

**INFLUENCE OF CONSTITUENCY DEVELOPMENT FUND ON
EXPANSION OF PUBLIC SECONDARY SCHOOL EDUCATION IN
NORTH MASABA SUB-COUNTY, NYAMIRA COUNTY**

BY

SIMON NG'ANG'A MUNGAI

**A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF
THE DEGREE OF MASTER OF ARTS IN PROJECT PLANNING
AND MANAGEMENT, UNIVERSITY OF NAIROBI.**

2014

DECLARATION

This research project report is my original work and has not been presented for a degree or any award in any university.

Signature.....

Date.....

Mungai Simon Ng'ang'a

L50/63121/2013

This research project report has been submitted for examination with my approval as university supervisor.

Signature.....

Date.....

Dr. Charles Rambo

Senior Lecturer, University of Nairobi.

DEDICATION

I dedicate this research project report to my beloved wife Grace Kinyanjui Ng'ang'a for her moral support and encouragement and to my lovely children John, Mark and Abigael for standing by me.

ACKNOWLEDGEMENT

I am sincerely grateful to my two supervisors, Dr. Charles Rambo and Mr. Awino Joseph for their professional guidance, support and commitment towards the successful completion of this research project report.

My very special appreciation also goes to Mr. Mageto Shem, Mr. Shem Migosi, Mr. Sakaja Yona M, Mr. Enock Otundo, Mr. George Onuonga, and Dr. Mengo Onsembe for having offered expert advice in the entire research process. I also wish to appreciate the tireless efforts of my colleagues in MA class 2014, for without this category of friends, this work would surely fail the threshold of an academic undertaking. These colleagues include, Florence Omollo, Denis Obare, James Kirui and Bernard Makori

Special thanks to Humphrey Njuguna for typesetting this work and editing whenever any changes were to be effected from time to time. Moreover, i also owe a lot of thanks to my research assistants, Dan Kevin, Andrew Wasike, Thomas Morara and Afred Migika, for collecting data professionally and on record time. Lastly, I wish to appreciate all the respondents who offered data to make the research process successful.

TABLE OF CONTENTS

DECLARATION	i
DEDICATION.....	ii
ACKNOWLEDGEMENT.....	iii
TABLE OF CONTENTS	iv
LIST OF FIGURES	viii
LIST OF TABLES	ix
LIST OF ABBREVIATIONS AND ACRONYMS	x
ABSTRACT.....	xi
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background of the study	1
1.2 Statement of the Problem	5
1.3 Purpose of the Study.....	6
1.4 Objectives of the study.....	6
1.5 Research questions.....	7
1.6 Significance of the study.....	7
1.7 Delimitations of the study.....	8
1.8 Limitations of the study	8
1.9 Basic Assumptions of the Study	9
1.10 Definition of significant terms as used in the study.....	9
1.11 Organization of the study	10
CHAPTER TWO: LITERATURE REVIEW.....	12
2.1 Introduction	12
2.2. The concept of expansion of public secondary school education.	12
2.3 Provision of infrastructural facilities on expansion of secondary education.	15
2.4 Provision of Human Resources and expansion of secondary education	22
2.5 provision of Instructional Resources on expansion of secondary education	25
2.6 Financial Resources on expansion of secondary education.....	30

2.7 Theoretical Framework.....	33
2.8. Conceptual framework of the study	35
2.9. Gaps in literature review	38
2.10. Summary of literature review	38

CHAPTER THREE: RESEARCH METHODOLOGY40

3.1 Introduction.....	40
3.2 Research Design	40
3.3 Target Population	41
3.4 Sample Size and Sample selection	41
3.4.1. Sample size	42
3.4.2. Sample selection	42
3.5. Methods of Data Collection	43
3.5.1. Instruments pretesting	43
3.5.2 Instruments Validity	43
3.5.3 Instruments Reliability	44
3.6. Data Collection Procedures	45
3.7 Methods of Data Analysis	45
3.8. Operationalization of the study variables	46
3.9. Ethical Considerations in research	49

CHAPTER FOUR : DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION51

4.1 Introduction	51
4.2 Questionnaire Return Rate	51
4.3 Demographics of the respondents.....	52
4.3.1 Characteristics of the respondents by age	52
4.3.2 Characteristics of the respondents by sex	53
4.3.3 Marital orientations of the respondents	54
4.3.4 Level of education of the respondents.	55
4.3.5: Characteristics of respondents by area of business operations	56

4.3.6: Length of engagement with CDF funded education projects.....	57
4.4 Influence of CDF funded infrastructure projects on education expansion	58
4.4.1 The number of CDF funded infrastructure projects on education expansion.	59
4.4.2 Variety of CDF funded infrastructure projects on education expansion	60
4.4.3 Adequacy of CDF funded infrastructure projects on education expansion	61
4.4.4 Frequency of funding infrastructure projects on education expansion	62
4.5. Provision of human resources on expansion of secondary school education	63
4.5.1 The number of hired teachers on expansion of secondary school education..	64
4.5.2. Cadre of human resources on expansion of secondary education	65
4.5.3. Adequacy of these human resources on expansion of secondary education .	66
4.6 Influence of instructional materials on expansion of secondary education	67
4.6.1 Influence of the number of instructional materials	67
4.6.2 Variety of instructional materials on expansion of education	68
4.6.3 Influence of adequacy of instructional materials on expansion of education .	69
4.7 Provision of financial resources on expansion of secondary education	70
4.7.1 Provision of financial resources on expansion of secondary education	70
4.7.2 Areas of financial resources on expansion of secondary education	71
4.7.3 Adequacy of financial resources on expansion of secondary education	72
4.7.4 Frequency of offering of financial resources on expansion of education.....	73

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND

RECOMMENDATIONS.....	75
5.1 Introduction.....	75
5.2 Summary of the finding	75
5.3 Conclusion	81
5.4. Recommendations.....	82
5.4.1 Recommendation for policy formulation.....	82
5.4.2 Recommendation for further Research.	83

REFERENCES	84
APPENDIX A: Letter of Trasmittal	88
APPENDIX B: Research Questionnaire.....	89

LIST OF FIGURES

Figure 2.1 Conceptual framework of the study	37
--	----

LIST OF TABLES

Table 3.1 Sampling Selection Procedures	42
Table 3.2 Operationalization Table.....	47
Table 4.1: Questionnaire Return Rate.....	51
Table 4.2: Age characteristics of respondents	52
Table 4.3 Sex features of the respondents	53
Table 4.4: Marital orientations of the Respondents	54
Table 4.5. Level of education of the respondents.	55
Table 4.6. Area of project engagement.....	56
Table 4.7. Length of engagement with CDF funded education projects.	58
Table 4.8: Number of CDF funded infrastructure projects on education expansion	59
Table 4.9 CDF funded infrastructure projects on education expansion.....	61
Table 4.10 Adequacy of CDF funded infrastructure projects on education expansion	62
Table 4.11 Frequency of funding infrastructure projects on education expansion	63
Table 4.13 Cadre of hired human resources on expansion of secondary education	65
Table 4.12: The number of human resources on expansion of secondary education	64
Table 4.14 Adequacy of human resources on expansion of secondary education.....	66
Table 4.15: The number of instructional materials on expansion of education.....	68
Table 4.16: Influence of variety of instructional materials on expansion of education	69
Table 4.17: Adequacy of instructional materials on expansion of education	70
Table 4.18: Amount of financial resources on expansion of secondary education	71
Table 4.19 Areas of financial resources on expansion of secondary education	72
Table 4.20 Adequacy of financial resources on expansion of secondary education	73
Table 4.21 Frequency of offering of financial resources on expansion of education	74

LIST OF ABBREVIATIONS AND ACRONYMS

ANOVA	:	Analysis of Variance
ANCOVA	:	Analysis of covariance
CDF	:	Constituency Development Fund
CDFC	:	Constituency Development Fund Committee
COPE	:	Columbia's Committee on Public Education
EFA	:	Education for All
FPE	:	Free Primary Education
G O K	:	Government of Kenya
ITBS	:	Iowa Test of Basic Skills
MDG	:	Millennium Development Goal
PMC	:	Project Management Committee
SAT	:	Scholastic Achievement Test

ABSTRACT

The purpose of the study was to determine the influence of Constituency Development Fund (CDF) on expansion of Secondary school education in North Masaba Sub-county, Kitutu Masaba Constituency in Nyamira County. The study used descriptive survey research design to; Establish how Constituency Development Fund's provision of physical facilities has led to expansion of public secondary school education in North Masaba Sub-county, Determine how Constituency Development Fund's provision of human resources has contributed to the expansion of public secondary school education in North Masaba Sub-county , Find out how Constituency Development Fund's provision of material resources has contributed to the expansion of public secondary school education in North Masaba Sub-county, The extent to which provision of financial resources contributes to expansion of secondary school education in North Masaba subcounty. The study employed a descriptive survey design. It employed a sample size of 30% of the targeted sample. Both sample size and census were employed.

Data analysis was done against the backdrop of the key study variables: influence of CDFs provision of infrastructural facilities, provision of human resources, provision of instructional materials and provision of financial resources on expansion of public secondary school education in North Masaba Sub County.

Conclusions from the study findings reveal that CDF as a package of funds for public institutions plays significant role in the expansion of public secondary school education, and being the only popular devolved fund at the grass root, it is being felt in the entire public sector.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Availability of educational resources is very important because of its role in the achievement of educational objectives and goals. The extent to which an organization like educational institution attains its objectives is directly proportional to the educational resources available and their utilization. Educational resources can be categorized into human, material and physical resources.

Focusing on a study based on influence of learning resources on expansion of educational opportunities in Singapore, Belio (2012) observed that Singapore had set aside a kitty meant to provide basic educational facilities in public secondary schools in order to improve learning in schools. In this attempt, learning infrastructures, learning and teaching resources, besides recruitment of additional teaching personnel were all drawn from the established vote.

Grounding his survey on factors influencing expansion of learning institutions in India, Sign (2013) reported that more chances for secondary education were being created steadily through provision of learning and teaching resources in schools. He noted that expansion of education in public institutions could remain a tall order initiative if efforts were not put up to increase learning space, purchase adequate learning materials and recruit more teaching personnel.

While working with community based organizations in Australia, Alion (2012) indicated that the Aborigines community had hardly embraced modern education and therefore being the epicentre of Non Governmental Organizations in Australia. In their effort to

offer education to this marginalized group, diverse resources were being mobilized to fund various learning facilities in schools to improve the learning environment for effective learning. Individuals have perceived and acknowledged the purpose and function of resource in effective teaching and learning.

Hallack (2000) emphasized that the availability, relevance and adequacy of educational resource items contribute to academic achievement and that unattractive school buildings, crowded classrooms, non-availability of playing ground and surroundings that have no aesthetic beauty can contribute to poor academic performance. Fuller (2005) discovered that students who had used two or more books were almost three times better than those who had no textbooks in school. Reporting from her study anchored on factors influencing academic performance of students in public secondary schools in Kwazulu Natal region in South Africa, Zonna (2010) observed that academic progress was a function of adequate availability of learning and teaching resources, both in material and non materials forms.

Expansion of educational opportunities in any learning institution demands investment on physical materials that support effective learning outcomes, Sembene (2013). Looking at the status of public schools in Senegal in terms of student's academic performance, Sembene noted that institutions which were well equipped with learning resources often registered attractive performance. He recommends that special attention ought to be put in mobilizing more funds to cater for provision of facilities that support effective learning outcomes in schools.

Having undertaken a study in Ghana based on influence of learning and teaching resources on expansion of educational opportunities in public secondary schools, Omuthe (2010) indicated that sufficient learning space, availability of learning materials, provision of adequate teaching staff and presence of conducive learning environment, are vital ingredients for meeting the goals of education for all.

Factoring learning and teaching resources on students academic performance in public learning institutions in Uganda, Gurachi (2013) observed that achievement in education was a function of the extent to which basic resources are availed, for no meaningful learning outcome would be attained by resource disadvantaged institutions. His recommendation was that the government should set special funds to cater for learning materials and infrastructure to expand educational opportunities for its youth, without which less equipped schools would be unattractive to learners.

In Tanzania, Zena (2012) grounding her work on the influence of devolved funds on expansion of educational opportunities in basic learning institutions reported that through these funds, more schools were being put up, teaching staff employed and learning facilities improved in order to have many children in schools. Through this initiative, basic education had expanded by 23% in the last six years since the inception of the programme. After the Rwandese Genocide in 1994, when dozens of human lives were mercilessly lost, the government in cooperation with the development partners embarked on the reconstruction process for restoring the destroyed institutions. One of the key institutions considered in this arrangement was the construction of more schools, equipping them with the basic learning facilities and hiring more teachers so as to expand

education to obtain the much needed human capital for economic emancipation of a country torn by ethnic polarization.

In Kenya, since independence in 1963; the expansion of learning institutions has been one of the greatest achievements in education sector. Achievements of access to education during the last four decades have been possible through the establishment of a network of schools throughout the country. This has resulted in an increased participation by groups that previously had little or no access to schooling.

Enrolment of a greater percentage of girls and indeed the attainments of Universal Primary Education (UPE) has been the long-term objective in the primary education sub sector (Sifuna, 2004). The introduction of Free Primary Education (FPE) in 2003 and Subsidized Secondary Education (SSE) was in line with the Millennium Development Goals (MDGs) which call for attainment of UPE and Education For All (EFA) by the year 2015, (Kinyanjui, 2007).

At the secondary school level, the government has introduced bursaries for needy students. Recent initiatives to improve access to education at this level include subsidizing of school fees by the government under the free secondary education Program and the establishment of the Constituency Development Fund (CDF) by the government, Onditi (2013).

In the foregoing perspective, the value of any educational system as an investment lies in its capabilities to continuously serve its clients better and remain relevant. In this regard, educational planners and managers are faced with the challenges of providing adequate and qualitative resources for the system. It is on this basis that this study sought to

examine influence of Constituency Development Fund on expansion of public secondary education in North Masaba Sub-County, Nyamira County.

1.2 Statement of the Problem

In an attempt to expand educational opportunities to accommodate the increased enrolment of students in secondary schools as a result of the introduction of free primary in Kenya in 2003, the government has rolled out several programmes, such as KESP and bursary for the needy students with the intension of improving access, yet every year pupils complete primary school level, many fail to secure chances in the existing secondary schools due inadequate learning space, Chekirui (2013).

Moreover, several NGOs such as World Vision, AMURT and other community based outfits also focus on improving access to educational opportunities in North Masaba Sub-County through allocation of bursaries, provision of learning materials and funding infrastructure projects in public secondary schools to secure suitable learning conditions, but such efforts have made minimal change.

With the introduction of CDF in 2003, it was expected that every constituency would set aside a considerable amount of money from the CDF kitty to finance education in their respective public secondary schools. The funds were expected to be used to provide bursaries to students from needy background that would otherwise not access education. In addition, physical facilities like science laboratories, classrooms and libraries needed to be constructed or improved upon so as to ensure quality education and the realization of vision 2030. According to North Masaba Sub County Education Department Report (2014) on the expansion status of education opportunities, through all resources available

from different sources for secondary schools, expansion has staggered at 2% over the last five years.

It is on account of the realization of the marginal expansion index that this study sought to examine influence of CDF in expanding secondary school education in North Masaba Sub-County, Nyamira County.

1.3 Purpose of the Study

The purpose of the study was to examine influence of constituency development fund on expansion of public secondary school education in North Masaba Sub-county, Nyamira County.

1.4 Objectives of the study

The study was guided by the following objectives:

1. To assess how Constituency Development Fund's provision of infrastructural facilities influences expansion of public secondary school education in North Masaba Sub-county.
2. To evaluate the extent to which Constituency Development Fund's provision of human resources influences expansion of public secondary school education in North Masaba Sub-county.
3. To examine the influence of Constituency Development Fund's provision of instructional resources on expansion of public secondary school education in North Masaba Sub-county.

4. To explore the extent to which Constituency Development Fund's provision of financial resources influences expansion of public secondary school education in North Masaba Sub-county.

1.5 Research questions

1. To what extent does Constituency Development Fund's provision of infrastructural facilities influence expansion of public secondary school education in North Masaba Sub-county?

2. How does Constituency Development Fund's provision of human resources influence expansion of public secondary school education in North Masaba Sub-county?

3. What influence does Constituency Development Fund's provision of instructional resources have on expansion of public secondary school education in North Masaba Sub-county?

4. Of what contribution does Constituency Development Fund's provision of financial resources have on expansion of public secondary school education in North Masaba Sub-county?

1.6 Significance of the study

In this study, it was hoped that the findings would enhance effective and efficient utilization of the CDF funds by the local PMCs managing projects at the grass root level in North Masaba Sub County by focusing attention to projects that would contribute to expansion of educational opportunities among other priority areas. In addition, the findings would also be expected to sensitize the general public on their need to participate in decision making in matters relating to CDF, particularly identification of the projects

that would address the needs of the various stakeholders in the Sub County. Besides, the results of the study would aid in policy formulation by the government to ensure that the funds are prudently managed to give value for money spent on each project. Moreover, the study findings would also be useful to the policy makers in academic field to develop policies that would enhance expansion of educational opportunities in the entire country.

1.7 Delimitations of the study

The study was anchored on influence of Constituency Development Fund on expansion of public secondary school education in North Masaba Sub- County, Nyamira County. It was confined to all public secondary schools with diverse characteristics such as boarding boys' schools, boarding girls' schools, boarding mixed schools and mixed day schools in the sub county.

1.8 Limitations of the study

The data collected largely depended on the accuracy of records kept on CDF funded projects by school head teachers. Where such records were not well maintained it presented challenges of accurate data access. This challenge was addressed by verifying records of disbursement of the funds from the Masaba North CDF Office with the records of expenditure from respective schools.

Moreover, CDF being a highly political financial facility, access to the records of various allocations by other persons were met with a lot of suspicion. The researcher handled this limitation by disclosing that the information was being sought for academic purpose only

and assured the respondents that any information obtained would be treated with utmost confidentiality.

The study having been done in North Masaba Sub County known for its reception of relatively high amount of rainfall, challenges ranging from continuous heavy torrents up to and including poor roads impeded the study. However, these weather issues were addressed by visiting other interior places on motor bikes and others accessed on foot. In order to enhance data collection, four well trained research assistants were involved in self administering the questionnaire to the respondents.

1.9 Basic Assumptions of the Study

The study was grounded on the basic assumption that the respondents would be willing to provide information objectively and honestly. Furthermore, the study also assumed that the data collection instruments would be valid and reliable in measuring the desired outcomes and that the study sample would be representative of the target population in its major characteristics.

1.10 Definition of significant terms as used in the study

Constituency Development Fund: grants from the government that is used to facilitate Development projects including education development in the constituency.

Expansion: improvement of the teaching and learning resources in order to ensure sustainable education practices, functions, services and practices.

Influence: the effect of a particular treatment on the desired variable.

County: Region legally identified as a distinct entity for government administrative purpose and community service.

Infrastructural facilities: entails physical resources that enhance learning and teaching which include Classrooms, dormitories, laboratories, libraries and computer laboratories among others.

Public secondary schools: refers to schools registered and owned by the government through the Ministry of Education.

Human resources: refers to manpower that can be hired to undertake various projects within the school.

Instructional resources: includes all learning and teaching materials

1.11. Organization of the study

This research report is organized in five chapters, with chapter one featuring background of the study, statement of the problem, purpose of the study as well as objectives of the study. also highlighted in chapter one are the research questions of the study, significance of the study, limitations of the study, basic assumptions of the study, delimitations of the study and definition of significant terms as used in the study.

Chapter Two presents a detailed review of literature on the area of this study. It reviews such literature in relation to the study variables. It also puts to focus the theoretical framework and the conceptual framework of the study.

Chapter Three presents the research methodology used in the study. Aspects of the research methodology employed include, Research design, target population, sample size and sample selection, data collection instruments, instruments validity and piloting. Included also in this chapter are the data collection procedures, methods of data analysis, operationalization of the variables and ethical considerations in research. While chapter four deals with data analysis, presentation, interpretation and discussion, chapter five captures summary of findings, conclusion and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section presents review of literature on influence of Constituency Development Fund on expansion of public secondary school education in North Masaba Sub County, Nyamira County. On this account, it examines literature on how Constituency Development Fund's provision of infrastructural facilities; provision of human resources; provision of instructional resources and provision of financial resources influence expansion of public secondary school education in North Masaba Sub-county. Besides, this chapter also features the theoretical framework and conceptual framework upon which the study is grounded.

2.2. The concept of expansion of public secondary school education.

Efforts to attain growth in education sector by all nations across the world have the core fictions of most international organizations and other NGOs championing expansion of educational opportunities to cater for the ever increasing demand for education in order to realize sustainable economic development, Andy (2010). Several scholars in the education sector have put a lot of premium on the construction of more learning institutions as a fundamental step towards realizing educational needs for all. In his study focusing on factors influencing expansion of basic education in China, Sanghuu (2011) noted that, with little efforts to fund infrastructural development in schools, fewer chances exist which can hardly absorb the increased demands for education.

Anderson (2009) discovered that teachers who regularly monitor and supervise their students' learning by checking students' work and helping individual student to overcome errors and learning difficulties are likely to have students who exhibit higher level of achievement. Bajah (2009), Oni (2005) and Adesina (2000) discovered that human resources played the important role in the teaching-learning situation than any other factor of production and that the quality of education hinges upon the qualities of teachers available.

Edward (2001) found that as school's condition improved from one category, for example, from poor to fair students' standardized achievement scores rose significantly. The Saginaw Schools Project in Canada is another study that noted the relationship between students' achievement and physical facilities. (Claus and Girrback (2005). Lorton et al (2009) posited that learning experiences are richest when the environment (physical resources) around them meets their needs through its adequacy and effective utilization. Walberg et al (2002) in their own contribution reported that children learn best when they can actively explore an environment rich in adequate material.

Newton (2007) professed that the magnitude of instruction that are more scientific based, make instruction more powerful; make learning more immediate and finally make access to education more equal. Adeogun (2001) discovered a very strong positive significant relationship between instructional resources and academic performance. According to him schools endowed with more resources performed better than schools that are less endowed. This corroborated the study of Babayomi (2009) that private schools performed

better than public schools because of the availability and adequacy of teaching and learning resources.

Adeogun (2001) discovered a low level of instructional resources available in public schools and stated that our public schools are starved of both teaching and learning resources. He expresses that effective teaching cannot take place within the classroom if basic instructional resources are not present.

Loxley (2004) revealed that inadequate supply of textbooks in schools is having a toll on teaching and learning activities in many of the countries in the world. According to him, the World Bank data recorded the number of student to a textbook as ratio 20: 1. Sodimu (2008) in his findings reported that based on the high cost of textbooks, many students have been unable to buy books that will help to promote the quality of education they receive in Lagos state public secondary schools. He even stressed that parents believed so much in government funding the education in public schools to the extent that they become non-chalant towards equipping their schools with textbooks.

Nkuuhe (2005) highlighted some of the bad influence as, teachers' abdication of teaching responsibility to textbooks at the expense of original teaching method; textbooks does not give room for flexibility, instead there are mechanical division of the curriculum and no provision made for individual differences among students.

Giwa and Illo (2000) expressed the problems militating against schools inspection as shortage of manpower and quality of the personnel available for the work. According to them, in most African countries the roles of inspectors tend to be ineffective due to severe resource constraints. Fagbamiye (2004) posited that government should reduce its responsibilities to monitoring of what transpires in the schools to ensure quality.

Beeby (2006) reported that good education costs more than bad education. Inadequacy of funds handicaps principals in their administrative and academic functions.

2.3 Provision of infrastructural facilities on expansion of secondary education.

Wales (2005) defines Physical resources to include classrooms, lecture theatres, auditoriums, typing pools, administrative block, libraries, laboratories, workshops, gymnasia, and assembly halls, special rooms like sickbay, staff quarters, students' hostels, kitchen, cafeteria, lavatory and toilet.

For many years there has been considerable interest and research regarding the relationship between physical facilities and student achievement. One of the first studies to analyze this relationship was a 2000 doctoral study conducted by Tak Cheung Chan. In his research Chan (2000) studied eighth graders in 191 public schools across Georgia. Chan's results concluded that there is a positive correlation between building conditions and the academic achievement of students. He found that after controlling for socioeconomic status, students in air conditioned buildings showed improved scores in the Iowa Test of Basic Skills (ITBS) vocabulary section over students in non- air

conditioned buildings. No significant differences were observed in student scores on the reading, language, work study and mathematics sections of the test.

Bowers and Burkett (2007) investigated school building conditions and student achievement to see if a relationship existed between student achievement and performance and school building conditions in two rural elementary schools in Tennessee. One of the schools selected was a new building, completed for the opening of the 2003-2004 school years. It was noted that the newer school was equipped with modern amenities such as air conditioning systems, fluorescent lighting and electric heating. The newer school also had a uniform color schemes and acoustical controls that merged with the physical environment as well as newer classroom and teacher furniture. The older building housed 584 students for the 2003-2004 school years. This building had outdated furniture, air conditioning systems that worked infrequently, poorly coordinated color schemes and an outdated acoustical system.

Bowers and Burkett (2007) randomly selected 280 fourth and sixth grade students for their study. They did not attempt to control for socioeconomic status, since both schools served similar populations. Bowers and Burkett analyzed the data using Analysis of Variance (ANOVA), t-tests and chi-square. Students in modern buildings scored noticeably higher in listening, reading, and language and arithmetic than did the students in older buildings. The results of this study indicate that, except for math, the academic Building Conditions and Student Academic Achievement of those students attending the newer building was significantly higher than that of students attending the older building.

The relationship between the conditions of public school buildings in Washington D.C. and student achievement and parental involvement were studied by Edwards (2001). She looked at the deteriorating conditions of Washington D.C.'s public schools and hypothesized that parental involvement and student achievement were affected by the condition of the buildings.

School building conditions were identified by a survey conducted by the District of Columbia's Committee on Public Education (COPE). Buildings were given a rating of poor, fair or excellent. Based on this rating and the student achievement data, as measured by the Comprehensive Test of Basic Skills (CTBS), it was concluded that students housed in poor facilities scored lower than those student housed in excellent facilities. It was noted that schools in poor school buildings scored 5.45% points lower than students in fair school buildings and 10.9% points lower than students in excellent school buildings. These findings concluded that a proper learning environment along with an involved school and community were factors in students academic performance (Edwards, 2001). Edwards recognized that the results of her study were somewhat limited because the information regarding parental involvement was dependent upon how the PTA was organized, the experience and quality of its officers and how cooperative the school administration was in working with the PTA.

Phillips (2007) examined the relationship of building age to the academic achievement and attendance of upper elementary students in both new and old buildings in rural Georgia. Phillips criteria for inclusion in his study were that students in the respective cohorts must have attended the same school for their third, fourth and fifth grade year.

Cohort One, the control group, was comprised of students housed in an older facility throughout their third, fourth and fifth grade year. Cohort Two and Cohort Three, the two test groups, attended older schools, but within the evaluation window were moved to newer buildings. Cohort Two students attended the older building during third and fourth grades and moved to the newer building for fifth grade.

Cohort Three students attended the older building for third grade and then were transferred to the newer building for fourth and fifth grade. The buildings that housed Cohort Two and Cohort Three were similar in design and replicated the entire school program in its move from the older building to the newer one. For the duration of this study all schools had the same principal and the instructional staff was relatively stable (Phillips, 2007). Phillips identified five hypotheses. Two hypotheses examined if students' ITBS scores in reading and mathematics were higher in newer school facilities than in older facilities. Three hypotheses tested the relationship between student attendance and academic achievement of upper elementary students and their ITBS scores on the reading and mathematics exam. Analysis of covariance (ANCOVA) tested these relationships by analyzing the results from Cohort One with the results from Cohort Two and Cohort Three.

The reading and math scores for the fifth grade students attending newer buildings, Cohort Two, were significantly higher than the students in Cohort One who attended older buildings. Additionally, the reading and mathematics scores of the Cohort Three fourth grade students who attended newer facilities were higher than those of the Cohort Two students who attended older facilities. These data are reported in Table 1. Phillips (2007) concluded that moving students to newer school buildings had a positive effect of student achievement and attendance.

Overbaugh (2000) utilized descriptive procedures in his research study. A Chi-square test and cross tabulation of independence was used to test for any differences in frequency distribution. She examined the data by gender, teaching level and experience, and found that teaching level and gender created the most significant variation. She concluded that overall the participants were satisfied with the influence facilities had on professional performance but they did have some concerns.

The responding teachers were aggravated by space utilization and by many non instructional areas which consequently received the lowest ratings. Respondents identified classroom furnishings, space utilization, class size, thermal conditions, and acoustics, well designed and well equipped computer labs and ambient features as the factors that influence their professional behavior and are essential in the design of a school.

Cash (2003) examined the relationship between the conditions of school buildings and student achievement and behavior in small, rural high schools in the Commonwealth of Virginia the data gathered on the various school building conditions were rated as sub-standard, standard and above-standard in this evaluation. Survey categories discussed in the CAPE included items regarding air conditioning, thermal conditions, lighting, interior and exterior painting, color and the presence of graffiti.

Cash (2003) concluded that student achievement was higher in schools with better building conditions. The study offered evidence that building conditions influence student academic achievement; These achievement scores were then used to examine the relationship between structural and cosmetic building conditions in the 21 schools identified as above-standard against the 20 schools rated as sub-standard. The results for cosmetic building conditions revealed that students in above-standard buildings scored one to four points higher than students in sub-standard buildings. The area of social studies was the only exception, where it was found that students in sub-standard buildings scored higher than students in above-standard buildings.

It was also found that when examining structural building conditions, students in above-standard buildings scored lower than students in sub-standard building conditions on five of eight sub-tests: Reading, Basic Composite, Social Studies, Science and Complete Composite. Cash's findings indicated that student academic performance was positively related to building conditions

Earthman, Cash and Van Berkum (2006) conducted a state-wide study of North Dakota's high schools to investigate the possible relationship between selected students variables and school building conditions. They used Cash's methodology and model to examine the relationship between building conditions and student achievement in a larger market. North Dakota was selected because their students had achieved some of the highest scores on the Scholastic Achievement Test (SAT). In 2002, the math scores of North Dakota's eighth grade students were the third highest in an international comparison of scores and their population was relatively homogenous. One hundred ninety-nine high schools throughout North Dakota served as the population for this study. Earthman, Cash and Van Berkum(2006) concluded that a positive relationship existed between building conditions and student achievement with building age.

The only exception was found on the Language Mechanics section where there was no observable difference in academic achievement between schools with standard building conditions and above standard building conditions. In the third study, researchers compared structural building conditions and student achievement and found the conclusions to be incompatible with the previous two studies.

They found that students in above-standard buildings scored one to eight percentile points higher than students in standard buildings in 8 of 13 sections of the CTBS. However, they also found that students in sub-standard buildings scored between three and twelve percentile points higher than students in above-standard buildings on the Math

Comprehension, Math Concept and Application, Math Total and Social Studies sections of the CTBS.

2.4 Provision of Human Resources and expansion of secondary education

Human resources include among others; students, teaching staff, non- teaching staff, bursar, librarian, laboratory attendants, clerks, messengers, mail runners, gatekeepers, gardeners and cooks as well as educational planners and administrators Wales 2005. Increased attention has been devoted recently, both in the field and in the academy, to teacher quality as a potential driver of educational parity, Rowe (2003). A number of recent studies by education scholars and economists have addressed empirically the potential power of teachers to catalyze student retention and/or learning.

Authors have examined the extent to which primary and secondary teachers' personal characteristics, test scores and qualifications (Goldhaber 2006, Rivkin, Hanushek & Kain 2005), demographic match to their students (Dee 2005), pathway into the profession (Boyd, et al 2006), and experience (Rivkin et al. 2005) impact on student performance. In many studies, teachers' experience and qualifications have been found to be associated to some degree with student gains (Darling- Hammond 1999), as has the degree of positive demographic match between a student and his or her teacher (Dee 2005). Other studies (Rivkin et al. 2005, Kane, et al 2006, Rocko 2004) and that while substantial heterogeneity in teacher quality exists, this heterogeneity is not well-captured by observable characteristics such as experience and education.

In addition, with very few exceptions, teacher quality has not been examined at the tertiary level Hoffmann & Oreopoulos (2006) finally; no existing papers known to the author examine the variance of teachers' associations with the success of their poorly-prepared students.

A panel of weekly enrolment snapshots across the semester allows the observation of aggregate attrition patterns, and information on tutors teaching multiple tutorials allows me to ascertain the extent to which individual tutors are associated with both the attrition and the national examination performance of their less well-prepared students. Results demonstrate that teachers do display economically and statistically significantly deferent profiles with regard to both attrition and performance implying that universities' selection of tutors based on teaching style may be a potential tool in shaping the survival strategies of players in the mass education.

On human resources, various educators for example, Ukeje (2000) and Fafunwa (2009) have written extensively on the prime importance of teachers to the educational development of any nation, be it simple, complex, developed or developing. From the writings of these educators, one can infer that whatever facilities are available, whatever content is taught, whichever environment the school is situated and whatever kind of pupils are given to teach, the important and vital role of the teacher cannot be over-emphasized.

Assuming that necessary facilities are adequately provided for, the environment is conducive to learning, the curriculum satisfies the needs of the students and the students themselves have interest in learning, learning cannot take place without the presence of the teacher. Teachers represent a large proportion of the input of an educational system. Coombs (2000) observed that “the problem of teacher supply is not one of simple numbers. It is first and foremost a problem of quantity and of getting the right quality. Fayemi (2001) also observed that “it is a truism that teachers are the hubs of any educational system” that upon their number, their quality and devotion depend the success of any educational system”.

Fafunwa (2009) in his paper “The purpose of teacher education” commented on the importance of teachers when he said: “The demand for more and better schools, the need to relate curriculum to the needs of the child and the environment, the crying needs of the child and his other instructional materials, the desirability of training in vocational and technical skills, and indeed the overall problem of preparing the future citizens of Africa who will be fully oriented to their environment cannot be fully accomplished without the aid of competent teachers”.

Fagbamiye (2007) noted that schools with stable, experienced and qualified teachers usually have better school facilities in terms of school buildings, books and equipments than those schools which have difficulty in attracting experienced and qualified staff. The concern expressed most often by superintendents, personnel directors, and financial officers centered around many interview subjects felt that teacher supply was not only an

issue in Texas, but also nationwide, with one personnel director stating .There is so many teacher needs that they tend to overshadow anything else that may be happening in a school year.

An insufficient supply of well-prepared teachers and administrators is an obstacle for many Sub-counties as they struggle to provide quality instruction for their students. There is thus need to find solutions for supplying, recruiting, and retaining qualified teachers. Teaching and non teaching staff has positive significant effect on students' academic Performance. The finding was in agreement with earlier findings of Bajah (1999), Oni (2005) and Adesina (2000) that discovered that human resources played the most important role in the teaching - learning situation than any other factors of production in the school system. Also, Anderson (2009) discovered that teachers who regularly monitor and supervise their students' learning by checking students' work and helping individual students to overcome errors and learning difficulties are likely to have students who exhibit higher level of achievement.

2.5 provision of Instructional Resources on expansion of secondary education

Education, according to Coombs (2000) consists of two components, inputs and outputs. According to him, inputs consist of human and instructional resources and outputs are the goals and outcomes of the educational process. Both the inputs and outputs form a dynamic organic whole and if one wants to investigate and assess the educational system in order to improve its performance, effects of one component on the other must be examined.

Wales (2005) defined instructional resources to include textbooks, charts, maps, audio-visual and electronic instructional materials such as radio, tape recorder, television and video tape recorder. Other category of material resources consist of paper supplies and writing materials such as biro, eraser, exercise books, crayon, chalk, drawing books, notebooks, pencil, ruler, slate, workbooks and so on.

Instructional resources which are educational inputs are of vital importance to the teaching of any subject in the school curriculum. Wales (2005) was of the opinion that the use of instructional resources would make discovered facts glued firmly to the memory of students.

Savory (2008) also added that, a well planned and imaginative use of visual aids in lessons should do much to banish apathy, supplement inadequacy of books as well as arouse students' interest by giving them something practical to see and do, and at the same time helping to train them to think things out themselves. Savory (2008) suggested a catalogue of useful visual aids that are good for teaching history i.e. pictures, post cards, diagrams, maps, filmstrips and models.

He said that selection of materials which are related to the basic contents of a course or a lesson, helps in-depth understanding of such a lesson by the students in that they make the lesson attractive to them, thereby arresting their attention and thus, motivating them to learn. It is also very vital to have sufficient and adequate human resources in terms of teacher quality for the teaching of all subjects in the school curriculum. Without the teachers as implementing factors, the goals of education can never be achieved. In order

to achieve a just and egalitarian society as spelt out in the Nigerian National Policy of Education (1981), schools should be properly and uniformly equipped to promote sound and effective teaching. Suitable textbooks, qualified teachers, libraries which are adequate should also be provided for schools.

Scarcity of these, according to Coombs (2000), will constrain educational system from responding more fully to new demands. In order to raise the quality of education, its efficiency and productivity, better learning materials are needed. Knezewich (2005) also stressed the importance of having appropriate personnel plan and adequate physical facilities to support educational effort.

Several people have written on the importance of instructional resources to teaching, Oluyori (2006) while stressing the importance of instructional technology commented that if the recently introduced system (6-3-3-4) in accordance with the National Policy on Education is to be a success, then instructional technology has a role to play. Balo (2001) commented that “Audio-visual materials, as integral part of teaching-learning situations help to bring about permanent and meaningful experience. He said that, they provide first-hand experience where possible or of vicarious one where only that is feasible.

In enumerating the factors that could be responsible for varying intra-and inter-school/academic achievement, Coombs (2000), listed four important factors including the acute scarcity of instructional resources which he said constrained educational systems from responding more fully to new demands’. He claimed that, in order to do their part in meeting the crisis in education, educational systems will need real resources that money can buy, they will need a fuller share of the nations’ manpower, not merely to

carry on the present work of education, but to raise its quality, efficiency and productivity.

They will need buildings, equipments and more learning materials. Numerous investigations have also been carried out to find the effects of instructional resources on students' academic achievement. Eminent scholars have also contributed immensely to report the effect of one variable on the other. Consequently, there have been many reports from these studies which had served as useful guides to the present one.

Akintayo (2000) did a survey of the learning and teaching problems of history in the secondary schools in Ekiti central local government area of Ondo State. She made use of 100 students and all history teachers in 6 secondary schools. Questionnaires were distributed to them to respond to. 44% of the students agreed that one of the factors affecting poor performance in history is lack of qualified teachers to teach the subject.

Momoh (2000) carried out a research on the effects of instructional resources on students' performances in WASC examination in Kwara State. He correlated material resources with academic achievements of students in ten subjects. Information was collected from the subject teachers in relation to the resources employed in teaching in five schools. The achievements of students in WASC examinations for the past five years were related to the resources available for teaching each of the subjects. He concluded that material resources have a significant effect on students' achievement in each of the subjects. In the same manner, Moronlola (2002) carried out a research in Ilorin local government of Kwara State. She also used questionnaires to tap information

on the material resources available for the teaching of ten subjects in ten secondary schools. She collected WASC examination results for the past five years and related these to students' achievements in each of the ten subjects and to the amount of resources available for the teaching of the subjects. She also reported a significant effect of material resources on the academic achievements of students in each of the subjects.

In the same vein, Popoola (2000) investigated the effect of instructional resources on the academic achievements of students in Ogun State. Five secondary schools in Abeokuta were used for his study. Questionnaires were designed to elicit responses on instructional materials that were available for the teaching and learning of each of the three school subjects he examined. He collected WASC examination results for five years and compared achievements of students in schools with adequate material resources and achievements of students in schools with inadequate material resources. He found a significant difference in the achievements of the two sets of students.

Akolo (2008) conducted a survey of audio-visual materials for eight Teacher Training Colleges in Kwara State and for twelve Teachers' Colleges in Plateau State of Nigeria. His study considered such elements as equipment and materials owned by each of the selected teachers colleges, utilization of equipments and materials owned, and the number of teachers that had some measure of audio-visual related training. The study revealed that there was under-utilization of instructional equipments in some areas and non-utilization in other areas where the research was conducted.

2.6 Financial Resources on expansion of secondary education

Financial resources are the monetary inputs available for and expended on the education system. These include money allocated to education by the government grants, PTA levy, and donations from philanthropists and internally generated funds. Educational leadership and counseling professor John R. Slate and associate professor Timothy B. Jones examined instructional expenditure ratios in relation to student access and achievement for four reports, finding the relationship between funding and achievements affects a school's ability to reduce the access and achievement gaps, while minority populations, including lower socioeconomic populations, “stand to lose the most.” Doctoral student Maureen Cullen contributed to one study.

Instructional expenditures for strong improvement districts are about 26 percent higher than the state average. This shows that resource allocation is positively related to student academic performance. One explanation for the apparent link between high performance and higher resources for instruction could be that budget decisions in these districts were made specifically with the goal of improving student learning. Other reasons for the higher expenditures could be related to District size.

Bennell and Segerstrom (1998) felt that, the reluctance of multinationals to fund vocational education and training in low income countries in the context of expanding education sector budget need to be reviewed, given the development stages of various countries and overarching problems in post-primary education. Bray (2002) also outlines other factors to be considered, including adopting sustainable cost-effective strategies that ensure strong linkage between formal education, their costs, labour market outcomes

and international flexibility. Indeed, if secondary education is linked to labour market, then returns would be higher, hence justifying increased public financing of secondary education.

In Kenya, private returns to education generally increase with the level of education as revealed in Manda, Mwabu and Kimenyi (2002). Human capital externality for male and female students has a positive impact on earnings for all workers. This analysis gives strong justification for design of sustainable financing mechanisms for post-primary education, particularly secondary education, which is a transitional level to tertiary and university education. This study notes that the government should always be the principal investor in education. Such a role cannot be left entirely to the private sector because future objectives of human resource development involve long-term planning and large financial resources outlays, which only the government is capable of mobilizing.

Secondary school expansion in Zimbabwe can be attributed to high level of policy and financial government commitment and prioritized expenditures sustained for a long period (Lewin and Caillods, 2001).

This contributed to financial sustainability of enrolment growth at secondary school cycle. The country adopted a system of sharing the costs of increased participation among all stakeholders including local authorities, communities and community-based organizations, hence easing the cost burden on the government. Internal efficiency of both primary and secondary school level was improved through adoption of policy on

automatic promotion and transition from standard one through standard 7 and to Form 1 through Form 4. Repetition rates were maintained at low to modest levels at primary and secondary levels, respectively. A policy of employing temporary teachers and double shifting were adopted while maintaining the wage bill at manageable levels.

Lewin and Caillods (2001) brings out the case of Malawi as one of low participation rates at primary (65 percent) and secondary (6 percent) levels in 1995 and nominal transition rate from primary to secondary of 10 percent. The low secondary enrolment rates were associated with low levels of participation at primary and low performance at final grade of primary level leading to minimal number of the pupils meeting the minimum requirement for transition to secondary.

Repetition and dropout rates were estimated at 15-20 percent and 18 percent in primary education, respectively, during the same period. The implementation of FPE in 1994 placed severe budgetary constraints on financing of secondary education estimated at seven or more times higher than that of primary education (1:7).

Towards expanding secondary education in Malawi, the major policy and investment commitments included increasing transition rates from primary to secondary to 30 percent through building of more secondary schools; encouraging the development of private secondary schools; reduction in double shift system, curriculum review and rationalizations ensure quality; deliberate efforts towards increasing girls enrolment in

secondary schools; and improved in-service and pre-service training and establishment of textbook fund to improve textbook provision in secondary schools.

This, as Lewin and Caillods (2001) notes, is attributed to rapid secondary school expansion and sustainable financing, including decentralization of management to principal councils free primary education with grade 1-13 supported with widely distributed school facilities, free text book scheme, high subsidiary secondary education, free uniforms; adequate provision of infrastructure for teacher training and in-service programmes, and high internal efficiency reflected by low repetition (2.6 percent) rates and dropout rates (4 percent).

Countries like the Czech Republic have made financing of secondary education more affordable by increasing the teacher load, increasing the teacher intensity in terms of the pupil-teacher ratio and merging of schools with low enrolment. Other cost reduction measures include individual teacher innovations such as the use of computers in teaching (OECD, 1999).

2.7 Theoretical Framework

This study was anchored on the Theory of Education Production Function. This theory was propounded by an American education economist called Erick A. Hanushek in 1998. In his paper, *'The Role of Education Quality in Economic Growth'*, Hanushek reviewed the role of education in promoting economic well-being. He concluded that there is strong evidence that the cognitive skills of the population – rather than mere school

attainment – are powerfully related to economic growth (Hanushek, 1998). An education production function is the relationship between school and student inputs and a measure of school output. Some researchers are mainly interested in the effect on student performance of the characteristics of educational institutions which include class size, teacher-student ratios, and expenditure per student. In those studies students are usually treated as the ‘raw material’ that educational institutions transform into the final product. Much of the variation in student performance from school to school is related to student characteristics and home-related factors over which schools have no control. The theory gives these two very important academic performance determinants a completely passive role. In one of the earliest investigations of the link between school inputs and achievements outcomes, Coleman (1966) found surprisingly small effects of school resources on student achievement. Recent exchanges between Hanushek and Krueger provide examples of the debate that has characterized this literature, a debate that is continued in their contributions to this issue. For example, Hanushek (1998) and Krueger (1998, 2000) analyze US aggregate time series data on expenditure and NAEP (National Assessment of Educational Progress) test scores, with Krueger concluding that increases in expenditure have led to modest gains in test scores and Hanushek finding ‘not strong or consistent relationship between school resources and student performance.

In setting school policy and in long-range educational planning, knowledge of the educational production function is essential for efficient resource allocation. Without an estimate of the technology of education (the production function) the relationship

between the opportunity cost and expected benefits of particular policies must be little more than guesswork.

Anchored on the Theory of Education Production Function, this study aims to shed light on the level of expenditure that needs to be committed in secondary schools to build their institutional capacity, and then hold them accountable by expecting good academic performance and access in return. The theory helps to focus the study on education as an investment from which returns are expected. It is therefore the most relevant theory that enabled the researcher to investigate the influence of CDF on expansion of public secondary school education in Masaba Sub County.

2.8. Conceptual framework of the study

A conceptual framework refers to the conceptualization of the relationship between variables in the study and shows the relationship graphically or diagrammatically, Mugenda and Mugenda (2003). The study's conceptual framework is regarded as significant for it assists the researcher to quickly perceive the relationship established among various study variables. The conceptual framework of the study is illustrated in figure 2.1

As indicated in the conceptual framework of the study, CDF in Masaba North Sub County offers funds to various secondary schools to cater for different financial needs for purposes of effectively delivering services to the students. Given that all activities in schools can effectively be executed with adequate availability of funds, CDF, being a

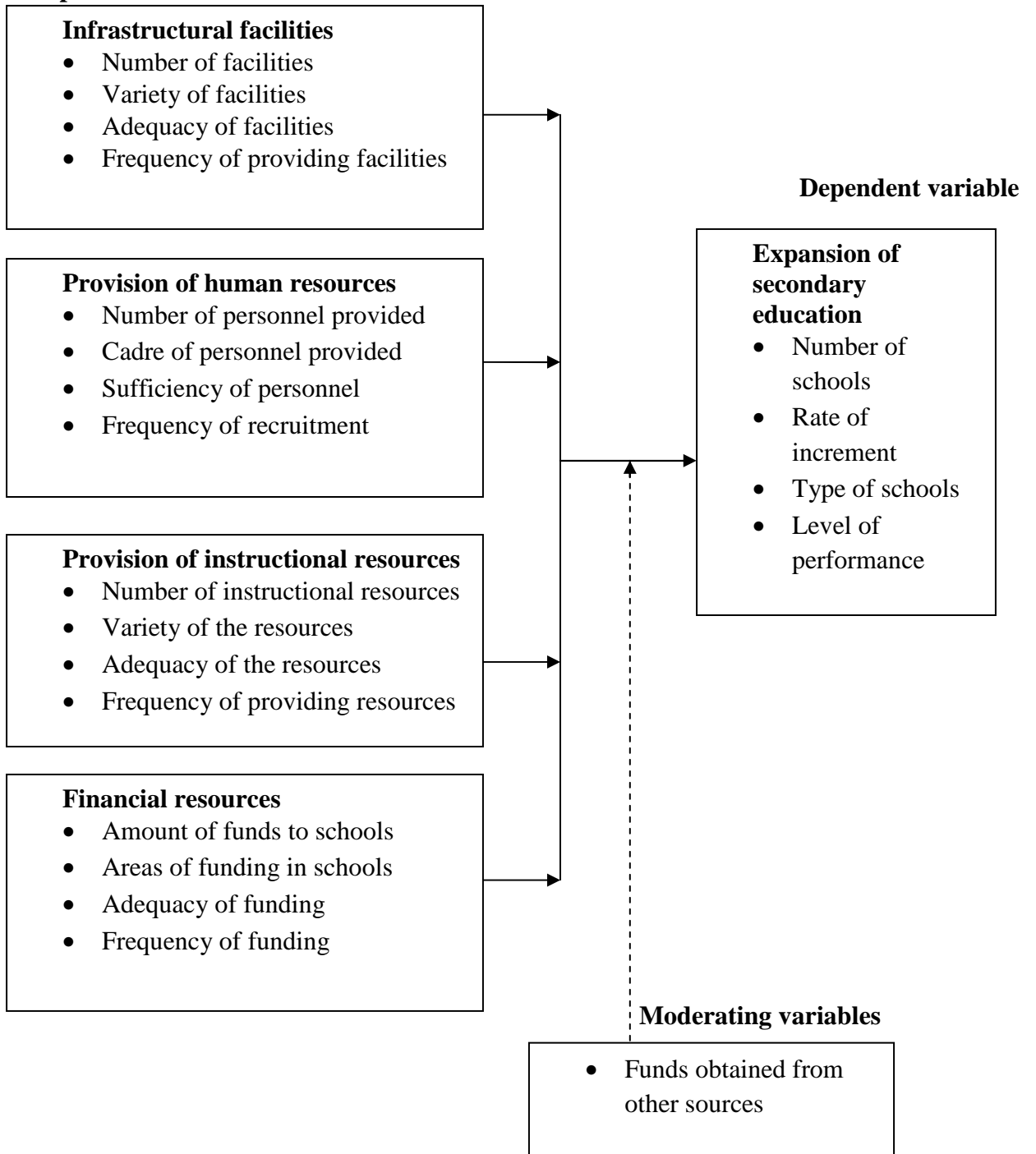
devolved fund for grass root development, plays a significant role in expanding opportunities for learning.

On the account of this fact, schools fund various activities in different magnitudes and yet funds are often scarce and this is the gap that CDF is expected to bridge. In this respect, these funds target core school functional areas such as provision of infrastructural facilities, human resources, instructional materials and financial resources for operational purposes. These functional areas have funds packaged in CDF funds and other devolved funds.

For meaningful expansion to be realized to offer more opportunities to accommodate many learners, all these core funding areas in secondary schools must be given adequate attention, hence the interplay of the study variables as captured in the conceptual framework.

Figure 2.1 Conceptual framework of the study

Independent variables



2.9. Gaps in literature review

The literature review in this work captures various studies conducted in different regions across the world concerning expansion of educational opportunities in order to accommodate the increasing demand for learning. Given that all nations strive for economic development and the key driving force in achieving this desire lies in acquisition of knowledge and skills, investment in education becomes great preoccupation of all countries.

Whereas the role of education in economic development cannot be overemphasized, more funds are being channelled in other sectors in total disregard to the sector of education, reversing the gains to be realized in expansion of educational opportunities. In the interest of the need to create more learning opportunities, devolved funds such as LATIF and CDF offer to provide hope to many struggling schools to achieve their educational objectives.

2.10. Summary of literature review

As indicated in the literature review, expansion of public secondary school education greatly depends on the availability of fundamental learning facilities. These facilities are used in different activity areas in schools which all are a measure of educational expansion.

These various functional areas in educational institutions include expansion on infrastructural facilities, provision of human resources, provision of instructional materials and provision of funds for operational purposes. The literature review undertaken in this study therefore captures these themes in details all over the world.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology that was used in the study. It outlines research design, target Population, Sample size and sample selection. It also puts to focus data collection instruments, highlighting instruments pretesting, instruments validity and instruments reliability. Besides, it also features data collection procedures, methods of data analysis, operationalization of the study variables and ethical issues in research.

3.2 Research Design

In this study, a quantitative research paradigm packaged in a descriptive research design was adopted, given the fact that the study was quantitative in nature. Descriptive research design is a scientific method which involves observing and describing the behavior of a subject without influencing it in any way (Shuttle worth, 2008). It describes data and characteristics about the population or phenomenon being studied, it answers the questions who, what, where, when and how (Peter, 1994). Descriptive research designs exhibit the advantage of acquiring a lot of information through description and it is useful for identifying variables and hypothetical constructs. The choice of this technique was guided by the fact that the study aimed at generating findings which would facilitate a general understanding and interpretation of influence of CDF on expansion of public secondary education in North Masaba Sub County.

3.3 Target Population

According to (Kothari 2004), a target population refers to that population of subjects from where a study sample is drawn and upon which the results of the study will be generalized. In the view of Tromp and Kombo in Onuonga (2011), a target population defines the accessible number of the targeted population from where a researcher seeks to select sample for the study. According to Sub-County Education Office Report (2014) on the number of CDF funded education projects in public secondary schools in North Masaba Sub County from 2003-2014 stands at 518.

The report further indicates that all the current 74 public secondary schools have benefited from such project funds. The target population comprised of PMC members in charge of implementation of CDF funded education projects in the public secondary schools and all the Kitutu Masaba CDFC members who allocate CDF funds to PMCs for projects implementation. The study therefore targeted 8 Kitutu Masaba CDFC members and 7 PMC members per school multiplied by 74 public secondary schools, giving a total population of 526.

3.4 Sample Size and Sample selection

According to Mugenda and Mugenda (2003), a sample is defined as a subject of a target population, sampling, on the other hand, is defined as the selection of some part of an aggregate or totality on the basis of which a judgment or an inference about the aggregate is made, Kothari (2005).

3.4.1. Sample size

In the views of Tromp and Kombo (2002), a suitable sample size is that which is representative of the target population in major characteristics. The larger the sample, the more representative it is to the target population. Gay in Mugenda and Mugenda (2003) suggests that for descriptive studies, a sample size of 10% - 30% is appropriate for analysis and reporting, therefore, a sample size of 30% of the PMC members gave a sample size of 162 respondents, in addition to all the 8 CDFC members.

3.4.2. Sample selection

Given that the study was descriptive in nature, it employed a probability sampling design to ensure high objectivity in sample selection was achieved by giving each item in the target population equal chances of being selected and included in the final sample. In account of this reality, stratified random sampling technique was used by dividing the target population (PMCs) on the basis of distinctive project categories as illustrated in table 3.1. Whereas PMCs were subjected to sample selection procedures, census was used include all the 8 CDFC members in the final study sample.

Table 3.1 Sampling Selection Procedures

Stratum	Total Population	Sample Percentage	Sample Size
Infrastructure projects	232	30	70
Instructional materials	80	30	24
Human resources	10	30	03
Financial resources	12	30	04
Combination projects	184	30	55
Total	518	30	155

3.5. Methods of Data Collection

In this study, questionnaire was prepared and used as the main instrument of data collection. The questionnaire was developed in such a manner that it consisted of both open and close-ended questions. The close-ended or structured questions were preferred for purposes of conserving time and money as well as facilitation of ease of analysis as they were in immediate usable form; while the unstructured questions were helpful in encouraging the respondents to give in-depth and felt response without feeling held back in revealing of any information.

3.5.1. Instruments pretesting

Pre-testing, also referred to as piloting is a preliminary study conducted on a small scale in order to establish the effectiveness of data collection instruments. According to Mugenda and Mugenda (2003), a pretest sample should be between 1% to 10% depending on the sample size and in this study, pretest sample of 10% of the sample size (162) was used (16 respondents). Piloting was done in Kitutu Chache Sub County by administering 16 copies of questionnaire to the pretest sample of 16 respondents. The questionnaire were then be collected, checked to verify if they met validity and reliability threshold, with the necessary changes effected to ensure that they solicited the intended outcomes in the actual study.

3.5.2 Instruments Validity

Validity is perceived as a measure of the degree to which differences found with a measuring instrument depict true differences among the items being measured, Kothari

(2005). According to Mugenda and Mugenda (2003), an instrument is validated by proving that its items are to greater degree representative of the characteristics it is supposed to measure.

In establishing the validity of the research instrument, adequate coverage of the research objectives was considered in the development of the questionnaire. Randomization was undertaken in selecting items from the target population into final sample to check the possible influence of any extraneous variables in the study. Validity of the questionnaire was also ascertained through peer review and expert's judgment which helped in shaping up the questionnaire items in conformity to the objectives of the study, as well as ensuring that all items solicited the desired results.

3.5.3 Instruments Reliability

Reliability of an instrument is a measure of the consistency with which a research instrument produces the same results when administered to the same group over a time interval, (Kothari 2005). Reliability is a measure of the degree to which an instrument yields consistence results or data after repeated trials, Mugenda and Mugenda (2003).

In this study, split-half method of measuring reliability was employed and in this case, the questionnaire items were designed into parts on the basis of odd and even appearances and Pearson's products moment coefficient of correlation (r) between the two halves be calculated, in which a correlation coefficient of an alpha value of 0.85 was obtained indicating that the data collection instrument was reliable. Spilt-half method was

preferred as it required only one testing session hence guarding against the possibility of introducing errors associated with the measurement precision.

3.6. Data Collection Procedures

In Kothari (2005) data collection procedures describes the steps and their sequences as well as actions to be initiated in conducting research effectively. Having developed and defended the research proposal, the researcher applied for a research permit from the National Council of Science and Technology, Ministry of Higher Education, upon presentation of corrected copies of a research proposal.

The researcher therefore embarked on data collection by presenting the research permit to all relevant authorities in the Sub County seeking permission to obtain data. The researcher adopted the steps proposed by Wiseman and Mc Donald (1980) which ensures enhanced questionnaire response rate. In the light of this necessity, a cover letter attached to each copy of the questionnaire addressed to the respondents disclosing the significance of the study as well as commitment to the confidentiality between the researcher and the respondents.

3.7 Methods of Data Analysis

Before processing the responses, the completed copies of questionnaire were edited for completeness and consistency. A content analysis and descriptive analysis were then employed. The close-ended questions were then coded to enable the responses to be grouped into categories.

Owing to the fact that the study was descriptive in nature, descriptive statistics was used in data analysis. Such descriptive statistics took the form of frequencies and percentages and information was presented using frequency distribution tables

3.8. Operationalization of the study variables

Operational definition of the study variables is a technique employed in research to establish the indicators to be measured in order to determine the influence of the independent variables on the dependent variable. In this study, provision of infrastructural facilities was measured on the basis of the number of infrastructural projects financed through CDF funds, the variety of such projects, adequacy of the projects to meet the needs of each school and the frequency of funding such projects.

Provision of human resources was measured against the indicators, the number of personnel recruited using CDF funds, cadre of personnel, sufficiency of personnel and how often such were recruited for schools. Provision of instructional materials were grounded on the number of instructional materials offered to schools, variety of the materials, adequacy of the materials and frequency of providing such materials. Provision of financial resources was considered on such parameters as the amount of funds given to schools, areas of usage, adequacy of funding and frequency of funding.

Table 3.2 Operationalization Table

Objectives	Variables	Indicators	Measurements Scale	Data Collection Method	Data Analysis
To examine the extent to which provision of infrastructural facilities influences expansion of public secondary education.	Independent Provision of infrastructural facilities	Number of projects Variety of projects Frequency of provision Adequacy of projects	Nominal Ordinal Ratio	Questionnaire	Descriptive
	Dependant Expansion of public secondary school education	Number of schools Rate of increment Type of schools Level of performance	Nominal Ordinal Ratio	Questionnaire	Descriptive
To determine the influence of human resource on expansion of secondary school education.	Independent Provision of human resources	Number of personnel Cadre of personnel Areas of recruitment Frequency of recruitment	Nominal Ordinal Interval	Questionnaire	Descriptive

	Dependent Expansion of public secondary school education	Number of schools Rate of increment Type of schools Level of performance	Nominal Ordinal Interval	Questionnaire	Descriptive
To investigate the influence of instructional materials on expansion of secondary education	Independent Provision of instructional materials.	Number of materials Variety of materials Adequacy of materials Frequency of provision	Nominal Ordinal Interval	Questionnaire	Descriptive
	Dependant Expansion of public secondary school education	Number of schools Rate of increment Type of schools	Nominal Ordinal Interval	Questionnaire	Descriptive

To explore the extent to which provision of financial resources influences expansion of	Independent provision of financial resources	Amount of funds provided Areas of funding Adequacy of funds	Nominal Ordinal Interval	Questionnaire	Descriptive
---	--	---	--------------------------------	---------------	-------------

secondary education		Frequency of funding			
	Dependant Expansion of public secondary school education	Number of schools Rate of increment Type of schools Level of performance	Nominal Ordinal Interval	Questionnaire	Descriptive

3.9. Ethical Considerations in research

There are several reasons why it is important to adhere to ethical norms in research. First, norms promote the aims of research, such as knowledge, truth, and avoidance of error, David Resnik (2011); For example, prohibitions against fabricating, falsifying, or misrepresenting research data promote the truth and avoid error. Second, since research often involves a great deal of cooperation and coordination among many different people in different disciplines and institutions, ethical standards promote the values that are essential to collaborative work, such as trust, accountability, mutual respect, and fairness. For example, many ethical norms in research, such as guidelines for authorship, copyright and patenting policies, data sharing policies, and confidentiality rules in peer review, are designed to protect intellectual property interests while encouraging collaboration. Third, many of the ethical norms help to ensure that researchers can be held accountable to the public, Otunga (2012).

According to William (2006), some of the ethical issues as informed consent, confidentiality and anonymity. Given the importance of ethical issues in research, the researcher in conducting the study adhered to the following; the researcher carried out the research alone and did not take somebody's work. In cases where someone else's work was included in the research, it was acknowledged through quotations and citations. The researcher also ensured that there were neither physical nor psychological harm to the respondents. Further, the respondent's identity was hidden.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter captures data analysis, presentation, interpretation, and discussion. Data analysis was done against the backdrop of the key study variables: influence of CDFs provision of infrastructural facilities, provision of human resources, provision of instructional materials and provision of financial resources on expansion of public secondary school education in North Masaba Sub County.

4.2 Questionnaire Return Rate

Copies of the questionnaire were self administered to the respondents by four trained and motivated research assistants, who were being closely supervised by the researcher and the following return rate obtained as illustrated in table 4.1.

Table 4.1: Questionnaire Return Rate

Target population	Sample size	Return Rate	Return Percentage
518	155	120	77.42%

In Table 4.1, it is revealed that of the 155 copies of questionnaire administered to the respondents, 120 were received back completely filled giving a response rate of 77.42%. According to Mugenda and Mugenda (2003), response rate refers to the number of subjects who respond to questionnaire. A response rate of 50% is deemed adequate for analysis and reporting, a response of 60% is good and a response rate of 70% and over is

very good. On account of this, the study is deemed to have returned an excellent questionnaire response rate.

4.3 Demographics of the respondents

In this section, the respondent’s demographic features that were considered significant to the study are highlighted. These demographic characteristics include, age, sex, marital status, level of education, area of project category and the duration within which the respondents have been in contact with CDF funded projects. The demographic features were considered significant to the study on the basis that such orientations could influence engagement in various projects implemented in the public sector.

4.3.1 Characteristics of the respondents by age

It was assumed that age variations of the respondents would be of great significance to the study on the basis that issues of CDF funded projects demand people with a lot more political attachment and managerial skills, hence younger people would be relatively few in this domain. The respondents were therefore requested to complete the questionnaire indicating their ages and their responses captured as displayed in table 4.2

Table 4.2: Age characteristics of respondents

Age in years	Frequency	Percentage
Below 20	15	12.12
20- 30	21	19.28
30- 40	53	44.02
40- 50	11	08.33
Above 50	10	08.33
Total	120	100.00

As depicted in table 4.2, 15 (12.12%) of the 120 respondents who completed the questionnaire were below 20 years, 21(19.28%) fell in the age of 20-30years, 53 (44.02%) were in the age of 30-40 years, while 11 (8.33%) being in the age of 40- 50 years and 10(8.33%) were above 50 years. The implication of these statistics was that, more relatively older people were key participants in the management of CDF funded projects, as these projects required those with managerial skills in public resources. Features that could only be displayed by experienced individuals, acquired over a relatively long period of time, than could be expected from young people.

4.3.2 Characteristics of the respondents by sex

This demographic parameter was perceived to be of great significance to the study for the researcher was interested in establishing the influence of gender issues on participation in the management of public institutions, as well as political dispensations. This was because, women were rare in the political spheres of life in Nyamira County and the same could be replicated in the management of public resources. On this account, the respondents were asked to complete the questionnaire indicating their sex and table 4.3 presents their responses.

Table 4.3 Sex features of the respondents

Sex	Frequency	Percentage
Male	98	81.67
Female	22	18.33
Total	120	100.00

Table 4.3 reveals that of the 120 the respondents who filled the questionnaire, 98 (81.67%) were males and 22 (18.33%) were females. revealed in the table is that most participants in the management of public sector resources were generally men. This scenario is unfortunate in this time and age when affirmative action is being advocated for in order to close gender disparities in public institutions. On this account, CDF being a political fund with men active participants, little wonder that this image was reflected in composition of managers of public coffers.

4.3.3 Marital orientations of the respondents

This feature of the demographics of the respondents was of great significance to the study as it would reveal the extent to which marital orientations would influence participation in public engagements. Since being aggressive is the cornerstone for appointment to public institutions, married people are more likely to be aggressive in public assignments for purposes of creating opportunities for their children. In the light of this, the respondents were tasked to fill the questionnaire indicating their marital orientations and their responses noted as illustrated in table 4.4

Table 4.4: Marital orientations of the Respondents

Marital status	Frequency	Percentage
Single	15	10.74
Married	64	50.48
Widowed	32	25.34
Separated	07	06.22
Other	22	20.72
Total	120	100.00

In table 4.4, of the 120 copies of questionnaire completed by the respondents, 15(10.74%) were single, 64 (50.48%) were married, 32(25.34%) were widowed and 07(06.22%) being separated, with 22(20.72%) having fallen on other marital orientations. The statistics in the table reveal that majority of the PMCs implementing CDF funded projects in public secondary schools in North Masaba Sub County were married, though a substantial number were widowed which reflects ordinary realities in life and the same could be observed in other aspects of public engagement.

4.3.4 Level of education of the respondents

In the study, the researcher believed that the level of education would significantly influence respondent’s accessibility to finances given that they would be informed of the most attractive financial products on offer. Besides, educated entrepreneurs having acquired substantial knowledge and skills in entrepreneurship would be more inclined to go for funds from banks. In this respect, the respondents were asked to fill the questionnaire stating their level of education and table 4.15 presents their responses.

Table 4.5. Level of education of the respondents

<u>Level of education</u>	<u>Frequency</u>	<u>Percentage</u>
Primary and below	23	18.21
Secondary	78	63.33
Tertiary	16	15.84
Other	03	03.32
<u>Total</u>	<u>120</u>	<u>100.00</u>

Table 4.15 reveals that 23(18.21%) of the respondents had primary level and below, 78 (63.33%) had secondary, 16 (15.84%) had tertiary education and 03 (03.32%) had other forms of education. The implication of these statistics is that most PMCs implementing CDF funded projects in public secondary schools in North Masaba Sub County were academically challenged, given that they displayed education at the basic level and hence unlikely to make significant contribution on the expansion of secondary school education. Moreover, membership to politically influenced bodies was being viewed as a field of practice and experience of the people with influence that did not attract highly educated people.

4.3.5: Characteristics of respondents by area of business operations

In this study, the researcher was interested in establishing the influence of different project engagements that individual PMCs undertook in the implementation of education interventions on expansion of education in North Masaba Sub County. This was because some project engagements demand more managerial skills than others. On account of this, the respondents were requested to complete the questionnaire stating their areas of project undertakings and their responses noted as illustrated in table 4.6

Table 4.6. Area of project engagement

Area of engagement	Frequency	Percentage
Monitoring and evaluation	14	11.66
Allocation of funds	08	06.67
Project Management	72	60.00
Other	26	21.67
Total	120	100.00

Table 4.6 reveals that, out of the 120 respondents who completed the questionnaire, 14(11.66%) were in project monitoring and evaluation, 08(06.67%) engaged in funds allocation, 72(60%) took part in project management at the grass root level, while 26(21.67%) engaged in other project activities. Revealed by these statistics is that most participants in the implementation of education projects were involved in project management at the PMC level, with just a few taking part in either monitoring and evaluation or allocation of funds. The implication is that majority of the respondents were rarely involved in key decision making and hence were unlikely to influence how much funds were to be allocated to each school, as this seemed a prerogative of the member of parliament through the CDFC members.

4.3.6: Length of engagement with CDF funded education projects.

It was assumed in this study that the duration of time one served in a particular endeavor would influence level of experience in task performance, as well as an indicator of the expansion of education in public secondary schools in North Masaba Sub County. In this respect, those had been in contact with these projects for a relatively long period of time would be better placed to have contributed to expansion of schools than those with short duration of service. On account of this eventuality, the respondents were requested to complete questionnaire stating their duration of engagement with implementation of education projects and their responses noted as illustrated in table 4.5

Table 4.7. Length of engagement with CDF funded education projects.

Length in years	Frequency	Percentage
Below 1 year	12	10.00
1-2	65	54.14
2- 3	25	20.83
3- 4	12	10.00
4- 5	04	03.33
Above 6 years	02	01.60
Total	120	100.00

Table 4.7 reveals that, of the 120 respondents whose questionnaire copies were received indicating the duration of engagement with education projects, 12(10%) stated having been in contact for below 1 year, 65 (54.14%) for 1-2 years, 25 (20.83%) indicated 2-3 years, with 12 (10%) stated 3-4 years and 04(3.33%) having been in contact with education projects for 4-5 years, while 02(1.6%) had served for over 6 years. Implied by the statistics in table 4.7 is that most of the respondents had been in contact with CDF funded education projects in public secondary schools in North Masaba Sub County for relatively short period of time, hence were unlikely to have had substantial experience on matters of expansion of educational opportunities in their areas of jurisdiction.

4.4 Influence of CDF funded infrastructure projects on education expansion

One the key determinants of the expansion of secondary school education is the extent to which physical infrastructures are established in the learning institutions to accommodate additional learners. In the light of this fact, a school cannot be said to have expanded if

the conditions of physical facilities are wanting. Infrastructural facilities were therefore measured on the basis of the number of projects initiated through CDF funds, variety of the infrastructure projects, adequacy of the projects and the frequency of putting up such projects.

4.4.1 The number of CDF funded infrastructure projects on education expansion

In measuring the influence of CDF funded projects on expansion of secondary education in North Masaba Sub County, the number of these physical facilities put up is significant in the sense that if these facilities are few, the expansion of educational opportunities will be suppressed. In the light of this, the respondents were asked to complete the questionnaire indicating the number of CDF funded infrastructure projects in their schools and their responses captured as depicted in table 4.8

Table 4.8: Number of CDF funded infrastructure projects on education expansion

Number of projects	Frequency	Percentage
2 and below	96	81.61
3 – 5	12	10.00
6 – 8	04	03.33
9 – 11	00	00.00
Above 11	08	06.66
Total	120	100.00

Table 4.8 reveals that, out of the 120 respondents who completed the questionnaire, 96(81.61%) stated that number of CDF funded projects in their schools stood at 2 and below, 12 (10%) had implemented 3 – 5 infrastructure projects, 08 (03.33%) indicated having initiated above 11 infrastructure projects in public secondary schools in North Masaba Sub County. Deduced from these statistics is that the vast majority of respondents had hardly implemented substantial number of CDF funded infrastructure projects in their schools, an indication that CDF as a devolved fund was being felt in schools, but at a marginal dimension to significantly influence expansion of educational opportunities.

4.4.2 Variety of CDF funded infrastructure projects on education expansion

In a more general perspective, the number of projects initiated through use of a specific fund may not account a lot on the expansion of educational opportunities in public secondary schools, rather, the variety of these projects would influence expansion as most functions can be undertaken with ease because space is available. On this account, the respondents were asked to complete the questionnaire indicating the variety of infrastructure projects they had established with CDF funds and their responses captured as depicted in table 4.9

Table 4.9 CDF funded infrastructure projects on education expansion

Project type	Frequency	Percentage
Class rooms	72	60.00
Laboratory	10	08.33
Dining hall	00	00.00
Dormitory	12	10.00
Other	26	21.67
Total	120	100.00

Table 4.9 reveals that, out of the 120 respondents who completed the questionnaire indicating the variety of infrastructure projects funded by CDF in their schools, 72(60%) indicated class rooms, 10(8.33%) stated laboratory, 12(10%) mentioned dormitory, with none identifying with dining hall and 26(21.67%) stating other infrastructure projects. Implied by these statistics is that the use of CDF funds in initiating infrastructure projects in public secondary schools in North Masaba Sub County is still low, given that the number of schools to be targeted is higher than the funds available, hence diverse projects were hardly being done, except class rooms.

4.4.3 Adequacy of CDF funded infrastructure projects on education expansion

As a measure of expansion of secondary school education, provision of infrastructure projects alone may not have a lot of influence, since other issues to do with the adequacy of those projects in catering for the diverse learning needs of the students also become critical. On this account, the respondents were asked to complete the questionnaire

indicating the adequacy of the CDF funded infrastructure projects in their schools and their responses captured as depicted in table 4.10

Table 4.10 Adequacy of CDF funded infrastructure projects on education expansion

Adequacy	Frequency	Percentage
Very adequate	00	00.00
Adequate	00	00.00
Indifferent	10	08.34
Inadequate	67	55.83
Very inadequate	43	35.83
Total	120	100.00

Table 4.10 reveals that, of the 120 respondents who completed the questionnaire disclosing how adequately CDF funds were to the construction of infrastructure projects in their schools were, none stated that these funds were either very adequate or adequate, 10(08.34%) were indifferent to the item, 67(55.83%) indicated that they were inadequate, while 43(35.83%) stated that the funds were very inadequate. Implied by these statistics was that the CDF funds allocated to the various secondary schools in North Masaba Sub County for putting up infrastructure projects were inadequate for purposes of expanding education opportunities to students.

4.4.4 Frequency of funding infrastructure projects on education expansion

The other measure of provision of infrastructure projects to schools through CDF funds is the frequency with which such projects are funded, as when funds are given just

occasionally, expansion challenges become numerous. In view of this reality, the respondents were asked to complete the questionnaire indicating the frequency of funding infrastructure projects in their schools and their responses noted as displayed in table 4.11

Table 4.11 Frequency of funding infrastructure projects on education expansion

Type of product	Frequency	Percentage
Every year	08	06.67
2-3	28	23.33
4-5	76	63.33
Above 5 years	08	06.67
Total	120	100.00

Table 4.11 indicates that of the 120 respondents who completed the questionnaire indicating the frequency of funding infrastructure projects in their schools, 08(6.67%) stated every year, 28(23.33%) mentioned 2 – 3 years ,76 (63.33%) indicated 4 – 5 years and 08(6.67%) stated above 5 years. These statistics reveal that, whereas North Masaba CDF funds infrastructure projects in public secondary schools, these funds were inadequate hence projects were less frequently implemented implying that expansion of secondary school education was bound to encounter the challenge of sufficiency of physical facilities.

4.5. Provision of human resources on expansion of secondary school education

As a measure of the extent to which secondary school education can be expanded, availability of adequate, well trained and motivated teaching force is crucial, for without

personnel on school could ever attract learners. This variable was considered against such parameters as, the number of teachers recruited, cadre of teachers, sufficiency of the teachers and how often the teachers are hired.

4.5.1 The number of hired teachers on expansion of secondary school education

As a matter of great concern to the expansion of education is the availability of the teaching force in adequate number to manage any increased student enrolment in schools. In the light of this necessity, the respondents were asked to complete the questionnaire indicating the number of personnel hired for their schools and their responses captured as displayed in table 4.11

Table 4.12: The number of human resources on expansion of secondary education

Number of personnel	Frequency	Percentage
2 and below	00	00.00
3 – 4	00	00.00
5 – 6	00	00.00
7 - 8	00	00.00
Above 8	00	00.00
Total	00	00.00

Table 4.12 indicates that of the 120 respondents who completed the questionnaire disclosing the number of personnel hired through CDF funds, none of the respondents stated that these funds were ever used for addressing human capital requirements of their respective schools. The implication was that CDF as a devolved kitty did not, by law,

focus on hiring personnel in schools, but was confined to facilities in schools and bursary for the needy students.

4.5.2. Cadre of human resources on expansion of secondary education

In this study, there was interest on whether CDF funds could be used by different schools in North Masaba Sub County in hiring other cadre of personnel even on the basis of temporary resource persons. This desire was informed by the fact that management of institutions was changing so fast that certain organizations were steadily putting preference on outsourcing services from vendors to employing their own. In view of this emerging issue, the respondents were asked to complete the questionnaire indicating the cadre of personnel hired and their responses recorded as displayed in table 4.12

Table 4.13 Cadre of hired human resources on expansion of secondary education

Lending suitability	Frequency	Percentage
Teaching staff	00	00.00
Support staff	00	00.00
Resource persons	28	23.33
Project managers	92	76.67
Other	00	00.00
Total	120	100.00

Table 4.13 indicates that of the 120 respondents who filled the questionnaire disclosing the cadre of personnel provided in their schools CDF, none identified with the teaching staff, support staff and other category. Strikingly, 28(23.33%) indicated resource persons,

while 92(51.67%) indicated project management committees in charge of the implementation of the projects through ordinary allowances. The implication was that CDF funds were managed on the voluntary basis and not through engaging personnel on permanent terms.

4.5.3. Adequacy of these human resources on expansion of secondary education

It was an interest in this study to establish the adequacy of the human capital provided on expansion of secondary school education in North Masaba Sub County, given that any activity embraced through use of public funds should promise value for money. In the light of this need, the respondents were requested to fill the questionnaire indicating how adequate provided human resources were and they responded as illustrated in table 4.13

Table 4.14 Adequacy of human resources on expansion of secondary education

Adequacy	Frequency	Percentage
Very adequate	00	00.00
Adequate	08	06.67
Indifferent	00	00.00
Inadequate	87	72.50
Very inadequate	25	20.83
Total	120	100.00

Table 4.14 reveals that out of the 120 respondents who completed the questionnaire indicating how adequate human resources were, none stated either very adequate and indifferent, 08(6.67%) stated adequate, 87(72.50%) mentioned inadequate, with 25

(20.83%) citing very inadequate. Implied by these statistics was that, owing to the fact that provision of personnel by CDF was focusing on temporary engagement for project implementation, this arrangement was inadequate in addressing human resource needs for educational expansion in North Masaba Sub County.

4.6 Influence of instructional materials on expansion of secondary education

Expansion of educational opportunities may have no meaning if such institutions of learning fail to impart knowledge in the learners and in this role, tools of trade must be availed to effectively instruct learners and effect positive behavior change required in facing the challenges of life. In view of achieving this desirable educational objective, instructional materials become critical. This variable was measured on the prism of the number of instructional materials provided, variety of the materials, adequacy of the materials and frequency of providing the materials.

4.6.1 Influence of the number of instructional materials on expansion of education

It is crucial to assemble a lot of learning materials appealing to different senses for effective learning to occur, as several learning materials are likely to take into considerations of human differences that are also reflected in the learning process. In this concern, the practice of teaching and learning acknowledges the role that instructional materials and resources play in making learning effective. On this account, the respondents were asked to fill the questionnaire indicating the number of instructional resources provided in their schools through CDF funds and table 4.14 shows their responses.

Table 4.15: The number of instructional materials on expansion of education

Number of materials	Frequency	Percentage
10 and below	98	82.00
10 - 20	02	01.67
20 – 30	10	08.33
30 - 40	02	01.67
Above 40	08	06.33
Total	120	100.00

Table 4.15 indicates that of the 120 respondents who filled the questionnaire stating the number of instructional materials provided through CDF funds, 98(82%) indicated 10 and below, 02(1.67%) stated 10 – 20, 10(08.33%) indicated 20 – 30, 02(1.67%) stated 30 – 40 and 08(6.33%) stated above 40. Implied by the statistics was that CDF funded instructional materials were still very few in secondary schools in North Masaba Sub County, hence these funds were unlikely to contribute meaningfully to expansion of public secondary school education.

4.6.2 Variety of instructional materials on expansion of education

Provision of instructional resources alone may fail to guarantee the much needed learning effects, but offering such materials in diversity is much more effective to learning and has the capacity to influence expansion of educational opportunities in schools. On this account, the respondents were requested to fill the questionnaire indicating the variety of instructional resources provided through CDF to facilitate learning in their schools and they responded as illustrated in table 4.15

Table 4.16: Influence of variety of instructional materials on expansion of education

Resource type	Frequency	Percentage
Text Books	00	00.00
Lab. Equipment	20	16.67
Teaching and learning	36	30.00
Other	64	53.33
Total	120	100.00

Table 4.16 reveals that out of the 120 respondents who filled the questionnaire indicating the types of instructional resources provided through CDF funding, none indicated purchase of text books, 20(16.67%) stated laboratory equipment, 36(30.00%) stated teaching and learning materials and 64(53.33%) indicated other items. Implied by these statistics was that despite text books being regarded as a major instructional materials in schools, CDF does not put a lot of emphasis on their provision, hence insufficient availability of text books is likely to negate the efforts to expand secondary school education.

4.6.3 Influence of adequacy of instructional materials on expansion of education

With an effort to provide instructional materials in secondary schools, chances are high that more learning opportunities could be offered to many yearning learners. However, adequacy of these provided resources is vital in substantial amounts, for with insufficient materials, students could put more pressure on the few rendering learning ineffective. The respondents were therefore asked to complete the questionnaire indicating adequacy of the instructional materials offered and their responses noted as illustrated in table 4.17

Table 4.17: Adequacy of instructional materials on expansion of education

Adequacy	Frequency	Percentage
Very adequate	00	00.00
Adequate	08	06.67
Inadequate	96	80.00
Very inadequate	16	13.33
Total	120	100.00

Table 4.17 reveals that, of the 120 respondents who filled the questionnaire stating how adequate offered resources were, 08 (6.67%) stated these resources were adequate, 96(80.00%) indicated inadequate and 16(13.33%) indicated very inadequate. The statistics in table 4.18 give the impression that even if North Masaba CDF funded instructional materials in public secondary schools, these resources were inadequate to have significant influence expansion of public secondary school education.

4.7 Provision of financial resources on expansion of secondary education

In the study, it was assumed that more often, secondary schools spend much more funds on operational functions on a daily basis and the moment these funds are not available, routine chores may halt. This variable was measured on the ground of amount of funds received, areas of funding, adequacy of funding and frequency of funding.

4.7.1 Provision of financial resources on expansion of secondary education

It is obvious that many clients go for loans when they are able to access loaning institutions within reach, since such buyers are often driven by impulse buying behavior.

The respondents were asked to fill the questionnaire stating the extent to which they agreed or disagreed or disagreed that access to service providers influence access to micro finance products and table 4.17 shows their responses.

Table 4.18: Amount of financial resources on expansion of secondary education

Amount	Frequency	Percentage
100000 and below	88	73.33
100000 - 200000	16	13.33
200000 - 300000	08	06.67
300000 - 400000	00	00.00
Above 400000	08	06.67
Total	120	100.00

Table 4.18 reveals that, out of the 120 respondents who filled the questionnaire indicating the amount of the financial resources offered by CDF ,88(73.33%) stated having received ksh.100000 and below, 16 (13.33%) mentioned ksh.100000 - 200000, 08(6.67%) stated ksh.200000 - 300000, 40(33.33%) and 08(6.67%) indicated above ksh.400000. Implied by the statistics in table 4.18 is that North Masaba CDF hardly financed recurrent operations in public institutions, as the funds were majorly for development projects.

4.7.2 Areas of financial resources on expansion of secondary education

In the study, there were indications that North Masaba CDF had been providing some funds for use in some public secondary schools and therefore interest was placed on identifying the areas in which these funds were used in order to examine the influence of

this on expansion of secondary education. In this respect, the respondents were asked to fill the questionnaire stating the areas commonly financed through CDF funds and table 4.18 shows their responses.

Table 4.19 Areas of financial resources on expansion of secondary education

Areas of funding	Frequency	Percentage
Salary and allowances	00	00.00
Purchase of teaching items	48	40.00
Feeding program	00	00.00
Other	82	60.00
Total	120	100.00

Table 4.19 reveals that, of the 120 respondents who filled the questionnaire disclosing areas of funding , none identified with paying of salaries and allowances, 48 (40%) stated purchase of teaching materials, none indicated feeding program and 82 (60%) mentioned other category. The implication is that, areas where CDF funds were spent were not very clear, a sign that there had not been put in place a system of disbursement of such funds for operational purposes in public institutions.

4.7.3 Adequacy of financial resources on expansion of secondary education

In order to determine the influence of financial resources on expansion of public secondary education in North Masaba Sub County, issues of how adequate these funds are in running essential errands in the schools are of great concern In this context, the respondents were asked to complete the questionnaire indicating how adequate these funds were and table 4.20 illustrates their responses.

Table 4.20 Adequacy of financial resources on expansion of secondary education

Distribution channels	Frequency	Percentage
Very adequate	00	00.00
Adequate	25	20.83
Indifferent	00	00.00
Inadequate	78	65.00
Very inadequate	17	14.17
Total	120	100.00

Table 4.20 reveals that, out of the 120 respondents who completed the questionnaire stating adequacy of financial resources offered, none identified with very adequate and indifferent, 25(20.83%) stated that the funds were adequate, 78(65.00%) stated inadequate 17 (14.17%) indicating very inadequate. Implied is that a relatively higher number of respondents noted that whenever these funds were given, they remained too inadequate to positively influence expansion of education in the public learning institutions.

4.7.4 Frequency of offering of financial resources on expansion of education

Whenever funds were given to public schools for operational purposes it would be interesting to establish how frequently these were done to make such operations effective. In the light of this scenario, the respondents were asked to fill the questionnaire displaying the frequency of accessing these funds and table 4.20 illustrates their responses.

Table 4.21 Frequency of offering of financial resources on expansion of education

Number	Frequency	Percentage
More frequently	00	00.00
Frequently	08	06.67
Less frequently	94	78.33
Indifferent	18	15.00
Total	120	100.00

Table 4.21 reveals that, of the 120 respondents who filled the questionnaire disclosing the frequency of obtaining financial resources, none indicated receiving the funds frequently 08(06.67%) stated frequently, 94 (78.33%) mentioned less frequently and 18(15%) were simply indifferent. By implication, CDF funds even if given to certain schools for undertaking certain functions, no guarantee that these funds would ever be frequently accessed, hence hardly leads to expansion of education on a systematical manner.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter focuses on the summary of the study findings undertaken within the framework of the key study variables. In this study, the researcher sought to investigate the influence of CDF on expansion of public secondary school education in North Masaba Sub County, Nyamira County. Moreover, this section also outlines the conclusions drawn and recommendations made.

5.2 Summary of the finding

Out of the 155 copies of questionnaire administered to the respondents, 120 were received completely filled giving a response rate of 77.42%, which was deemed as an excellent questionnaire response rate. Demographic characteristics held significant to the study included, age, sex, and marital orientation, as well as level of education, area of CDF engagement, in addition to the duration of being in contact with CDF funded in public institutions.

Copies of the questionnaire were self administered to the respondents by four trained and motivated research assistants, who were being closely supervised by the researcher, giving a response rate of 77.42%.

In this study, the respondent's demographic features that were considered significant include, age, sex, marital status, level of education, area of project category and the duration within which the respondents have been in contact with CDF funded projects.

It was observed that more relatively older people were key participants in the management of CDF funded projects, as these projects required those with managerial skills in public resources.

Most participants in the management of public sector resources were generally men. This scenario is unfortunate in this time and age when affirmative action is being advocated for in order to close gender disparities in public institutions. The study established that majority of the PMCs implementing CDF funded projects in public secondary schools in North Masaba Sub County were married, though a substantial number were widowed which reflects ordinary realities in life and the same could be observed in other aspects of public engagement.

In respect to the level of education, most PMCs implementing CDF funded projects in public secondary schools in North Masaba Sub County were academically challenged, given that they displayed education at the basic level and hence unlikely to make significant contribution on the expansion of secondary school education. On CDF involvement,

Majority of the participants in the implementation of education projects were engaged at the project management level, with just a few taking part in either monitoring and evaluation or allocation of funds. Moreover, most of the respondents had been in contact with CDF funded education projects in public secondary schools in North Masaba Sub County for relatively short period of time, hence were unlikely to have had substantial experience on matters of expansion of educational opportunities in their areas of jurisdiction.

One the key determinants of the expansion of secondary school education is the extent to which physical infrastructures are established in the learning institutions to accommodate additional learners. In the light of this fact, a school cannot be said to have expanded if the conditions of physical facilities are wanting. Infrastructural facilities were therefore measured on the basis of the number of projects initiated through CDF funds, variety of the infrastructure projects, adequacy of the projects and the frequency of putting up such projects.

Deduced from the study is that the vast majority of respondents had hardly implemented substantial number of CDF funded infrastructure projects in their schools, an indication that CDF as a devolved fund was being felt in schools, but at a marginal dimension to significantly influence expansion of educational opportunities. The use of CDF funds in initiating infrastructure projects in public secondary schools in North Masaba Sub County was still low, given that the number of schools to be targeted was higher than the funds available, hence diverse projects were hardly being done, except class rooms.

The other measure of provision of infrastructure projects to schools through CDF funds is the frequency with which such projects are funded, as when funds are given just occasionally, expansion challenges become numerous. In view of this reality, whereas North Masaba CDF were also funding infrastructure projects in public secondary schools, these funds were inadequate hence projects were less frequently implemented implying that expansion of secondary school education was bound to encounter the challenge of sufficiency of physical facilities.

As a measure of the extent to which secondary school education can be expanded, availability of adequate, well trained and motivated teaching force is crucial, for without personnel on school could ever attract learners. As a matter of great concern to the expansion of education is the availability of the teaching force in adequate number to manage any increased student enrolment in schools. CDF as a devolved kitty did, by law, focus on hiring personnel in schools, but was confined to facilities in schools and bursary for the needy students.

It was an interest in this study to establish the adequacy of the human capital provided on expansion of secondary school education in North Masaba Sub County, given that any activity embraced through use of public funds should promise value for money. Owing to the fact that provision of personnel by CDF was focusing on temporary engagement for project implementation, this arrangement was inadequate in addressing human resource needs for educational expansion in North Masaba Sub County.

Expansion of educational opportunities may have no meaning if such institutions of learning fail to impart knowledge in the learners and in this role, tools of trade must be availed to effectively instruct learners and effect positive behavior change required in facing the challenges of life.

It is crucial to assemble a lot of learning materials appealing to different senses for effective learning to occur, as several learning materials are likely to take into considerations of human differences that are also reflected in the learning process. In this

concern, the practice of teaching and learning acknowledges the role that instructional materials and resources play in making learning effective.

CDF funded instructional materials were still very few in secondary schools in North Masaba Sub County, hence these funds were unlikely to contribute meaningfully to expansion of public secondary school education.

Provision of instructional resources alone may fail to guarantee the much needed learning effects, but offering such materials in diversity is much more effective to learning and has the capacity to influence expansion of educational opportunities in schools.

Implied by these statistics was that despite text books being regarded as a major instructional materials in schools, CDF does not put a lot of emphasis on their provision, hence insufficient availability of text books is likely to negate the efforts to expand secondary school education.

With an effort to provide instructional materials in secondary schools, chances are high that more learning opportunities could be offered to many yearning learners. However, adequacy of these provided resources is vital in substantial amounts, for with insufficient materials, students could put more pressure on the few rendering learning ineffective t even if North Masaba CDF funded instructional materials in public secondary schools, these resources were inadequate to have significant influence expansion of public secondary school education.

In the study, it was assumed that more often, secondary schools spend much more funds on operational functions on a daily basis and the moment these funds are not available, routine chores may halt. This variable was measured on the ground of amount of funds received, areas of funding, adequacy of funding and frequency of funding.

that North Masaba CDF hardly financed recurrent operations in public institutions, as the funds were majorly for development projects. Identifying the areas in which these funds were used in order to examine the influence of this on expansion of secondary education. In this respect, the respondents were asked to other category. The implication is that, areas where CDF funds were spent were not very clear, a sign that there had not been put in place a system of disbursement of such funds for operational purposes in public institutions.

In order to determine the influence of financial resources on expansion of public secondary education in North Masaba Sub County, issues of how adequate these funds are in running essential errands in the schools are of great concern. In this context, the respondents were asked to complete the questionnaire indicating how adequate these funds were and table 4.19 illustrates their responses.

Implied is that a relatively higher number of respondents noted that whenever these funds were given, they remained too inadequate to positively influence expansion of education in the public learning institutions. Whenever funds were given to public schools for operational purposes it would be interesting to establish how frequently these were done to make such operations effective.

By implication, CDF funds even if given to certain schools for undertaking certain functions, no guarantee that these funds would ever be frequently accessed, hence hardly leads to expansion of education on a systematical manner.

5.3 Conclusion

Conclusions from the study findings reveal that CDF as a package of funds for public institutions plays significant role in the expansion of public secondary school education, and being the only popular devolved fund at the grass root, it is being felt in the entire public sector.

In the study, CDF funds were found to be used to provide infrastructural projects in public secondary schools such as construction of class rooms, laboratories, dormitories, administrative offices, latrines and other similar physical structures in schools. The presence of these structures surely opens up more learning opportunities to accommodate more learners. However, these funds were still inadequate, for most schools were found to be in dire need of the physical facilities in order to offer suitable learning atmosphere for the students. CDF funds were also addressing human capital aspect of the schools, for without personnel in different functions effective learning may be hard to come by. It was therefore established that this was an area that had not attracted CDF funding given that personnel were only temporarily deployed on allowances in the form of resource persons and project management committees.

CDF also provides instructional materials to schools in order to expand opportunities for learning, though such materials were mostly focusing on provision of laboratory equipment and not text books and other learning resources that are equally crucial in creating more learning opportunities. Since schools operate effectively with daily chores that grease the wheels of key functions, provision of financial resources for such activities would contribute to expansion of education. From the study, there was scanty information on provision of financial resources to schools by North Masaba CDF.

5.4. Recommendations

Findings from the study become crucial if vital lessons are drawn for purposes of addressing the challenges of expansion of public secondary school education in North Masaba Sub County. On this account, recommendations both for policy formulation and further research are outlined.

5.4.1 Recommendation for policy formulation

In this study, it was hoped that the findings would enhance effective and efficient utilization of the CDF funds by the local PMCs managing projects at the grass root level in North Masaba Sub County by focusing attention to projects that would contribute to expansion of educational opportunities among other priority areas. In this respect, it is recommended that the government should formulate much more strict regulatory policies to ensure that CDF funds disbursed for use in public institutions are prudently managed to give value for money. In addition, the study also recommends that the general public should be sensitized on their need to participate in decision making in matters relating to

CDF, particularly identification of the projects that would address the needs of the various stakeholders in the Sub County.

Besides, the study equally recommends that CDF funds allocated to development projects should be geared a lot more in addressing issues of education in order to provide more learning opportunities to the citizens, as investment in education is a major boost to economic development of a community. Lastly, the study recommends that other devolved funds within the various devolved entities be channeled to address educational needs of the public to enhance their capacities in contributing to meaningful development.

5.4.2 Recommendation for further Research

From the study, the following areas are recommended for further research:

1. What influence does political influence have on the disbursement of CDF funds to public institutions for development purposes?
2. Would the study results change if it were replicated in other Sub Counties in Nyamira County?
3. Is there significant differences in CDF funds allocated to various public secondary schools in North Masaba Sub County?
4. An analysis of the comparative influence of all the devolved funds on the expansion of public secondary school education in North Masaba?

REFERENCES

- Achievement Econometrica: The elusive search for an association. Educational Administration. San Diego: Academic Press.
- Activities, Educational and Psychological Measurement.
- Adeogun, A. (2001): Student profiles and factors affecting performance Int. j. math. educ. sci. technol, vol. 32
- Adeogun, C. (2007): The effects of school quality on educational attainment and wages. Rev. Econ. Statistic.
- Anderson, M.(2004): Exploring the effect of class size on pupil achievement: what have we learned over the past two decades. In international handbook on the Economics of Education (eds G. Johnes and J. Johnes).Cheltenham:Elgar.approaches, Nairobi, Acts Press.
- Armstrong, M.(2004): Human resource management theory and practice. London: Bath Press Ltd.
- Babayomi, A. (2009): Researching the links between school resources and pupil outcomes in the UK: a review of issues and evidence. Educ. Econ., Bajah, G.(2009) & Oni, S. (2005): Teacher quality and educational equality: Do teachers with higher standards-based evaluation ratings close student achievement gaps? Elementary School Journal,
- Bantu, D.(2006): Student attendance and absenteeism. The Practitioner. Universal Basic and Secondary Education.” Working paper of the Project on Universal Basic and Secondary Education. Cambridge, MA: American Academy of Arts and Sciences. University Press.
- Beeby, K. (2006): “An Analysis of High School Students' Performance on Five Integrated Science Process Skills” Research in Science & Technical
- Bowers, P. and Burkert, A. (2000): The effects of school quality on pupil outcomes: an overview. In Education, Training and Employment in the Knowledge-based
- Boyd, B., Correnti, R., & Miller, R. J. (2001): What large-scale, surveys research tells about teacher effects on student

- achievement: Insights from the Prospects study of elementary schools. Teachers College Record
- Cash, A. (2003): Economic considerations and class size. *Econ. J.*, 113, 34–63.
- Coombs, E. A. (2000): The economics of schooling; production and efficiency in public schools. *J. Econ. Lit*
- Cooper, R.V and schindler, D.W. (2003): Determining Sample Size for Research Corwin.
- Darling-Hammond, L., & Youngs, P. (1999): Defining “highly qualified teachers”: What does “scientifically-based research” actually tell us? Educational Researcher, DC: The World Bank.
- Economy (ed. H. Heijke): Basingstoke; Macmillan.
- Education, Volume 19, Number 2 / November 1, 2001
- Educational Management in Nigeria. Ambik Press Ltd. People. Washington, Educational Research and Publishers Ltd.
- Edward, G.B. (2001): Some issues, ideas and predictions about performance
- Fafunwa, B. J. (2000): Attaining self-regulation: A social cognitive perspective.
- Fagbamiye, J.E. (2004): Relationship between Education Facilities, Teachers
- Fayemi ,S.T. (2001): ‘Reassessing the view that American schools are broken’, Fuller (2003). Class size, education and wages. *Econ. J.*, 113, F99–F120.
- Girrbach, M. (2005). Class size in the early years: is smaller really better? *Educ. Econ.*,
- Giwa, R. D. and Illo, L. V. (2000): Money does matter: a research synthesis of a universe of education production function studies. In *Where Does the Money Go?: Resource Allocation in Elementary and Secondary*
- Golhale, A. (2006): ‘An economist’s view of class size research’, Milken Institute Award for Distinguished Economic Research paper.
- Hallack, C. M. (2000): The effects of class size on pupil achievement: new evidence population variation. *Q. J. Econ*
- Hanushek, E. A. (1997): Assessing the effects of school resources on pupil performance: an update. *Educ. Evaln Poly Anal International Ltd. Publishers.*
- Kerlinger, L.R (1993): *Educational Research Competencies for Analysis and application* Ohio: Charles E. Merrill

- Lorton, G. et al (2009): Does money matter?; the effect of school resources on achievement and adult success. Washington DC; Brookings Institution.
- Loxley, J (2004): Management of instructional materials and performance of teachers in primary schools . A dissertation submitted in Partial fulfillment for the Masters Degree in Education, Makerere: Kampala. Management, Public personnel management, Winter Press.
- Mugenda A. & Mugenda O. (2003): Research Methods: Quantitative and qualitative
- Mugenda, O.M. and Mugenda, A.G (1999): Research Methods. Quantitative and
- National Nigerian Primary edu. (1981): Study of teacher preparation programs in Nigeria. Retrieved December 1, 2010, fr. <http://www.nationalacademies.org/teacherprep/>.
- Newton, C.A. (2007): Managing Educational Facilities in Schools in V. F. Peretomode (Ed.) Introduction to Educational Planning and Supervision. Lagos: Joja
- Nkukuhe, N. A. (2005): The Environment of Crisis in Nigerian Educational System. Co-operative Education
- Oluyori ,F .V (2006): Schooling resources, educational institutions and pupil
- Oreopolos,M.Y (2006): Knowledge and skills for life: First results from the OECD Programme for International Student Assessment (PISA) 2000. Paris.
- Overbaugh, T. (2000): Analysis of Space Dimensions and Physical Facilities in Senior Public Secondary Schools: Unpublished M.Ed. Dissertation, Delta State University, Abraka.
- Qualifications,School Location and Academic Performance of Students in Qualitative approaches. Nairobi: Acts Press.
- Rivkin, S.,Hanushek, E., & Kain, J. (2005): Teachers, Schools and Academic
- Savory, N. A. (2008): Conceptual and empirical issues in the estimation of education production functions. J. Hum. Res., 14, 351–388.
- Schools (eds L. O. Picus and J. L. Wattenbarger):Thousand Oaks:
Secondary Schools in Delta State. Unpublished PhD Thesis. Delta State
- Shuttleworth, R.C. (2008): Research Methodology methods and Techniques. New Delhi

- Sodium, A. D. (2008): Local Governments in Non metropolitan America: Capacity and Will. Washington, D.C., U.S. Department of Agriculture.
- Tan, C.C. (2000): Aggregation and the estimated effects of school resources. *Rev. Econ. Statist*, 78, 611–627.
- Ukeje. A. D: Letter to the Chief State School Officers regarding states' good-faith effort in meeting the highly qualified teachers goal. Washington, DC: Author.
Retrieved December 1, 2006,
<http://www.ed.gov/programs/teacherqual/hqtltr/index.html>
- University, Abraka. inspectors and advisors in England", *School Organisation*, Vol. 12
- Walberg, B., Bosker, R. and Kruger, M (2002): Educational leadership and academic
- Wales, R.O. (2005): Facilities and University Development in Current Issues

APPENDIX A: LETTER OF TRASMITTAL

MUNGAI SIMON,

P.OBOX 731,

KEROKA.

O5/08/2014.

Dear Sir/Madam,

I am a student of Master of Arts in project planning and management at the University of Nairobi. I am conducting a research study to examine influence of CDF on expansion of public secondary school education in North Masaba Sub County, Nyamira County. The study is being undertaken for academic purposes only. Your opinion and views are important for the success of this study. I kindly request that you complete the questionnaire enclosed herein following instructions given after each item and return completed copies. Your co- operation will be highly appreciated and any information provided shall be treated with privacy and confidentiality.

Thank you in advance.

Yours Sincerely,

Mungai Simon.

APPENDIX B: RESEARCH QUESTIONNAIRE

SECTION A: DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

1. Indicate your age in years

- a) Less than 20. []
- b) 20-30 []
- c) 30-40 []
- d) 40-50 []
- e) Above 50 []

2. State your gender

- a) Male []
- b) Female []

3 .indicate your marital orientation

- a) Single []
- b) Married []
- c) Widowed []
- d) Divorced []
- e)Others(specify)

4. State your level of education

- a) Primary and below []
- b) Secondary []
- c) Tertiary []
- d) Degree []
- e) Other(specify)

5. In which CDF project implementation category are you involved?

- 1.11 a) Monitoring and Evaluation
- b) Funds Allocation
- c) Project Management Committee
- d) Other (specify).....

6. For how long have you been involved in implementation of projects in schools?

- a) Below one year
- b) 1-2
- c) 2-3
- d) 3-4
- e) 5 and above

SECTION B: THE STUDY VARIABLES

7. Indicate the number of infrastructure projects funded by CDF in the schools of your jurisdiction.

- a) 2 and Below
- b) 3 - 5
- c) 6 - 8
- d) 9 - 11
- e) Above 11

8. State the variety of infrastructure projects funded by CDF in your school.

- a) Class rooms
- b) Laboratory
- c) Dining Hall
- d) Dormitory
- e) Other (specify).....

9. How often are these infrastructure projects implemented in your school?

- a) Every year []
- b) 2-3 []
- c) 4-5 []
- d) Above 5 []

10. Indicate the adequacy of these projects on expansion of educational opportunities.

- a) Very adequate []
- b) Adequate []
- c) Indifferent []
- d) Inadequate []
- e) Very inadequate []

11. In your own opinion explain the influence of CDFs provision of infrastructural resources on expansion on education in public secondary schools in North Masaba Sub County.

.....
.....

12. State the number of personnel hired for your school using CDF funds.

- a) 2 and below []
- b) 3 - 4 []
- c) 5 - 6 []
- d) 7 - 8 []
- e) Above 8 []

13. Indicate the cadre of personnel often hired using CDF funds in your school.

- a) Teaching staff []

- b) Support staff []
- c) Resource persons []
- d) Project managers []
- e) Other (specify).....

14. To what extent do you agree or disagree that these personnel are in executing their duties?

- a) Strongly agree []
- b) Agree []
- c) Neutral []
- d) Disagree []
- e) Strongly disagree []

15. How often are these human resources provided in your school?

- a) Every year []
- b) 2-3 []
- c) 4-5 []
- d) Above 5 []

16. In your own opinion explain the influence of provision of human resources on expansion of public secondary education in North Masaba Sub County.

.....

17. Indicate the number of instructional materials offered to your school by CDF.

- a) 10 and below []
- b) 10 - 20 []
- c) 20 - 30 []

- d) 30 - 40 []
- e) Above 40 []

18. Indicate variety of instructional materials provided by CDF.

- a) Text Books []
- b) Laboratory Equipment []
- c) Teaching and Learning Aid []
- d) Other (specify)..... []

19. How adequate are these instructional materials for creating more learning opportunities?

- a) Very adequate []
- b) Adequate []
- c) Indifferent []
- e) Inadequate []
- f) Others (specify).....

20. How often are these instructional materials provided by the CDF for use in your school?

- a) More often []
- b) Often []
- c) Indifferent []
- d) Less often []

21. Explain how provision of instructional materials to your school by CDF influences expansion of secondary school education in North Masaba Sub County.....

22. How much funds has your school ever received for operational purposes from CDF?

- a) 100000 and below []
- b) 100000 - 200000 []

- c) 200000 - 300000 []
- d) 300000 - 400000 []
- e) Above 400000 []

23. In which areas of school operations do these funds target?

- a) Salary and allowances []
- b) Purchase of teaching items []
- c) Feeding programme []
- d) Other (specify) []

24. How adequate are these financial resources on the activities to be executed?

- a) Very adequate []
- b) Adequate []
- c) Indifferent []
- d) Inadequate []

25. How frequently are these funds provided to your school?

- a) More frequently []
- b) Frequently []
- c) Less frequently []
- d) Very frequently []

26. In your own opinion, explain the influence of provision of financial resources on expansion of public secondary school education in North Masaba Sub County

.....

.....