0	0	5	4
Igembe South	0	0	0	0	0	0	11	5	4

Constituency	P2a.3	P2a.4	P2a.5	P2a.6	P2a.7	P2a.8	P2a.9	P2a.10	P2a.11
Kitui Central	5	5	5	5		5	5	5	4
Ksm Town West	5	5	5	4	3	4	5	4	5
Kikuyu	4	5	5	4	3	4	5	4	4
Yatta	5	5	5	1	3	1	5	1	5
Kinagop	4	4	5	1	1	1	5	1	2
Makadara	4	3	5	1	4	3	5	5	4
Gatanga	3	4	3	5	5	3	5	3	5
Gachoka	3	4	4	3		3	4	2	2
Masinga	4		5	1	4	4	5	5	5
Turkana south	4	1	4	1	5	3	5	5	5
Embakasi	4	4	5	5	1	5	4	5	5
Githunguri	1	2	3	1	1	1	5	3	4
Gichugu	5	3	3	1	1	1	5	2	2
Starehe	4	4	2	1	3	3	5	4	5
Westlands	5	3	4	1	1	1	5	4	5
Kandara	4	4	4	5	2	4	5	5	5
Igembe North	5	5	5	1	1	4	5	5	5
Langata	5	5	5	2	3	2	5	5	5
Kajiado North	5	5	5	1	3	3	5	3	4
Manyatta	2	1	5	1	1	1	4	3	1
Dagoretti	5	5	5	5	1	3		5	5
Mwala	4	3	5	4		5	4	3	3
Kisumu Town EAs	3	3	5	3	4	3	5	4	5
Nyando	4	5	4	3	4	4	3	4	5
Igembe South	5	4	5	1	1	4	5	5	5

Constituency	P2a2	P2b.1	P2b.2	P2b.3	P2b.4	P2b.5	P2b.6	P2b.7	P2c.1
Kitui Central	0	3	4	5	5	5	2	5	2
Ksm Twn West	1	3	4	4	5	5	4	4	3
Kikuyu	1	5	4	3	4	5	5	5	5
Yatta	0	1	1	5	3	5	3	3	1
Kinagop	0	2	4	2	5	5	5	3	1
Makadara	0	3	3	4	5	5	2	4	2
Gatanga	0	3	4	5	5	5	5	5	5
Gachoka	0	1	4	3	4	3	2	2	1
Masinga	1	4	4	4	5	5	5	5	5
Turkana south	1	3	5	1	5	5	5	5	1
Embakasi	1	4	3	2	5	5	3	5	3
Githunguri	0	1	4	1	3	2	2	4	4
Gichugu	0	2	3	4	4	3	3	3	1
Starehe	0	4	4	4	5	5	1	4	3
Westlands	0	3	5	1	5	5	5	5	1
Kandara	1	4	5	4	5	5	4	5	1
Igembe North	1	1	5		5	5		5	2
Langata	1	5	5	5	5	5	5	5	4
Kajiado North	0	3	5	3	5	5	2	2	3
Manyatta	0	5	4	1	1	4	1	1	2
Dagoretti	0	5	5	5	5	5	3	5	1
Mwala	1	2	5	5	5	4	4	5	1
Ksm Town EAs	1	3	5	5	5	5	5	5	4
Nyando	1	4	4	3	4	3	4	3	3
Igembe South	1	3	5	5	5	5	5	5	2

Constituency	P2c.2	P2c.3	P2c.4	P2c.5	P2c.6	P2c.7	P2c.8	P2c.9	P2c.10	P2c.11
Kitui Central	2	4	5	2	5	2	4	2	2	2
Ksm Twn West	2	2	3	3	3	4	3	4	3	4
Kikuyu	5	5	5	5	5	5	5	5	5	5
Yatta	1	1	1	1	1	1	1	5	5	1
Kinagop	3	3	4	1	3	4	3	4	3	1
Makadara	2	4	4	4	4	3	3	2	2	2
Gatanga	3	5	5	3	5	3	5	3	5	3
Gachoka	2	5	3	3	5	3	2	3	1	2
Masinga	4	4	4	4	4	4	3	3	3	4
Turkana south	5	5	5	5	5	5	5	3	4	4
Embakasi	4	5	3	2	5	3	4	3	3	2
Githunguri	5	4	2	4	2	2	2		3	2
Gichugu	2	2	3	5	2	1	2	4	2	2
Starehe	4		5	4	5	5	5	5	5	3
Westlands	5	1	5	5	5	1	5	5	4	1
Kandara	1	5	2	1	4	1	1	1	1	1
Igembe North	2	3	4	5	3	2	2	1	1	2
Langata	5	5	5	4	5	3	4	3	3	4
Kajiado North	1	2	4	2	3	2	2	1	1	1
Manyatta	5	5	4	1	5	1	2	2	2	5
Dagoretti	1	2	5	1	1	5	1	1	1	1
Mwala	1	1	3	3	1	2	3	2	3	1
Ksm Town EAs	5	4	2	5	3	3	4	5	3	3
Nyando	2	3	3	4	3	2	3	4	3	2
Igembe South	3	5	4	4	5	4	3	3	3	3

Constituency	P3a.9	P3b.1	P3b.2	P3b.3	P3b.4	P3b.5	P3b.6	P3b.7	P3b.8	P3b.9
Kitui Central	1	5	2	3	5	2	1	3	3	4
Ksm Twn West	1	4	1	3	2	1	1	3	1	1
Kikuyu	1	4	1	1	1	1	1	3	4	4
Yatta	0	5	1	1	1	1	1	3	1	1
Kinagop	1	4	1	1	1	1	1	4	3	1
Makadara	0	3	1	1	1	1	1	2	2	1
Gatanga	0	5	4	4	4	1	1	3	3	2
Gachoka	0	1	1	1	1	1	1	1	1	1
Masinga	1	1	1	1	1	1	1	3	1	1
Turkana south	1	1	1	1	1	1	1	1	1	1
Embakasi	0	5	1	1	1	1	1	1	5	1
Githunguri	0	1	1	1	1	1	1	1	1	1
Gichugu	0	1	1	1	1	1	1	1	1	1
Starehe	1	5	1	5	5	1	1	1	1	1
Westlands	1	5	2	3	1	1	1	5	2	3
Kandara	1	5	4	4	4	3	1	3	1	4
Igembe North	1	3	1	1	1	1	1	1	1	2
Langata	0	2	2	1	1	1	1	4	1	1
Kajiado North	0	3	1	1	1	1	1	3	2	2
Manyatta	0	1	1	1	1	1	1	2	1	1
Dagoretti	1	5	1	1	5	1	1	1	1	1
Mwala	1	3	1	1	1	1	1	1	4	1
Ksm Town EAs	0	3	3	3	1	3	1	4	2	1
Nyando	0	3	3	3	3	4	4	4	3	3
Igembe South	0	1	1	1	1	4	1	4	1	1

Constituency	P3b.10	P3c.1	P3c.2	P3c.3	P3c.4	P3c.5	P3c.6	P3c.7	P3c.8
Kitui Central	3	1	0	0	1	0	0	0	0
Ksm Twn West	4	1	0	1	1	0	0	0	0
Kikuyu	3	0	0	0	0	0	0	1	1
Yatta	1	1	0	0	0	0	0	1	1
Kinagop	4	0	0	0	0	0	0	1	1
Makadara	1	1	0	0	1	0	0	1	0
Gatanga	5	1	0	0	1	0	0	0	0
Gachoka	1	0	0	0	0	0	0	0	0
Masinga	3	0	0	0	0	0	0	1	0
Turkana south	1	0	0	0	0	0	0	1	1
Embakasi	5	1	0	0	0	0	0	0	1
Githunguri	1	0	0	0	0	0	0	0	0
Gichugu	1	1	0	0	0	0	0	1	0
Starehe	5	1	0	0	1	0	0	1	0
Westlands	2	1	0	0	0	0	0	1	1
Kandara	5	1	0	1	0	0	0	0	0
Igembe North	4	1	0	0	0	0	0	0	0
Langata	4	0	0	0	0	0	0	1	0
Kajiado North	1	1	0	0	0	0	0	1	0
Manyatta	1	0	0	0	0	0	0	0	0
Dagoretti	1	1	0	0	1	0	0	0	0
Mwala	2	1	0	0	0	0	0	0	1
Ksm Town EAs	3	0	0	1	1	1	0	0	0
Nyando	3	1	0	1	1	0	0	0	0
Igembe South	1	0	1	0	0	1	0	1	0

Constituency	P3c.9	P3c.10	P3c2	P3c3
Kitui Central	0	1	0	1
Ksm Twn West	0	0	0	0
Kikuyu	0	1	0	1
Yatta	0	0	0	1
Kinagop	0	1	0	0
Makadara	0	0	0	1
Gatanga	0	1		0
Gachoka	0	0	0	0
Masinga	0	1	0	1
Turkana south	1	0	0	0
Embakasi	0	1	0	1
Githunguri	0	0	0	0
Gichugu	0	0	0	1
Starehe	0	0	0	1
Westlands	0	0	0	1
Kandara	0	1	0	1
Igembe North	0	0	0	1
Langata	0	1	0	1
Kajiado North	0	0	0	0
Manyatta	0	0	0	0
Dagoretti	0	0	0	0
Mwala	0	1	0	0
Ksm Town EAs	0	0	0	0
Nyando	0	0	0	1
Igembe South	0	0	0	1