

**FACTORS AFFECTING SUSTAINABILITY OF FREE PRIMARY  
EDUCATION IN PUBLIC SCHOOLS IN CENTRAL DIVISION,  
MACHAKOS DISTRICT  
KENYA**

**By**

**Monicah Muindi**

UNIVERSITY OF NAIROBI  
EAST AFRICANA COLLECTION

**Research Project Report Submitted in Partial Fulfilment of the Requirement  
for the Award of Degree of Master of Education in Educational  
Administration**

**University of Nairobi**

**2009**

University of NAIROBI Library



0501588 8

BA 324717

Af

LB

1029.7

.M85

## **DECLARATION**

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



**Monicah Muindi**

This project has been submitted for examination with our approval as university supervisors.



**Dr. George N. Reche**

Senior Lecturer

Department of Educational Administration and Planning,

University of Nairobi



**Mr. Ibrahim Khatete**

Lecturer

Department of Educational Administration and Planning

University of Nairobi

## **DEDICATION**

I dedicate this project to my parents Mr. Joel Muindi and Mrs. Ann N Muindi.

## **ACKNOWLEDGEMENTS**

I wish to thank the Almighty God for giving me good health, strength, insight, understanding and patience that saw me through the tireless struggle in the completion of this project.

I wish to acknowledge very sincerely the concerted efforts of my Supervisors Dr. George N. Reche and Mr. Ibrahim Khatete who offered me professional guidance throughout the project work. Their persistent and tireless effort in guidance and counsel no doubt provided the impetus that I required to move on.

My sincere gratitude goes to my family members who took time to encourage me, provided the very much needed moral support and constantly prayed for me during this period. I wish to thank my employer for allowing me time off from work to undertake this project. I wish also to appreciate the contribution of the District Commissioner (D.C) and the District Education Officer (D.E.O) Machakos District, the headteachers and teachers in public primary schools Central Division whom without their cooperation, data collection would not have been possible.

## TABLE OF CONTENTS

Content	Page
Title page .....	i
Declaration.....	ii
Dedication.....	iii
Acknowledgements.....	iv
Table of contents.....	v
List of tables.....	ix
List of figures.....	xi
Abbreviations and acronyms.....	xii
Abstract .....	xiii

### CHAPTER ONE

#### INTRODUCTION

Background of the study .....	1
Statement of the problem .....	6
The purpose of the study .....	7
Objectives of the study.....	7
Research questions.....	8
Significance of the study.....	9
Limitations of the study .....	9
Delimitations of the study .....	9
Basic assumptions of the study .....	10
Definition of significant terms .....	10
Organization of the study.....	11

## CHAPTER FOUR

### DATA PRESENTATION, ANALYSIS AND INTERPRETATION

Introduction.....	28
Questionnaire return rate.....	28
Demographic information of respondents.....	29
Headteachers' gender.....	29
Classteachers' gender.....	31
Head teachers highest professional qualifications .....	32
Classteachers' highest professional qualifications.....	33
Headteachers' administrative experience.....	34
Classteachers' teaching experience.....	36
Classes teachers teach .....	37
Reporting data .....	38
Availability of physical facilities .....	39
Current pupils' enrolment in the classes .....	39
Pupils enrolment before the implementation of FPE .....	40
Number of desks per class .....	42
Number of toilets per pupil according to headteachers.....	45
Teacher-pupil ratio.....	47
Teacher-pupil ratio according to headteachers .....	47
Headteachers comment of adequacy of the teaching staff .....	49
Ways of coping with inadequate teaching staff .....	49
Whether teachers give pupils assignments.....	50
The average teaching workload .....	53
Teaching and learning resources.....	54

Adequacy of teaching and learning resources.....	54
Pupil-textbook ratio.....	56
Storage of teaching and learning facilities.....	57
Where textbooks are stored in schools.....	58
Security in storage facilities.....	59
Measures to ensure durability of textbooks .....	59
Impact of teachers in-service on FPE .....	60
Government funding .....	63
Month when funds are released .....	63
How the school copes with financial demands before receiving money .....	64
Programmes forfeited by schools due to lack of funds .....	65
Challenges faced by headteachers when implementing FPE.....	67

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

Introduction.....	70
Summary of the findings.....	70
Conclusion of the study.....	74
Recommendations of the study .....	74
Suggestions for further research .....	75
<b>Bibliography .....</b>	<b>76</b>
<b>Appendices.....</b>	<b>80</b>
Appendix One: Introductory Letter to Respondents .....	80
Appendix Two: Questionnaires for Headteachers .....	81
Appendix Three: Questionnaire for the Classteachers.....	86
Appendix Four: Research Permit.....	88



## LIST OF TABLES

<b>Table</b>	<b>Page</b>
Table 1: Public primary school enrolment by gender in Machakos District 2003-2007 .....	5
Table 2: Questionnaire return rate .....	29
Table 3: Headteachers' gender .....	30
Table 4: Teachers' gender .....	31
Table 5: Headteachers' highest professional qualification .....	32
Table 6: Classteachers' highest professional qualification .....	33
Table 7: Headteachers' administrative experience .....	35
Table 8: Classteachers' teaching experience .....	36
Table 8: Classes teachers teach.....	37
Table 10: Physical facilities in the school according to headteachers.....	39
Table 11: Pupils enrolment before and after the implementation of FPE-2003.....	41
Table 12: Number of desks per class .....	43
Table 13: Number of toilets per pupil according to headteachers .....	45
Table 14: Teacher-pupil ratio according to headteachers.....	48
Table 15: Headteachers' comment on adequacy of the teaching staff.....	49
Table 16: Ways of coping with inadequate teachers according to headteachers ..	50
Table 17: Whether teachers give pupils assignments .....	51
Table 18: How often assignments are given .....	51
Table 19: Number of questions given to pupils as assignment .....	52
Table 20: Whether teachers manage to mark assignments .....	52
Table 21: The average teaching workload .....	53

Table 22: Adequacy of teaching and learning facilities .....	55
Table 23: Pupil-textbook ratio .....	56
Table 24: Storage facilities for teaching and learning facilities according to headteachers .....	57
Table 25: Teachers’ opinion on whether there are proper storage facilities.....	57
Table 26: Headteachers response on where textbooks are stored in the school .....	58
Table 27: Headteachers opinion on whether storage facilities are secure .....	59
Table 28: Measures taken to ensure durability of textbooks according to teachers .....	60
Table 29: In-service courses attended by headteachers .....	61
Table 30: In-service courses/seminars attended by teachers .....	62
Table 31: The month the government releases the funds according to headteachers .....	64
Table 32: How the school copes with financial demands before receiving money.....	65
Table 33: Programmes forfeited by schools due to lack of funds .....	66
Table 34: Challenges faced by headteachers when implementing FPE .....	67
Table 35: Challenges faced by teachers when implementing FPE.....	68

## **LIST OF FIGURES**

<b>Figure</b>	<b>Page</b>
Figure 1: Conceptual framework .....	21
Figure 2: Gender of headteachers .....	30
Figure 3: Classteachers' gender .....	31
Figure 4: Headteachers' highest professional qualifications .....	32
Figure 5: Classteachers' highest professional qualifications .....	34
Figure 6: Headteachers' administrative experience .....	35
Figure 7: Classteachers teaching experience .....	36
Figure 8: Classes teachers teach .....	38

## **ABBREVIATIONS AND ACRONYMS**

ASAL	Arid and Semi Arid Lands
CDF	Constituency Development Fund
ERS	Economic Recovery Strategy
FPE	Free Primary Education
GER	Gross Enrolment Rate
GoK	Government of Kenya
KANU	Kenya African National Union
MDGs	Millennium Development Goals
MOE	Ministry of Education
MOEST	Ministry of Education Science and Technology
NARC	National Rainbow Coalition
NDP	National Development Plan
PRASUPE	Practical Subjects in Primary Education
PRISM	Primary School Management
PTR	Pupil Teacher Ratio
SAPs	Structural Adjustment Programmes
SbTD	School based Teacher Development
SNE	Special Needs Education
TIQUET	Totally Integrated Quality Education and Training
UN	United Nations
UNESCO	United Nations Educational Scientific and Cultural Organization
UPE	Universal Primary Education

## **ABSTRACT**

The purpose of the study was to investigate factors affecting sustainability of FPE programme in Central Division, Machakos District. To achieve this, research questions on availability of physical facilities, teacher pupil ratio, levels of provision of teaching and learning resources, in-service of teachers and the government funding were formulated. The study adopted a descriptive survey design and targeted a population of 76 headteachers and 608 class teachers out of which a sample of 15 headteachers and 120 classteachers was selected. Data was collected using questionnaires and an observation schedule. The collected data was coded and classified into major topics and summary report was made. Quantitative data was analyzed by use of descriptive statistics supported by tables, frequency distributions and percentages. Statistical Package for Social Sciences (SPSS) was used to process data obtained.

The study revealed that most schools had not built enough toilets to serve the pupil population but most of them had built classrooms and have playgrounds, most schools lacked enough teachers and therefore had to employ teachers who are paid by money contributed by parents or from the funds allocated by the government.

The study also revealed that teachers gave assignments to pupils oftenly, but were not able to mark the assignments. This coupled with heavy workload on teachers has impacted negatively on the implementation of FPE.

On the teaching and learning resources, schools had English textbooks but had inadequate English Dictionaries, audio visual facilities, class readers and library

rooms which means that books and other materials are stored in deputy headteachers offices, headteachers' offices and classrooms.

The findings also revealed that most headteachers and teachers had attended guidance and counselling courses which is key in managing pupil discipline in the absence of corporal punishment, Primary School Management (PRISM) which is key in primary school management and School based Teacher Development (SbTD) courses that enable them to improve their teaching skills in key subjects.

On government funding, the findings show that government funds are mostly released at the start of the financial year. Finally the study revealed that over enrolment of pupils to school was the major challenge facing the implementation of FPE in public primary schools in Central Division in Machakos District.

In view of the findings discussed, this study makes the following recommendations: building of new physical facilities, and the existing ones repaired, the provision of teaching and learning resources as well as storage facilities, headteachers, teachers and other members of staff be encouraged and sponsored to attend in-service programmes and funding of the FPE programme should be increased by the government.

The study targeted Central Division of Machakos District leaving out other divisions, similar study be undertaken in the whole of Machakos District. The study also did not involve other stakeholders such as parents and pupils and therefore a similar study should be done with these persons as respondents.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **Background of the study**

Education in general is meant to promote human dignity and afford equal opportunity and equity in the distribution of wealth. Primary school education remains high in the global agenda of education due to its importance for economic and social development makes it a basic right for every child (UNESCO, 2003). Primary education is the largest sub sector of any education system as it offers a unique opportunity to contribute to the transformation of societies through education of the young generation. Since the World Education for All Conference in 1990, held in Jomtien Thailand, primary education enrolment has expanded in absolute terms. However, the quality of primary education has not been kept abreast of the expansion in enrolment. The Universal Primary Education (UPE) continues to be a global concern and a priority for all (Bruns, 2003).

The African Ministers of Education meeting in Addis Ababa in 1961 identified UPE as a long term objectives. The key resolution from that meeting was that all African countries should strive to provide UPE by 1980. Some states which had the financial and human resources introduced UPE thus democratizing the right of access to education by all (UNESCO, 2003).

Upon the introduction of UPE in Tanzania in 1964, school enrolment rose dramatically more than doubling in primary level and increased by 400% in the secondary level by 1990. A large number of untrained teachers were

recruited. There were no education policies followed due to increasing costs and budgetary constraints. Most schools had inadequate teaching and learning materials (United Republic of Tanzania, 1993). Uganda introduced UPE in 1997. It was viewed as an important foundation of poverty eradication action plan. The enrolments were overwhelming from 2.6 million in 1996 to 5.8 million in 2000 and 7.2 million in 2002 (Republic of Uganda 1999). However there were inadequate physical facilities and human resources hence quality was compromised. The UPE in Uganda faced challenges like high teacher-pupil ratio, pupil-book ratio and lack of classrooms. The failure to recruit more teachers resulted to pupil-teacher ratio of 300:1 in some areas (Republic of Uganda, 1999). UPE in both Uganda and Tanzania led to massive donor investment in education that led to expansion of classrooms and provision of requisite learning/ teaching materials. The World Bank Survey (2003) by Burns, Mingat and Tomalala set a recurrent budget share for spending of items other than teachers salaries at a target of 33% a figure which was significantly higher for high attaining countries.

The Kenyan government has been trying to follow suit since independence by initially trying to provide UPE as articulated in the Sessional Paper number 10 of 1965 on African Socialism. The government committed itself to eradicating ignorance, poverty and disease (Republic of Kenya, 1964). UPE was declared in 1974 from Standard One to Standard Four and uniform fees structure of Ksh 60 for Standards 5 – 7 per child per annum in the whole country. Primary school enrolment for Standards 1 – 6 then increased from 1.8 to 2.8 million in



1974 (Republic of Kenya, 1976). The school management committees introduced all sorts of levies to recover the lost revenue under the guise of building fund. This was after the government failed to give clear guidelines on how to recover the lost revenue. There was overcrowding in classes as the supply of teaching and learning resources under-went severe strain. The country was also short of trained teachers. The teaching force stood at 56,000 in 1973 out of whom 12,600 were untrained teachers. By 1975, the number of untrained teachers stood at 40,000 out of a teaching force of 90,000 teachers (Sifuna, 1990). In 1975, the situation reverted to how it was before 1973 as most parents could not afford the levies (Sifuna, 1990). The high dropout was a response to the high levies as well as the quality of education that was being offered (Sifuna, 1990)

In 1978 an attempt to address high dropouts, in the country, the government abolished all forms of primary school levies through out the country. The National Committee on Educational Objectives and Policies recommended UPE for the entire primary school cycle (Republic of Kenya, 1976). Free primary education was later abolished under the Structural Adjustment Programmes (SAPs). Following the recommendations of the Presidential Working Party on Education and Training for the Next Decade and Beyond and the subsequent Sessional Paper number 6 of 1988, the government shifted the burden of funding education to the parents and the community in the form of school levies and other expenses (Olembo, Wanga and Karagu, 1992). The building fund levy varied from one district to the other, but in most cases it

turned out to be higher than the fees charged prior to the declaration of UPE. The implementation of the SAPs frustrated many parents who had no alternative but to withdraw their children from school (Republic of Kenya, 1988). The UPE policy was implemented with some degree of success until the effects of a declining economy and donor conditionality. The introduction of cost-sharing measures in 1988 under the SAPs in the provision of social services including education when the majority of the population were experiencing raising poverty levels influenced the degree of affordability hence limited access to this service. In the course of implementation, the government paid teachers remuneration through taxation, while funds for construction and maintenance of education facilities were raised by parents or through voluntary construction (Olembo et al, 1992). While the population has been on a steady increase, there has not been a corresponding expansion or improvement of infrastructure or service delivery which is attributed to the effects of cost sharing, hidden levies such as activity fees, building funds, compounded by the inability of most parents to access private education service (Republic of Kenya, 1988).

Free Primary Education (FPE) was re-introduced in Kenya in January 2003 in line with the Millennium Development Goals (MDGs), Poverty Reduction Strategy Paper (PRSP) and the Economic Recovery Strategy (ERS) for wealth and employment creation and to achievement of UPE by 2015. After this re-introduction of FPE in 2003, an estimated 1.5 million children, who were previously out-of-school enrolled for primary education (UNESCO, 2003).

Enrolment rates in public primary schools rose from 5.9 million in 2002 to 7.2 million in 2003. The enrolments have since been increasing steadily for example from 7.6 million in 2006 to 8.3 million in 2007 (MOEST, 2009). However physical capacity (space) lacked in many schools forcing some children to study under trees, with some classes being overcrowded for example some comprise 80-100 children (UNESCO, 2003).

A study by UNESCO in 2004 in 162 primary schools in Kenya, established that after an initial increase in enrolment, public primary schools are now experiencing decline in enrolments due to dropouts and to a lesser degree transfer to private schools. While enrolment rose to 92,974 in the 162 sampled schools in 2003, up from 74,410 in 2002, the number dropped to 88,356 in 2004, representing a 5% drop (UNESCO, 2005). In 2004, Machakos District registered an enrolment of 279,351, however this enrolment dropped to 257,924 in 2007 (MOEST, 2009).

**Table 1: Public primary school enrolment by gender in Machakos District  
2003-2007**

<b>Year</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
<b>Boys</b>	139,079	143,492	141,918	139,904	123,227
<b>Girls</b>	132,509	135,859	134,949	133,321	134,697
<b>Total</b>	<b>271,588</b>	<b>279,351</b>	<b>276,867</b>	<b>273,225</b>	<b>257,924</b>

**Source:** MOEST, (2009).

The significant drop in enrolment has been attributed to pupils being transferred to private schools since the influx of large pupils to public primary schools had compromised the quality of education as a result of high teacher pupil ratio and strain on both physical and teaching and learning facilities making some parents to withdraw their children. A substantial number of pupils have also dropped out of public primary schools for being over-age and failure to pay the hidden costs charged in schools (MOEST, 2009).

### **Statement of the problem**

Since the onset of the FPE programme in Kenya in 2003, questions have been raised on whether the government will sustain the programme and ensure quality teaching and learning due to its failure to employ additional teachers to cater for the increased enrolment. With the increased enrolment in schools, teaching and learning is difficult (Republic of Kenya, 2003). Whereas the government had a positive plan of the FPE programme to yield positive effects, teaching problems have been experienced in the running of the programme (Republic of Kenya, 2003).

A study carried by UNESCO in 2004 in 162 primary schools in Kenya show that on average the teacher-pupil ratio is 1:50. Teachers are not able to give individual attention to the learners, especially the slow learners; this makes it difficult to offer quality education (UNESCO, 2005). Since the introduction of FPE, there are many challenges in most areas including Central Division, Machakos District where the provision of both physical and human resources

do not match the pupil population. School administrators and other stakeholders have complained of various issues pertaining to sustainability of FPE.

In 2004, Machakos District registered an enrolment of 279,351 in public primary schools, this enrolment dropped to 257,924 in 2007 (MOEST, 2009). In a meeting held by Education officials, officials of Primary School Headteachers Association and members of the Kenya National Union of Teachers held in Machakos in 2009, revealed that despite government's effort to provide FPE by abolishing all forms of school levies, providing CDF funded schools and other projects, primary schools in Central Division continued to register decline in enrolment (Eastern Province Capacity Building Report, 2009). This study therefore aims at investigating factors affecting sustainability of FPE programme in public primary schools in Central Division, Machakos District.

### **The purpose of the study**

The purpose of the study was to investigate factors affecting sustainability of FPE programme in Central Division, Machakos District.

### **Objectives of the study**

The study aimed at achieving the following objectives:

1. Establish the adequacy of physical facilities for sustainability of FPE in Central Division, Machakos District.

2. Assess the effects of teacher – pupil ratio on the sustainability of FPE in Central Division, Machakos District.
3. Establish levels of provision of the teaching and learning resources for sustainability of FPE in Central Division, Machakos District.
4. Determine how in-servicing of teachers affect sustainability of FPE in Central Division, Machakos District.
5. Assess the adequacy of the government funds for the sustainability of FPE in Central Division, Machakos District.

### **Research questions**

To help realise the stated objectives, the study was guided by the following research questions:

1. To what extent does the availability of physical facilities affect the sustainability of FPE in Central Division, Machakos District?
2. How does teacher-pupil ratio affect the sustainability of FPE in Central Division, Machakos District?
3. To what extent has teaching and learning resources affected the implementation of FPE in Central Division, Machakos District?
4. To what extent has in-servicing of the teacher affected implementation of FPE in Central Division, Machakos District?
5. To what extent is the government funding adequate to sustain the FPE programme?

### **Significance of the study**

The findings of the study may be useful to the education planners in the Ministry of Education (MOE) as it may act as an evaluation report on the progress of sustainability of the FPE programme. The findings of this study may also be important to the school administrators in documenting the issues that hinder proper sustainability of FPE. The findings of the study may add literature related to FPE which may be beneficial in the field of educational administration. The findings of the study may also create more opportunity areas which may attract government funding as well as private sector and foreign aid. The recommendations of the report may be useful to other researchers who might be interested in this and other related field of study.

### **Limitations of the study**

Limitations are conditions beyond the control of the researcher that may place restrictions on the conclusions of the study and their application to other situations (Best & Khan, 1998). The major limitation of this study was that it was not possible to control the attitudes of the respondents which might have affected the validity of the responses; respondents may have given answers that were not honest or true for fear of being victimized. However the researcher assured them confidentiality.

### **Delimitations of the study**

The study was conducted in Central Division, Machakos District. For a comprehensive study the whole district should have been included. The study

only involved the head teachers and class teachers in the public primary schools. Other stakeholders like parents, students and subject teachers would have been involved in the study. The study covered one administrative division only therefore the findings of this study may be generalized to the other areas with caution.

### **Basic assumptions of the study**

The study assumed that primary school head teachers and teachers had been trained on various issues concerned with the implementation of FPE. The study assumed that public primary schools in the division were well prepared for the implementation of FPE in terms of pupil enrolment, teacher- pupil ratio, availability of physical and human resources.

### **Definition of significant terms**

**Challenges** - Obstacles / constraints / problems which might prevent full success of the FPE programme.

**Free Primary Education (FPE)** - An education that involves no financial burden to the parents of the pupils in primary schools. This means no fees or levies charged, and there should be no hidden costs to hinder any pupil from benefiting.

**In-Service Training** - Refresher courses or seminars meant to make a primary school teacher keep a breast of current trends in education.



**Special needs** - Children with different characteristics compared to those in the same cohort, such as average, physically challenged, mentally handicapped, drug users and abusers, the slow learners and the gifted learners.

**Sustainability** - The ability to maintain free primary education objectives which are to ensure that all children of school going age have a chance to receive basic education.

### **Organization of the study**

The study is organized into five chapters. Chapter one consists of the background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, limitations of the study, delimitations of the study, basic assumptions of the study, definitions of significant terms and organization of the study. Chapter two is on the literature review that is related to the study. This includes introduction, free primary education in Kenya, physical facilities, teacher pupil-ratio, in-service of teacher, financial management, and summary of the literature review, theoretical framework and conceptual framework. Chapter three describes the research methodology employed in carrying out the study. It includes the research design, target population, sample size and sampling procedures, research instruments, instrument validity, reliability of the instruments, data collection procedures and data analysis techniques. Chapter four deals with presentation of data collected their analysis and interpretation of findings. Chapter five is on summary of the research findings, conclusions, recommendations of the study and suggestions for further research

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **Introduction**

This chapter reviews literature on Free Primary Education. physical facilities, teacher-pupil ratio, teaching/learning facilities, in-service teacher training, and financial management, summary, theoretical framework, and conceptual framework.

#### **Free primary education in Kenya**

The government introduced Free Primary Education (FPE) in 2003 as a commitment to realize Universal primary Education (UPE) by 2005 and Education for All (EFA) by 2015. Achieving UPE by ensuring all boys and girls complete a full course of primary schooling is one of the Millennium Development Goal (MDG) as pledged by 189 United Nations member States. The Government of Kenya, having accepted and signed the recommendations of these two international meetings, looked at the attainment of UPE as a development strategy and a literate population as a key to the overall development of the nation (Republic of Kenya, 2003).

In Kenya FPE was officially launched in January 2003. This saw the abolition of fees and other levies for tuition in primary education. Under the arrangement, the government and development partners are meeting the cost of basic teaching and learning materials, wages for critical non-teaching staff and sponsoring of co-curricular activities. For the year 2003, the government paid Ksh 1,020 per child with an additional Ksh 2,000 per disabled child under

the integrated programmes (Republic of Kenya, 2003).The (FPE) is a joint responsibility. The government considers the provision of primary education as central to poverty reduction and implementation of FPE a spirit of partnership where everybody has a clear role to play. The parents are still required to meet the cost of examination fees for class eight, provide school uniforms, provide meals, transport to and from school, boarding facilities, as well as health care (UNESCO, 2003).

In the guidelines on implementation of FPE, the primary schools are expected to enrol all the children of school going age without discrimination. The schools should be all inclusive to cater for children from various backgrounds including children with special needs. Street children who may have been exposed to drugs or emotional stress need to be rehabilitated so as to fit into regular schools, while over-age learners who show up for enrolment should be enabled to attend school by establishing one class to serve over-age children of a particular area or cluster of schools where necessary. Double shifts should be encouraged for schools which have enrolled more pupils than they have the capacity to handle. Everything should be done to keep all those enrolled in school (Republic of Kenya, 2003).

The FPE does not require parents and communities to build more schools, but rather encourages the communities to improve, refurbish and use existing facilities such as community and religious buildings as classrooms. However, FPE does not stop community initiatives to maintain certain facilities and services for pupils such as lunches, swimming pools, school bus and transport

and boarding facilities. This should be discussed and agreed by the parents. The Ministry of Education approval through the District Education Board is required before any charges can be made (Republic of Kenya, 2003). When FPE was introduced in Kenya, enrolment rates in public primary schools rose from 5.9 million in 2002 to 7.2 million in 2003, 7.6 million in 2006 and 8.3 million in 2007 (MOEST, 2007). The over whelming enrolments across the country indicates that many children had been locked out of school by levies, thus curtailing their potential and subsequent contribution to the development of the nation. Since the government had not given an age limit, even those who were over-age were enrolled. The FPE programme faces several challenges which include increased student population, shortage of teachers, over stretched physical facilities, discipline problems, need for clear guidelines on age of admission and placement of over-age learners (UNESCO, 2005).

### **Physical facilities**

The appearance of the school plant as well as the school compound is a very important source of inspiration and motivation to members of the school, the community and the stakeholders (Okumbe, 1998). School physical facilities such as classrooms, libraries, laboratories and others have direct bearing on good performance (Ayoo, 2002). The condition of the school building is very important in the learning process (Gakuru, 1981). Crowding in classes is a factor that can affect learning and consequently implementation of the new programme.

Anandu (1990) asserts that physical facilities are vital for both teachers and pupils in the teaching/learning situations. Any trace of inadequacy leads to frustration and demotivation. Good classroom arrangements help the teacher to cope with complex demands of teaching many students. Nafula, and Ngoma (1998) found out that modern teaching environment require space for movement to enable students to physically change their grouping during a lesson. Wanjala (1999) observed that lack of adequate physical facilities like libraries and classrooms affects student performance. However there exists an information gap on the adequacy of physical facilities in enhancing sustainability of FPE programme which this study aims to fill.

### **Pupil-teacher ratio (PTR)**

Mbatia (2005) reported that most primary schools cannot cope with the large number of pupils who poured in school after introduction of FPE in 2003. The large classes are the most glaring characteristic of teacher shortage. Many classes go unattended to, others are merged especially the lower classes. Teachers rarely mark pupils work (Mbatia, 2005). Chiefelbein and Simmons (1981) on determinants of school enrolments argued that there is a close relationship between the out of class academic assignments and achievements.

Wanjala (1999) observed that high PTR lead to difficult work both in preparation and in marking. It also strains the textbook usage consequently affecting the student performance. High PTR lead to feedback problems due to difficulties for the teacher to assess pupils frequently; regulate the number of

UNIVERSITY OF NAIROBI  
EAST AFRICANA COLLECTION

questions a teacher could set in assignment, continuous assessment tests and end of term examinations. Overcrowded classrooms lead to lack of interaction between the teacher and learners. The PTR vary from region to region and between urban and rural schools. While it is uneconomical to have a ratio of 25:1, a pupil-teacher ratio (PTR) of over 40:1 affects the quality of teaching. The Commission of Enquiry into Educational Systems in Kenya (Koech report) (Republic of Kenya, 1999) recommended a PTR of 40:1 and where there are fewer pupils in a class, a shift system be applied (Republic of Kenya, 1999). With the introduction of the FPE, the PTR is far above the recommended ratio in most schools.

However Abagi (1997) concluded that how a teacher organizes and motivates his class is more important than the class size. Available studies suggest that high and very low pupil-teacher ratio is one of the main reasons for poor quality and low efficiency in education which characterizes primary education in Africa. A ratio of 40:1 is considered reasonable for developing countries. Low enrolments lead to under utilization of resources, teachers included, but at some point, classroom management and effective teaching becomes difficulty when a teacher has to handle very large number of pupils.

### **Teaching/learning materials**

Teaching/ learning materials form the medium through which teaching is carried out. Materials used by teachers help the teachers to prepare schemes of work and lesson notes which guide them in the course of teaching. Ouma (1987) notes that resources encourage learners to participate in the learning

process, motivates them, cater for individual differences and enables learners to gain experience by using their senses.

Since the declaration of FPE, the government has set a target of Textbook-Pupil Ratio of 1:2 for upper primary and 1:3 for lower primary. According to the study by UNESCO (2005) provision of instructional materials including textbooks was identified as one of the major achievements of the FPE programme, in Kenya particularly through reducing the cost burden of education on parents leading to an influx of pupils to the schools. However, it was noted that the FPE grants disbursements were not done on time as most schools started receiving the funds either in the second or third term of 2003. The FPE funds for the year 2008 were disbursed in term three; while in the year 2009 only the fund for the School Instructional Materials Bank Account (SIMBA) were released by March 2009 (MOEST, 2009). This implied that most pupils had limited access to textbooks in first term.

### **Government funding**

During the year 2001/2002 financial year, the government of Kenya allocated Kshs 56 billion to education which was 13.3% increase from the previous year budget of 49 billion (Mbatia, 2005). Out of this allocation, personal emoluments consumed 83% leaving only 17% for other programmes. The donor community received FPE with a lot of enthusiasm. Funds trickled down to the school level where actual implementation of FPE was taking place through the head teachers and the stakeholders of the school. Glatter (1989)

put it that, emphasis should be placed on the need for school to be more accountable to the tax payers.

The Education Act (1980) spells out in part that good records keeping and inventory should show how all physical resources in the possession of the school are acquired, utilized, registered, maintained and expended. The head teacher as a financial manager is concerned with three main financial management processes which are budgeting, accounting and auditing. Everest (1998) says that the responsibilities of head teacher go beyond control of expenditure. The government implemented the FPE programme without carrying out cost analysis to determine how much each child needs. The decision to award each child Ksh 1,020 and Ksh 2,000 for every disabled child was arbitrary. The parents were supposed to be involved in the monitoring the use of the Ksh 1,020 set aside for every child by the Kenya government (Republic of Kenya, 2003).

### **In-Service teacher training**

The pre-service teacher training often fails to prepare teachers for the reality of the class room in terms of large classes, insufficient or poor quality teaching and learning materials, vast differences in the capacities of learners and in some cases the complexity of having to cater for the different languages spoken by learners (UNESCO, 2003). The inadequacy in teacher training together with the changing learning environment put pressure on educational systems to provide in-service training to teachers at regular levels of education delivery (UNESCO, 2003).



Shiundu and Omulando (1992) noted that constant teacher in-servicing is very necessary as it fills the gaps which were not filled during the time of teacher training. Teacher Advisory Centres (TACs) offer both academic and professional support for teachers. They also act as resource centers and focal points for in-service of teachers. Ayot (1982) points out that TAC is mainly used for updating teachers in the use of necessary equipment. New teachers may use the TACs as a means of obtaining support from experienced teachers, while experienced teachers may also bring themselves to up-to-date with new developments in educational ideas.

The TACs also functions as research centre facilities to carry out research in primary teaching methods. Using the results of their research findings, they may initiate their own programmes and try to use locally available teaching aids. These findings may be first passed to the classroom teachers who after testing them make the necessary modifications (Ayot, 1982).

### **Summary of the literature review**

This section has outlined that for effective sustainability of free primary education programme, all the variables discussed above be directly proportional to the rate of enrolment. If there is any discrepancy between the two variables, the quality of education is compromised. While existing studies explain the importance of the variables that lead to effective implementation of basic education, attention has not been focused on the adequacy of education resources that commensurate with the rate of enrolment. Consequently, there exists a significant information and advocacy gap which

this research. hopes to fill by conducting an analysis between policy and practice in the sustainability of FPE.

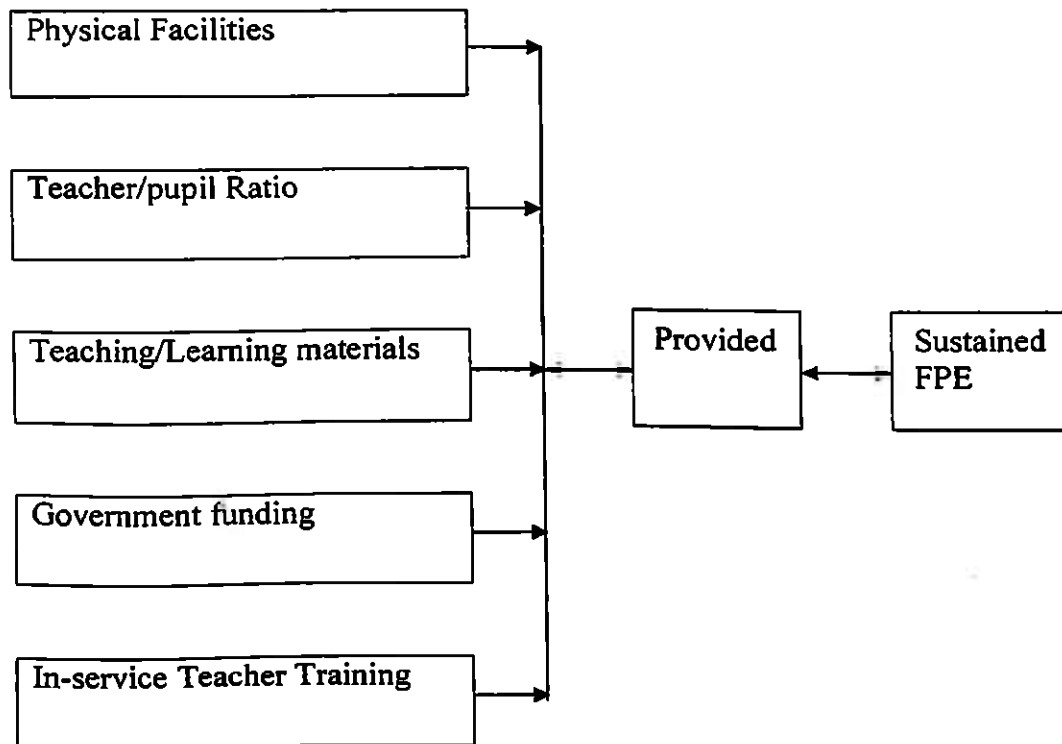
### **Theoretical framework**

The study is based on systems approach to educational management. A system is a collection of parts or sub-systems integrated to accomplish an overall goal (Thomas, 1980). Systems have inputs, process, outputs or outcomes, with an on going feedback among these various parts. If one part is removed the nature of the system is changed. There is direct relationship between education inputs (students, teachers, teaching/ learning materials) and educational out puts (performance at the national examinations, graduation rates, school enrolments and retention of the learners), and the interaction processes that take place within the school as a system. This study examines the physical facilities, teacher-pupil ratio, teaching / learning materials government funds and in-service courses as educational in puts; variables which when put together effectively forms a basis for the sustainability of FPE.

### **Conceptual framework**

The following conceptual framework illustrates the variables that are in play for effective sustainability of FPE.

**Figure 1: Conceptual framework**



**Source:** Adapted from Huha (2003)

The Figure 1 shows the challenges arising as a result of the declaration of FPE in public primary schools. These challenges have to be determined to establish whether education provided with these challenges can be sustained.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **Introduction**

This chapter outlines the methodology used in carrying out the study. It includes research design, target population, sample size and sampling procedures, research instruments, instrument validity and reliability of the instruments, data collection procedures and data analysis techniques.

#### **Research design**

This study adopted a descriptive survey design to establish the factors contributing to the sustainability of FPE. A survey is an attempt to collect data from members of a population in order to determine the status of that population with respect to one or more variables. It is a method through which data is collected from members of targeted population by use of questionnaires, interviews and observation schedule (Mugenda and Mugenda, 1999). This design helped the researcher to get generalized characteristics or information about the target population. Descriptive survey research was intended to produce statistical information and aspects of education that interest policy makers and educators (Orodho, 2003).

#### **Target population**

Target population included all the members of a real or hypothetical set of people, events or objects to which a researcher wished to generalize the results of the research (Borg and Gall, 1996). The target population of this study

consisted of all the 76 head teachers and 608 class teachers in public primary schools in Central Division of Machakos District.

### **Sampling techniques and sample size**

According to Borg and Gall (1996), sampling refers to the process of selecting a few cases from a defined population with the intent that the cases accurately represent the population. Schools were assigned numbers. Fifteen schools were selected for the study. Stratified random sampling was used to select 15 head teachers for the study. The head teachers were classified according to gender to get a more accurate representation (Best and Kahn, 2006). There were 8 female head teachers and 68 male head teachers. Two female head teachers and 13 male head teachers were selected for the study. Purposive sampling was used to select the class teachers. This method allows the researcher to select those participants who provide the richest information (Best and Kahn, 2006). Class teachers are in charge of their specific classes and are conversant with effects of FPE on the pupils. Eight class teachers were selected from each school chosen for the study. Therefore a total of 120 class teachers were selected for the study.

### **Research instruments**

Questionnaires and an observation schedule were used for this research. Questionnaires were preferred because they are more efficient in that they require less time, they are less expensive and permits collection of data from a wide population as suggested by Orodho, (2005). Two categories of

questionnaires were used, that is one for the head teachers and another for the class teacher. The two categories of questionnaires comprised of closed ended items which required respondents to select one response from given alternatives and open ended items which required the respondents to express their personal views about the questions asked. Questionnaires comprised of sections A, B, C, D, E, F arranged according to objectives of the study. Section A comprised of demographic information, section B collected information on physical facilities, section C collected information on teacher-pupil ratio, section D collected information on teaching/learning materials, section E collected information on government funding while section F collected information on in-service training courses. Observation checklist was used to record information on the availability of classrooms, libraries, desks, playgrounds, toilets and other facilities.

### **Instrument validity**

Validity is the accuracy and meaningfulness of inferences drawn from the research findings. It is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study (Mugenda and Mugenda, 1999). In this study, the validity was taken to mean the extent to which the instruments covered the objectives. To determine the validity of the instruments, a pilot study was conducted with one head teacher and eight class teachers; this was 1% of the total population (Mugenda and Mugenda, 1999). The school that was chosen for the pilot study was not included in the sample used in the study. Through the pilot study, the researcher was able to

determine ambiguities in the items. The items that failed to measure the variable intended were modified and others were discarded. Expert advice was sought from the supervisors and other lecturers in the Department of Educational Administration and Planning, who critically examined the items of the instruments and gave professional advice that found a basis for the modification and improvement of the questionnaires.

### **Reliability of the instruments**

Reliability is a measure or the degree to which a research instrument yields constant results or data after repeated trials (Mugenda and Mugenda, 1999). To test the reliability of the instruments, the researcher employed the test-retest during the pilot study. The researcher administered the questionnaire on to one head teacher and eight class teachers. After one week the researcher administered the same instruments to the same respondents. A pilot study helps test the feasibility of the study techniques and to perfect the questionnaire concepts and wording. The pre-test helped to find out if the selected questionnaires measured what they were supposed to measure. It also helped to find out if the wording was clear and if all the questions were interpreted in the same way by the respondents. The researcher used Pearson Product Moment Correlation formula to correlate the scores from both test periods to obtain correlation coefficient. Pearson Product Moment Correlation establishes the extent to which content of the instruments are consistent in eliciting the same responses every time the instrument is administered (Orodho, 2005). A correlation coefficient of about 0.8 to 1 is considered high

enough to judge the instrument as reliable for the study. Pearson product moment was calculated using the following formula:

$$r = \frac{N\sum xy - (\sum x)(\sum y)}{\sqrt{N[\sum x^2 - (\sum x)^2] [\sum y^2 - (\sum y)^2]}}$$

### **Data collection procedures**

The researcher applied for a research permit from the Ministry of Education. After permission was granted, the researcher sought clearance from the district education office, Machakos where permission and introductory letter to the participating schools was issued. The researcher booked appointment with the help of participating schools. The researcher visited the selected schools to establish rapport with the members of the staff. The researcher then administered the research instruments of the study to the head teachers and the class teachers of the sampled schools. The researcher also filled the observation schedule during the visit to the schools. The researcher collected completed questionnaires after one week.

### **Data analysis techniques**

The collected data was edited. The data was then analyzed both qualitatively and quantitatively. Qualitative data analysis considered inferences that were made from opinions of respondents. Qualitative data was analyzed thematically. Collected data was analyzed, coded and classified into major topics from which summary report was made. Quantitative data was analyzed



by use of descriptive statistics supported by tables, frequency distributions and percentages. Statistical Package for Social Sciences (SPSS) was used to process data obtained.

## **CHAPTER FOUR**

### **DATA PRESENTATION, ANALYSIS AND INTERPRETATION**

#### **Introduction**

This chapter represents data presentation, analysis and interpretation of the data collected from the study. The chapter begins with the analysis of the questionnaire return rate and then presents the analysis of the demographic information of the respondents which include headteachers' and classteachers' gender, their highest professional qualification, headteachers administrative experience, teachers' teaching experience and the classes taught. The sub-topics which covered by the research questions of the study include: availability of physical facilities, teacher pupil ratio, levels of provision of teaching and learning resources, in-service of teachers and the government funding whose data are presented, analyzed and discussed. Frequency tables, percentages, range, pie charts and graphs have been used to present the findings of the study. The chapter concludes with a summary of the findings.

#### **Questionnaire return rate**

From a target population of 76 head teachers and 608 class teachers in public primary schools in Central Division of Machakos District, a sample of 15 head teachers and 120 class teachers was selected. These respondents were given questionnaires which they filled and returned them to the researcher. The questionnaire return rate is as presented in Table 2.

**Table 2: Questionnaire return rate**

<b>Category of respondents</b>	<b>Sample</b>	<b>Questionnaire Returned</b>	<b>Percentage return rate</b>
Headteachers	15	14	93.3
Classteachers	120	112	93.3
<b>Total</b>	<b>135</b>	<b>126</b>	

According to Table 2, out of a sample of 15 head teachers, 14 of them returned dully filled questionnaire making 93.3% return rate and out of a sample of 120 class teachers 112 returned the dully filled questionnaires making a questionnaire return rate of 93.3%. The average return rate was calculated as 93.3% which was found to be an acceptable representation of the target population.

### **Demographic information of respondents**

This section presents the analysis of the demographic information of respondents as revealed from the data collected from head teachers and classteachers of public primary schools in Central Division, Machakos District. It includes respondents' gender, highest professional qualification, administrative and teaching experience and classes teachers taught.

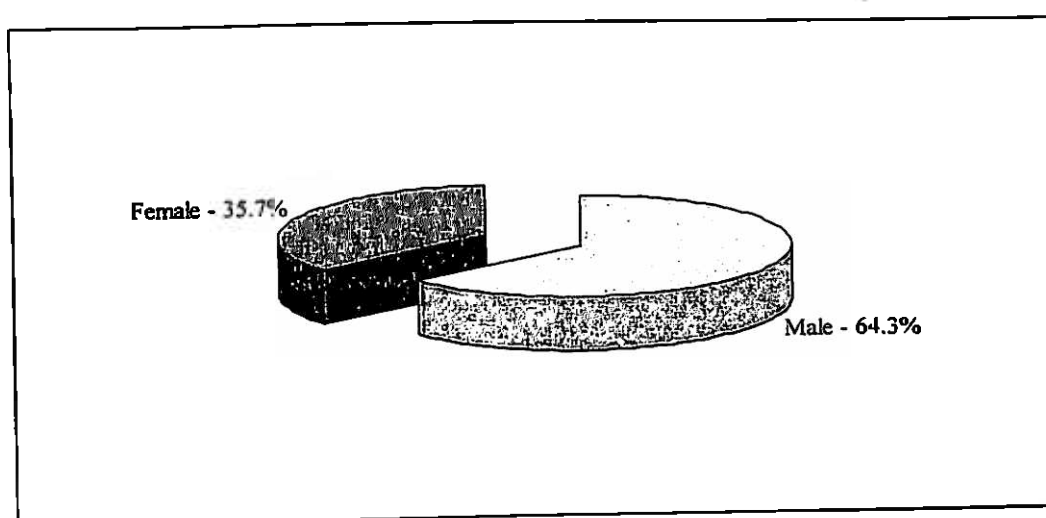
#### **Headteachers' gender**

The researcher inquired from head teachers of public primary schools in Central Division of Machakos District to indicate their gender. The findings are as presented on Table 3 and Figure 2.

**Table 3: Headteachers' gender**

Gender	Frequency	Percentage
Male	9	64.3%
Female	5	35.7
<b>Total</b>	<b>14</b>	<b>100.0</b>

**Figure 2: Gender of headteachers**



The findings in Table 3 and Figure 2 show that majority of headteachers (64.4%) were male while 35.7% were female. This is an indication that gender parity has not been observed in the posting and promotion of head teachers in the division as seen by a high number of male head teachers as compared to female head teachers. This could affect the implementation of FPE in that the girl child may not have role models in position of school heads.

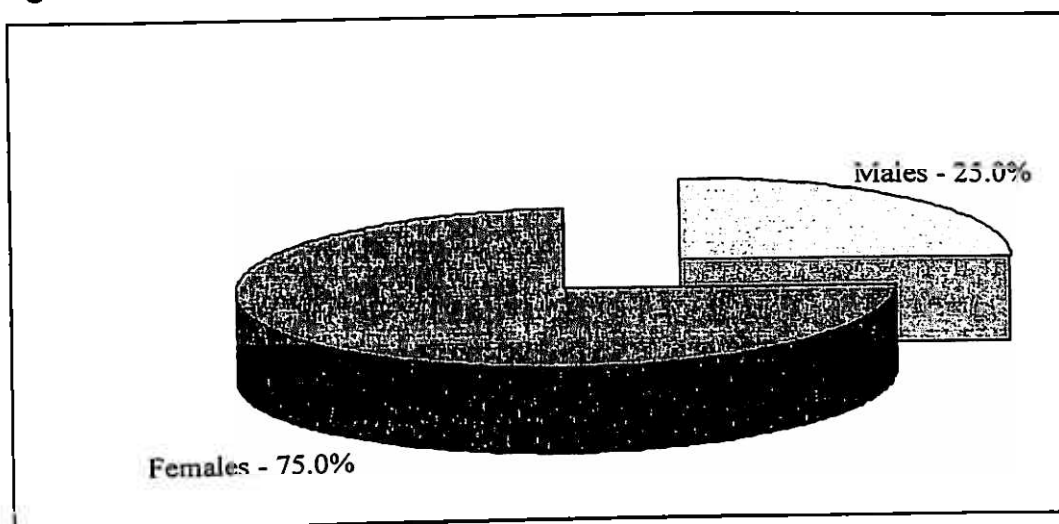
### Classteachers' gender

The researcher equally asked classteachers to indicate their gender. The findings are as presented in Table 4 and Figure 3.

**Table 4: Teachers' gender**

Gender	Frequency	Percentage
Male	28	25.0
Female	84	75.0
<b>Total</b>	<b>112</b>	<b>100.0</b>

**Figure 3: Classteachers' gender**



The findings of the study in Table 4 and Figure 3 show that majority of classteachers in Central Division, Machakos District (75.0%) are female as compared to 25.0% of male teachers. The findings in comparison to the findings on Table 2 show that despite the fact that majority of teachers are female, promotion to school headship is not fair to women.

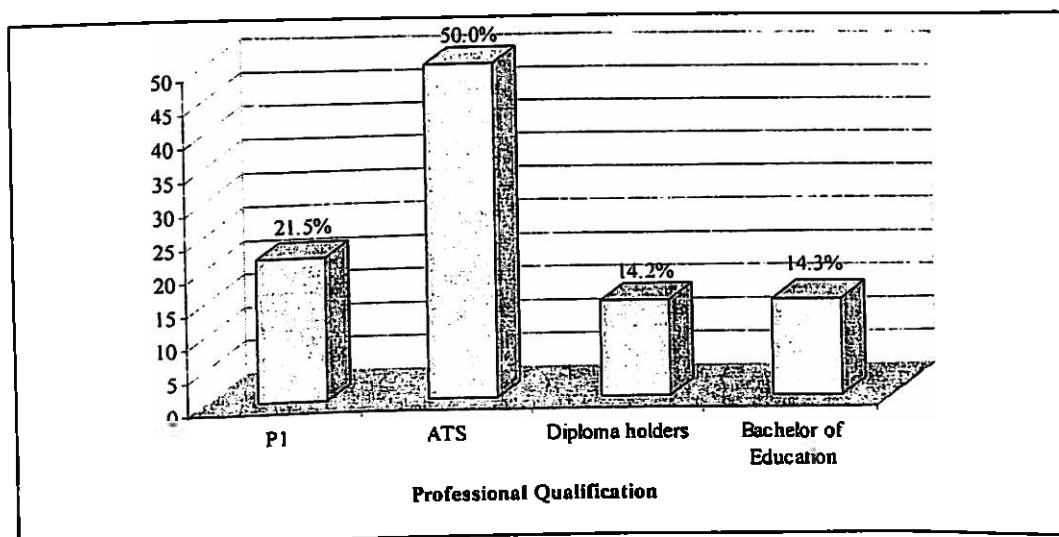
### Head teachers highest professional qualifications

In order to access the sustainability of the free primary school education programme, it was necessary that the researcher asks headteachers to indicate their highest qualification. The results are as shown in Table 5 and Figure 4.

**Table 5: Headteachers' highest professional qualification**

Qualification	Frequency	Percentage
P1	3	21.5
ATS	7	50.0
Diploma holders	2	14.2
Bachelor of education	2	14.3
<b>Total</b>	<b>14</b>	<b>100.0</b>

**Figure 4: Headteachers' highest professional qualifications**



The findings as indicated in Table 5 and Figure 4, majority of headteachers in Central Division, Machakos District (50.0%) had ATS qualifications. This is followed by 21.5% of teachers who had P1 qualification, and then 14.2% were

diploma certificate holders and lastly 14.3% were bachelor of education degree holders. These findings are an indication that majority of head teachers had minimum qualification to head in public primary schools and therefore failure to sustain the free primary education programme can not be very much attributed to head teachers' qualifications.

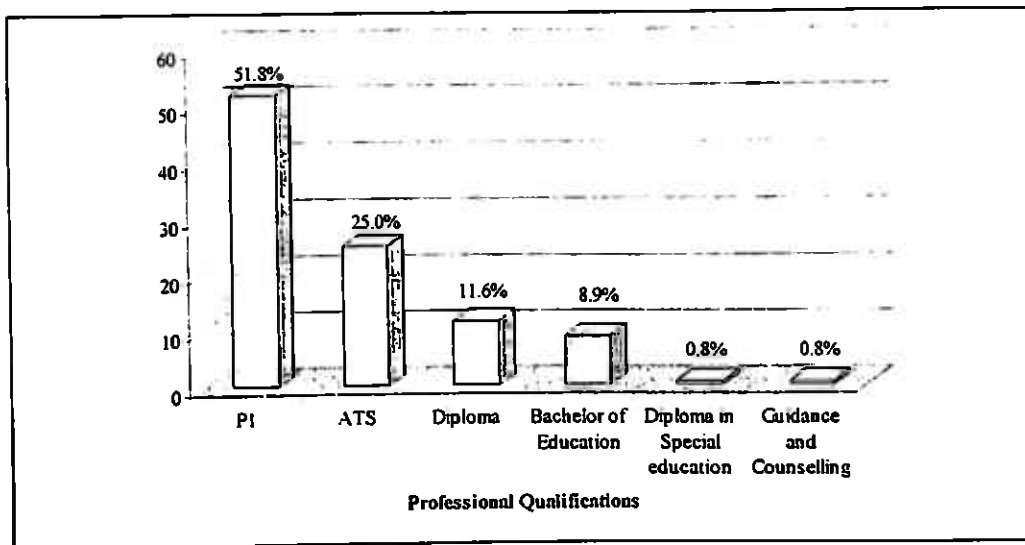
### **Classteachers' highest professional qualifications**

Just like head teachers, classteachers of public primary school in Central Division, Machakos District were asked to indicate their highest professional qualifications. Their responses are as shown in Figure 5.

**Table 6: Classteachers' highest professional qualification**

<b>Qualification</b>	<b>Frequency</b>	<b>Percentage</b>
PI	59	52.7
ATS	28	25.0
Diploma holders	13	11.6
Bachelor of education	10	8.9
Diploma in special education	1	0.9
Guidance and counselling	1	0.9
<b>Total</b>	<b>112</b>	<b>100.0</b>

**Figure 5: Classteachers' highest professional qualifications**



From Table 6 and Figure 5, majority of teachers (52.7%) were P1 certificate holders. This was followed by 25.0% of teachers with ATS qualification, then 11.6% with diploma certificates, 8.9% were bachelor of education degree holders and lastly, 0.8% had diploma in special education and certificate in guidance and counselling. These findings are an indication that majority of teachers had minimum qualification to teach in public primary schools and therefore failure to sustain the free primary education programme can not be attributed to teachers' qualifications.

### **Headteachers' administrative experience**

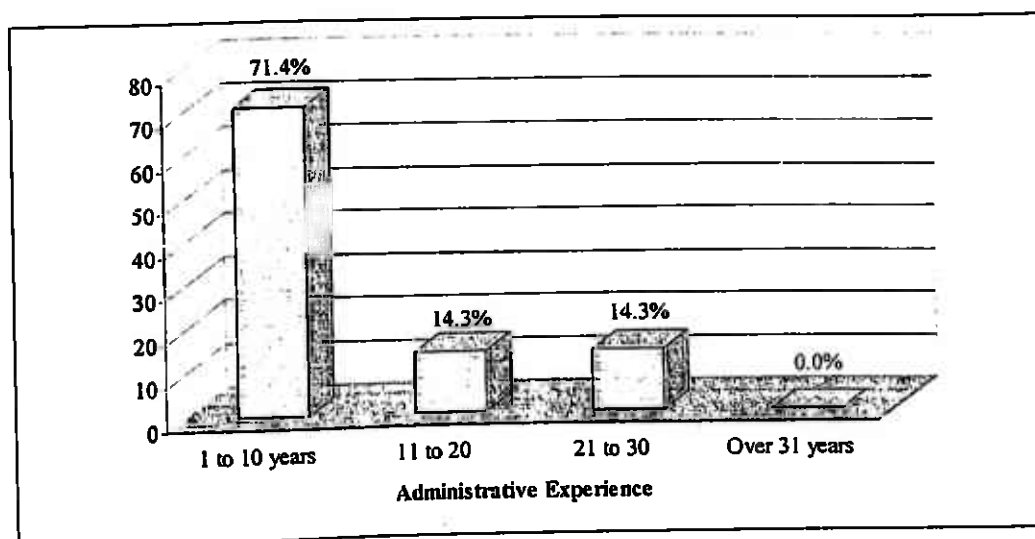
The study further sought to establish from headteachers their administrative experience in years. The findings are as presented in Table 7 and Figure 6.



**Table 7: Headteachers' administrative experience**

Experience in years	Frequency	Percentage
1 to 10	10	71.4
11 to 20	2	14.3
21 to 30	2	14.3
Over 31	0	0.0
<b>Total</b>	<b>14</b>	<b>100.0</b>

**Figure 6: Headteachers' administrative experience**



The findings as shown in Table 7 and Figure 6 indicate that majority of headteachers (71.4%) had administrative experience of between 1 to 10 years. This is followed by 14.3% of headteachers with an administrative experience of 11 to 20 and 21 to 30 years respectively. None of the headteachers had an administrative experience of over 30 years. The findings are an indicator that majority of headteachers has administrative of less than 10 years which means

that majority of them were not heading schools before the introduction of FPE programme and therefore could be said to have not experienced changes in administrative challenges as a result of the introduction of the programme.

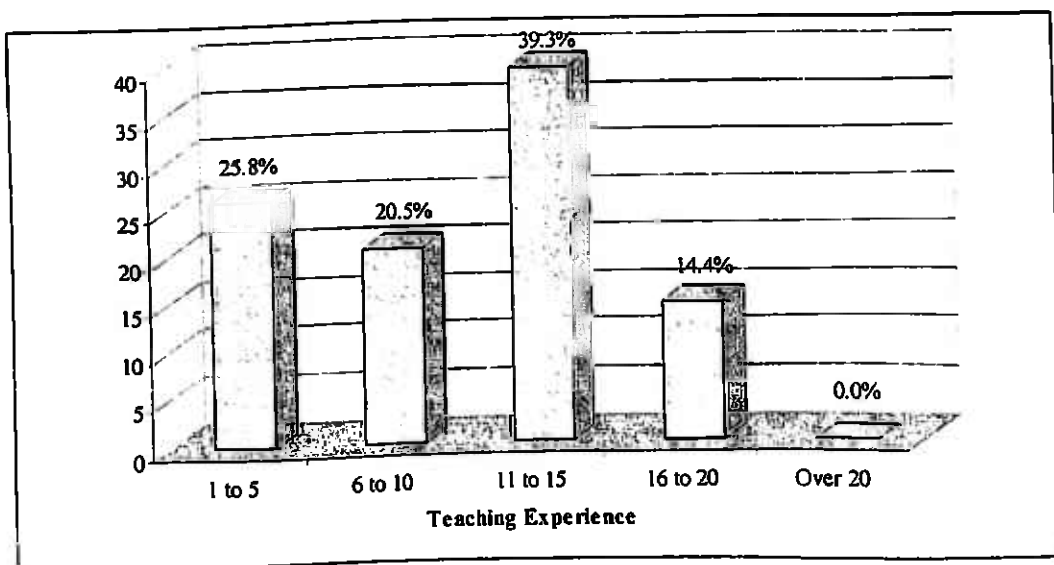
### **Classteachers' teaching experience**

The researcher also sought from classteachers of public primary schools in Central Division, Machakos District their teaching experience. The results are shown in Table 8 and Figure 7.

**Table 8: Classteachers' teaching experience**

<b>Experience in years</b>	<b>Frequency</b>	<b>Percentage</b>
1 to 5	29	25.8
6 to 10	23	20.5
11 to 15	44	39.3
16 to 20	16	14.4
Over 20	0	0.0
<b>Total</b>	<b>112</b>	<b>100.0</b>

**Figure 7: Classteachers' teaching experience**



The findings as presented in Table 8 and Figure 7, which show that majority of teachers (39.3%), had a teaching experience of 11 to 15 years. This is followed by 25.8% who indicated that they had teaching experience of 1 to 5 years, then 20.5% of teachers indicated they had teaching experience of 6 to 10 years and 14.4% with 16 to 20 teaching experience. None of the teachers had a teaching experience of over 20 years. These findings are an indication that majority of teachers had a teaching experience that could ensure the implementation of the free primary education goes on smoothly. This could have positive influence on FPE implementation.

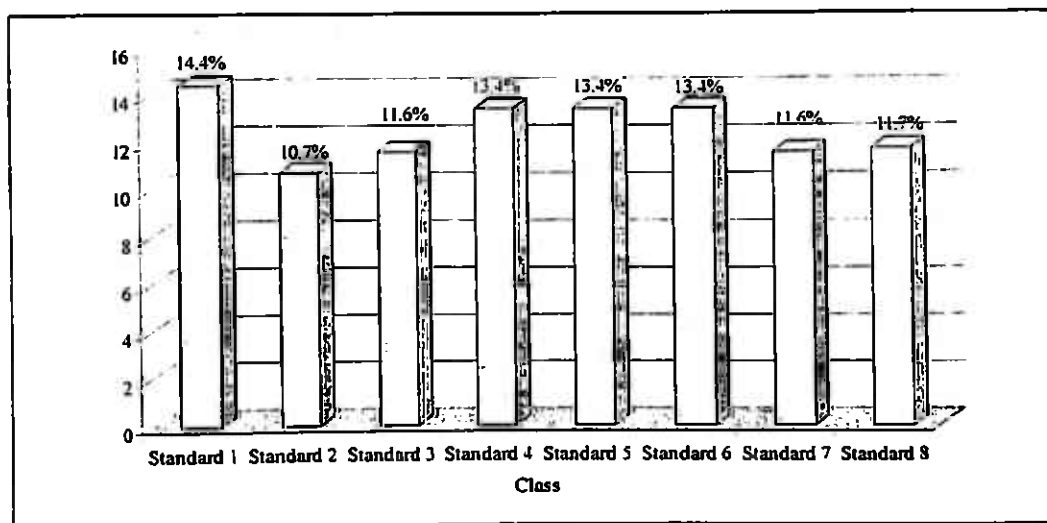
### **Classes teachers teach**

The study also required teachers to indicate the classes they teach. The results are as shown in Table 9 and Figure 8.

**Table 8: Classes teachers teach**

<b>Experience in years</b>	<b>Frequency</b>	<b>Percentage</b>
Standard 1	16	14.4
Standard 2	12	10.7
Standard 3	13	11.6
Standard 4	15	13.4
Standard 5	15	13.4
Standard 6	15	13.4
Standard 7	13	11.6
Standard 8	13	11.6
<b>Total</b>	<b>112</b>	<b>100.0</b>

**Figure 8: Classes teachers teach**



Results presented in Table 9 and Figure 8 reveals that teachers were almost evenly distributed in all the eight classes. This is seen in the fact the difference in percentage from one class to another was very minimal i.e. 14.4% for class 1, followed closely by 13.4% for class 4, 5, 6; 11.6% for class 8, 7 and 3 and lastly 10.7% for standard 2. This is an indication that apart from being classteachers, these teachers are also teaching other classes which increases the workload.

### **Reporting data**

This section presents the analysis of the data obtained from classteachers and headteachers as well as observation of facilities in public primary schools in Central Division, Machakos District based on the research questions.

### **Availability of physical facilities**

**Research question 1:** To what extent does the availability of physical facilities affect the sustainability of FPE in public primary schools Central Division, Machakos District?

### **Current pupils' enrolment in the classes**

According to Ayoo (2002), school physical facilities such as classrooms, libraries, laboratories and other have direct bearing on good performance. This prompted the researcher to ask headteachers to provide information on the availability of physical facilities (classrooms, desks, toilets, staffroom, textbooks, playgrounds and others). The results are as shown on Table 10.

**Table 10: Physical facilities in the school according to headteachers**

<b>Facility</b>	<b>Frequency</b>	<b>Percentage</b>
Water tank	11	78.6
Classrooms	9	64.3
Headteachers' office	8	57.1
Deputy headteachers office	6	42.9
Staffroom	6	42.9
Toilets	5	35.7
Fencing	2	14.9

The findings on Table 10 reveal that majority of headteachers (78.6%) indicated that their schools had water tanks. This is thanks to the CDF fund

which has availed money to schools for construction of water tanks. This was followed by 64.3%, who said they had classrooms in their schools, then 57.1% who said they had headteachers' office, 42.9% who indicated that they had deputy headteachers office and staffrooms respectively, 35.7% who said they had toilets in their schools and lastly 14.9% who said they had fenced their schools. These findings are an indicator that majority of schools have constructed physical facilities.

### **Pupils enrolment before the implementation of FPE**

Gakuru (1981) notes that crowding in classes is another factor that can affect learning and consequently implementation of the free primary school education programme. It was therefore prudent for the researcher to establish the number of pupils per class so as to determine whether there were cases of overcrowding. The findings are presented in Table 5. In order to assess the change in enrolment as a result of the introduction of the FPE programme in Central Division of Machakos District, the findings are as shown in Table 11.

UNIVERSITY OF NAIROBI  
EAST AFRICANA COLLECTION

**Table 11: Pupils enrolment before and after the implementation of FPE-  
2003**

		Before FPE – 2002		After FPE - 2009	
	No. of pupils per class	F	%	F	%
Standard 1	Less than 40	5	35.7	2	14.3
	41 to 50	4	28.6	4	28.6
	51 to 60	4	28.6	4	28.6
	Over 61	1	7.1	5	35.7
Standard 2	Less than 40	3	21.4	1	7.1
	41 to 50	5	35.7	2	14.3
	51 to 60	2	14.3	3	21.4
	Over 61	2	14.3	6	42.9
Standard 3	Less than 40	4	28.6	4	28.6
	41 to 50	4	28.6	0	0.0
	51 to 60	2	14.3	3	21.4
	Over 61	2	14.3	6	42.9
Standard 4	Less than 40	3	21.4	3	21.4
	41 to 50	6	42.9	2	14.3
	51 to 60	1	7.1	6	42.9
	Over 61	4	28.6	4	28.6
Standard 5	Less than 40	5	35.7	3	21.4
	41 to 50	3	21.4	3	21.4
	51 to 60	2	14.3	4	28.6
	Over 61	2	14.3	5	35.7
Standard 6	Less than 40	4	28.6	2	14.3
	41 to 50	6	42.9	7	50.0
	51 to 60	3	21.4	1	7.1
	Over 61	1	7.1	5	35.7
Standard 7	Less than 40	6	42.9	1	7.1
	41 to 50	5	35.7	2	14.3
	51 to 60	2	14.3	1	7.1
	Over 61	1	7.1	5	35.7
Standard 8	Less than 40	5	35.7	5	35.7
	41 to 50	6	42.9	5	35.7
	51 to 60	1	7.1	2	14.3
	Over 61	2	14.3	3	21.4

According to the findings on Table 11 public primary schools in Central Division, Machakos District had low enrolment rates something that changed with the introduction of FPE. However, with FPE, majority of headteachers (35.7%) indicated that they have less than 40 and between 41 to 50 pupils per class respectively followed by 21.4% who said they have over 61 pupils per

class in their schools and lastly 14.3% who said they have between 51 to 60 pupils per class in their schools.

These findings as compared to those in Table 4 indicate that majority of public primary schools in Central Division, Machakos District had overcrowded classes. Most of the classes had enrolment far above the recommended 40 pupils per class. This is attributed to the introduction of FPE. It was also established that the number of pupils per class was diminishing progressively towards the end of the primary school cycle as seen by standard eight having fewer learners. Few 21.4% headteachers indicated that they had over 61 pupils per class in class eight. This can be attributed to dropout or repetition which casts a dark cloud on the implementation of FPE.

### **Number of desks per class**

As a follow-up to the information provided on the number of pupils per class, the researcher further asked headteachers to furnish the study with information on the number of desks per class. Their responses are as shown in Table 12.



**Table 12: Number of desks per class**

<b>Class</b>	<b>No of desks per class</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Standard 1</b>	1 – 10	0	0.0
	11 – 20	7	50.0
	21 – 30	8	57.1
	31 – 40	1	7.1
<b>Standard 2</b>	1 – 10	0	0.0
	11 – 20	1	7.1
	21 – 30	9	64.3
	31 – 40	0	0.0
<b>Standard 3</b>	1 – 10	0	0.0
	11 – 20	5	35.7
	21 – 30	7	50.0
	31 – 40	1	7.1
<b>Standard 4</b>	1 – 10	0	0.0
	11 – 20	5	35.7
	21 – 30	5	35.7
	31 – 40	1	7.1
<b>Standard 5</b>	1 – 10	0	0.0
	11 – 20	10	71.4
	21 – 30	5	35.7
	31 – 40	0	0.0
<b>Standard 6</b>	1 – 10	1	7.1
	11 – 20	8	57.1
	21 – 30	4	28.6
	31 – 40	1	7.1
<b>Standard 7</b>	1 – 10	0	0.0
	11 – 20	2	14.3
	21 – 30	9	64.3
	31 – 40	2	14.3
<b>Standard 8</b>	1 – 10	1	7.1
	11 – 20	10	71.4
	21 – 30	3	21.4
	31 – 40	1	7.1

According to Table 12, majority of headteachers (57.1%) said they have between 21 and 30 desks in their schools. This is followed by 50.0% of those who said they have 11 to 20 desks per class in their schools and then 7.1 who said they have 31 to 40 desks per class. None of the headteachers said they have 1 to 10 desks. In regard to standard 2, majority of headteachers (64.3%)

said they have 21 to 30 desks per class, followed by 7.1% who said they have 11 to 20 desks per class. None of the headteachers however said they have 1 to 10 desks or 31 to 40 desks.

The study findings further have majority of headteachers (50.0%) saying that they have 21 to 30 desks per class for the standard 3 class. This is followed by 35.7% who said they have 11 to 20 desks, then 7.1% who said they have 31 to 40 desks. None of them said they have 1 to 10 desks per class in standard 3. In regard to standard 4, majority of headteachers (35.7%) indicated that they have 11 to 20 desks per class and 21 to 30 desks respectively. This is followed by 7.1% who said they have 31 to 40 desks. None of the headteachers said they have 1 to 10 desks per class in standard 4.

For standard 5, majority of headteachers (71.4%) said they have between 11 to 20 desks per class, followed by 35.7% who said they have 21 to 30 desks per desk. None of the headteachers said they have 1 to 10 and 31 to 40 desks respectively. In regard to standard 6, a large number of headteachers (57.1%) indicated that they have 11 to 20 desks per class. This was followed by 28.6% who have 21 to 30 desks and 7.1% said they have 1 to 10 desks and 31 to 40 desks per class respectively.

For standard 7, majority of headteachers (64.3%) said they have 21 to 30 desks per class. This is followed by 14.3% for those who said they have 11 to 20 and 31 to 40 desks per class respectively. One of them said their schools have 1 to 10 desks in their school. Lastly, for class eight, majority of

headteachers (71.4%) said that their schools have 11 to 20 desks per class in their schools. This is followed by 21.4% who said they have 21 to 30 desks per class and then 7.1% who said they have 1 to 10 and 31 to 40 desks per class respectively. These findings reveal that the number of desks per class is lower than that of pupils per class. This is unless the desks have been designed in a way that a number of pupils can use one desk.

### **Number of toilets per pupil according to headteachers**

Toilets are among the key physical facilities in schools. This prompted the researcher to ask headteachers to indicate the number they have in their schools for boys and girls. The schools were named from A to N as a way of preserving headteachers identities. The findings are as shown in Table 13.

**Table 13: Number of toilets per pupil according to headteachers**

School	No. of toilets		Population of pupils	Ratio of pupils per toilet
	Boys	Girls		
School A	4	8	401	1 : 33
School B	15	15	1,049	1 : 35
School C	8	16	760	1 : 31
School D	6	6	439	1 : 37
School E	6	6	439	1 : 37
School F	10	10	596	1 : 30
School G	3	3	318	1 : 53
School H	13	13	626	1 : 24
School I	16	14	424	1 : 14
School J	8	8	318	1 : 20
School K	4	5	437	1 : 49
School L	17	18	1,599	1 : 45
School M	14	18	633	1 : 20
School N	5	5	506	1 : 50

According to the findings in Table 13, School A with a population of 401 pupils had 4 toilets for boys and 8 toilets for girls. The calculated ratio of pupils per toilet was 1: 33. School B on the other hand with a pupil population of 1,049 had 15 toilets for boys and 15 for girls making a pupil per toilet ratio of 1: 35 School C with a pupil population of 760 had 16 toilets for girls and 8 for boys making a ratio of 1: 31. School D with a population of 439 pupils had 6 toilets for boys and 6 for girls making a ratio of 1: 37. School E with a pupil population of 439 also had 6 toilets for girls and 6 for boys making a ratio of 1: 37.

The findings further have School F with a pupil population of 596 having 10 toilets for boys and 10 for girls yielding a ratio of 1: 30. School G on the other hand with a population of 318 pupils had 3 toilets for boys and 3 for girls making a ratio of 1: 53. School H with a population of 626 had 13 toilets for boys and 13 for girls making a ratio of 1: 24. School I with a population of 424 had 16 toilets for boys and 14 for girls making a ratio of 1: 14.

The findings of the study also have School J with a population of 318 pupils having 8 toilets for girls and 8 for boys making a 1: 20 ratio. School K with a population of 437 pupils has 8 toilets for boys and 8 for girls making a ratio of 1: 49. School L with a population of 1,599 pupils was found to have 17 toilets for boys and 18 for girls making a ratio of 1: 45. School M on the other hand with a population of 633 pupils had 14 toilets for boys and 18 for girls making a ratio of 1: 20. Lastly school N with a population of 506 pupils had 5 toilets for boys and 5 for girls making a ratio of 1: 50 pupils. These findings are an

indicator that majority of public primary schools in Central Division of Machakos District had not built enough toilets to serve the pupil population. Given the amount of time allocated for breaks in school, it means that majority of pupils find it hard to use toilets or end up delaying to go for the next classes. According to Ministry of Health recommendations, the toilet pupil ratio should 1 : 30 for boys and 1 : 25 for girls (Ministry of Health, 2008). This further confirms that the number of toilets in schools falls below the required number.

### **Teacher-pupil ratio**

**Research question 2:** How does the teacher-pupil ratio affect the sustainability of FPE in Central Division, Machakos District?

### **Teacher-pupil ratio according to headteachers**

According to Mbatia (2005), most primary schools cannot cope with the large number of pupils who poured in school after introduction of FPE in 2003. This meant that teachers were now unable to mark pupils' books as well as giving pupils individual attention. This made the researcher to ask teachers to provide the information on the number of pupils and teachers in view to establish the teacher pupil ratio. The results are as shown in Table 14.

**Table 14: Teacher-pupil ratio according to headteachers**

<b>School</b>	<b>No. of pupils</b>	<b>No. of teachers</b>	<b>Teacher pupil ratio</b>	<b>Remarks</b>
School A	401	11	1 : 36	Adequate
School B	1,049	30	1 : 34	Adequate
School C	760	17	1 : 44	Inadequate
School D	439	10	1 : 44	Inadequate
School E	439	10	1 : 44	Inadequate
School F	596	18	1 : 33	Adequate
School G	318	10	1 : 32	Adequate
School H	626	16	1 : 39	Adequate
School I	424	13	1 : 33	Adequate
School J	318	9	1 : 35	Adequate
School K	437	12	1 : 36	Adequate
School L	1,599	37	1 : 43	Inadequate
School M	633	19	1 : 33	Adequate
School N	506	14	1 : 36	Adequate

According to the findings in Table 14, Majority of schools 10 (71.4%) had teacher pupil ratio below 1: 40 obtained from School A with a ratio of pupils per teacher 1: 36, School B with a pupil per teacher ratio of 1: 33, School F with 1: 33, School G with a ratio of 1: 32, School J with a 1: 35 ratio, School H with a ratio of 1: 39, School I with a ratio of 1: 33, School J with a 1: 35 ratio, School K with a ratio of 1: 36, School M with a ratio of 1: 33 and School N with a ratio of 1: 36. This is against 4 (28.6%) which include School C with a ratio of 1: 44 and School D and E both with a teacher pupil ratio of 1: 44 which is above the recommended 1: 40. From these findings it is clear that majority of public primary schools in Central Division of Machakos District

had enough teachers and therefore failure to sustain the free primary education programme cannot be attributed to lack of teachers.

### **Headteachers comment of adequacy of the teaching staff**

The researcher further went ahead to ask teachers to give their comments on the adequacy of the teaching staff. The findings are as shown in Table 15.

**Table 15: Headteachers' comment on adequacy of the teaching staff**

<b>Comment</b>	<b>Frequency</b>	<b>Percentage</b>
Adequate	7	50.0
Inadequate	7	50.0
<b>Total</b>	<b>14</b>	<b>100.0</b>

The results in Table 15 show that an equal number of headteachers (50% and 50%) said that their schools had adequate and inadequate teachers respectively. These findings are centrally to the findings in Table 10 which means that either headteachers were giving inaccurate information or there were other factors that made some headteachers to say the teaching staff was inadequate.

### **Ways of coping with inadequate teaching staff**

In view of the findings in Table 15, the researcher went a head and asked headteachers to indicate how they cope with the shortage of teachers. The findings are as shown in Table 16.

**Table 16: Ways of coping with inadequate teachers according to headteachers**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Employing PTA teachers	5	35.7
Combine the pupils into a single room	4	28.6
Teaching in shifts	1	7.1
Volunteer teachers	0	0.0

From Table 16, majority of headteachers (35.7%) said they coped with shortage of the teaching staff by employing PTA teachers. This was followed by 28.6% who said they combine pupils into a single room and 7.1% said they coped with shortage in teaching staff by teaching in shifts. These findings show that most schools in Central Division of Machakos opted to employ teachers most of whom were paid by money contributed by parents or from the funds allocated by the government.

### **Whether teachers give pupils assignments**

According to Wanjala (1999), high teacher pupil ratio lead to feedback problems due to difficulties for the teacher to assess pupils frequently, regulate the number of questions a teacher could set in assignment, continuous assessment tests and end of term examinations. This prompted the researcher ask teachers whether they give assignments to pupils or not. Their responses are as shown in Table 17.



**Table 17: Whether Teachers Give Pupils assignments**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	112	100.0
No	0	0.0
<b>Total</b>	<b>112</b>	<b>100.0</b>

From Table 17, all teachers (100.0) gave assignments to their pupils. These findings were followed by the researcher asking teachers how often they gave pupils assignments. The results are as shown in Table 18.

**Table 18: How often assignments are given**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
On daily basis	110	98.2
Twice a week	1	0.9
On monthly basis	1	0.9
Not given at all	0	0.0
<b>Total</b>	<b>112</b>	<b>100.0</b>

According to the findings in Table 18, majority of teachers (98.2%) said they gave assignments to pupils on daily basis. This is followed at a distance with 0.9% who said they gave pupils assignment on twice a week and on monthly basis respectively. These findings could however not be exhaustive without teachers being asked to indicate the number of questions given to pupils as assignments. The results are as shown in Table 19.

**Table 19: Number of questions given to pupils as assignment**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Less than 5 questions	2	1.8
6 – 10 questions	30	26.7
11 – 15 questions	49	43.8
Over 16 questions	31	27.7
<b>Total</b>	<b>112</b>	<b>100.0</b>

The findings in Table 19 reveal that majority of teachers (43.8%) gave pupils 5 to 10 questions. This is followed by 27.7%, who said they give over 16 questions, then 26.7% of those who gave 6 to 10 questions and lastly 1.8% of those who said they gave less than 5 questions. To build up on the findings on Table 19, the researcher asked teachers to say whether they manage to mark the assignments. The findings are as shown in Table 20.

**Table 20: Whether teachers manage to mark assignments**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
No	74	66.1
Yes	38	33.9
<b>Total</b>	<b>112</b>	<b>100.0</b>

The findings in Table 20 shows that majority of teachers (66.1%) said they are not able to mark assignments given to pupils followed by 33.1% who said they are able to mark the assignments. The findings in Tables 17, 18 and 19

indicate that as much as teachers in public primary schools in Central Division of Machakos District give assignments to pupils' oftenly, they are not able to mark the assignments and in most cases ask pupils to exchange books and mark for themselves. These defeats the purpose of giving pupils assignments as assessment can not be done due to lack of feedback.

### **The average teaching workload**

The researcher went on to ask teachers to indicate their teaching workload in terms of lessons per week. The findings are as shown in Table 21.

**Table 21: The average teaching workload**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
31 to 40 lessons per week	9	64.3
21 to 30 lessons per week	4	28.6
Less than 20 lessons per week	1	7.1
More than 40 lessons per week	0	0.0
<b>Total</b>	<b>14</b>	<b>100.0</b>

From the findings in Table 21, majority of teachers (64.3%) had a teaching workload of 31 to 40 lessons per week. This is followed by 28.6% who said they had 21 to 30 lessons per week and lastly 7.1% who said they had less than 20 lessons per week. The findings indicate that teachers in most public primary schools in Central Division, Machakos District had a heavy workload

against the recommended ratio of 35 lessons per week. This has impacted negatively on the implementation of the free primary education.

### **Teaching and learning resources**

**Research Question 3:** To what extent has teaching and learning resources affected the implementation of FPE in Central Division, Machakos District?

### **Adequacy of teaching and learning resources**

Ouma (1987) notes that resources encourage learners to participate in learning process, motivates them, cater for individual differences and enables learners to gain experience by using their senses. It was therefore important for the researcher to establish whether schools had these facilities by visiting the sampled schools to carryout an observation. The results are as shown on Table 22.

**Table 22: Adequacy of teaching and learning facilities**

<b>Resources</b>	<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Textbooks	Inadequate	13	52.0
	Adequate	12	48.0
	<b>Total</b>	<b>25</b>	<b>100.0</b>
English Dictionaries	Inadequate	18	72.0
	Adequate	7	28.0
	<b>Total</b>	<b>25</b>	<b>100.0</b>
Class readers	Inadequate	18	72.0
	Adequate	7	28.0
	<b>Total</b>	<b>25</b>	<b>100.0</b>
Library	Inadequate	19	76.0
	Adequate	6	24.0
	<b>Total</b>	<b>25</b>	<b>100.0</b>

According to the findings presented in Table 22, show that majority of schools have inadequate textbooks as seen by 52.0% of school that had inadequate textbooks while 48.0% had adequate textbooks. English Dictionaries were also found to be inadequate by 72% against 28% who had adequate English Dictionaries. Class readers were other facilities that were observed and the findings were that majority of the schools (72.0%) had inadequate class readers with only 28.0% having these facilities. Lastly, the researcher observed the library facilities in schools and discovered that majority of schools lacked these facilities as seen by 76.0% of with inadequate libraries against 24.0% who had adequate libraries. The findings are an indicator that as much as public primary schools in Central Division of Machakos District had

English textbooks and literature set books, they did not have adequate facilities such as English dictionaries, audio visual facilities, class reader and libraries. This has impacted negatively to the implementation of free primary education.

### **Pupil-textbook ratio**

The study also sought to find out from headteachers the pupil/textbook ratio in their schools. Their responses are as shown in Table 23.

**Table 23: Pupil-textbook ratio**

<b>Ratio</b>	<b>Frequency</b>	<b>Percentage</b>
1 : 1	0	0.0
1 : 2	4	28.6
1 : 3	6	42.9
1 : 4	3	21.4
1 : 5	1	7.1
1 : 6	0	0.0
<b>Total</b>	<b>14</b>	<b>100.0</b>

The findings are presented in Table 23 reveal that majority of public primary schools in Central Division (42.9%), Machakos District had a pupil/textbook ratio of 1:3. This is followed by 28.6 that had a ratio of 1: 2, then 21.4% with a ratio of 1: 4 and lastly 7.1% with a ratio of 1: 5. These findings are an indicator that most schools in the division had adequate textbooks for pupils thanks to the funds allocate by the Government for the purchase of textbooks.

### **Storage of teaching and learning facilities**

For teaching and learning facilities to fully benefit their users, there is need to store these facilities in secure placed. With this in mind, the researcher asked headteachers whether there are storage facilities for teaching and learning resources in their schools. The results are as shown in Table 24.

**Table 24: Storage facilities for teaching and learning facilities according to headteachers**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	10	71.4
No	4	28.6
<b>Total</b>	<b>14</b>	<b>100.0</b>

The findings in Table 24 reveal that majority of headteachers 71.4% said they had storage facilities in their schools with 28.6% saying they lacked storage facilities in their schools. These findings prompted the researcher to inquire from teachers whether these storage facilities are in proper state. The findings are as shown in Table 25.

**Table 25: Teachers' opinion on whether there are proper storage facilities**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
No	12	85.7
Yes	2	14.3
<b>Total</b>	<b>14</b>	<b>100.0</b>

According to Table 25 majority of teachers (85.7%) said that there are no storage facilities for books in their schools. This is followed by 14.3% of headteachers who said there are storage facilities in their schools. The findings are an indicator that as much as public primary schools in Central Division, Machakos District had storage facilities for teaching and learning facilities.

### **Where textbooks are stored in schools**

The study further sought from headteachers the information on where they stored textbooks in schools. Their responses are as presented in Table 26.

**Table 26: Headteachers response on where textbooks are stored in the school**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Deputy headteachers office	10	71.4
Headteachers' office	3	21.4
In classrooms	3	21.4
Pupils carry them home	1	7.1
Book store	0	0.0

The findings in Table 26 reveal that majority of headteachers said textbooks are stored in deputy headteachers' offices. This is followed by 21.4% who said they kept their textbooks in headteachers' offices and classrooms respectively and lastly 7.1% of headteachers said pupils carry textbooks with them to their home. The findings are an indication that most schools in Central Division, Machakos District, used deputy headteachers offices as stores for textbooks



although some stored them in headteachers' offices and classrooms with some allocating textbooks to pupils who carry them home.

### **Security in storage facilities**

The researcher further sought from headteachers whether the storage facilities were secured. Their responses are as presented in Table 27.

**Table 27: Headteachers opinion on whether storage facilities are secure**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	10	71.4
No	4	28.6
<b>Total</b>	<b>14</b>	<b>100.0</b>

According to Table 27, majority of headteachers (71.4%) said that the storage facilities for teaching and learning facilities were secure. This was followed by 28.6% who said the storage facilities were not secure. This is an indicator that one of the reasons why textbooks were kept in offices in schools was because these were secured facilities mostly with steel doors.

### **Measures to ensure durability of textbooks**

A part from storage of textbooks, others measures are also supposed to be taken to ensure that these books are durable. The researcher therefore asked teachers to indicate the measures they had taken to ensure that textbooks are durable. The findings are as shown in Table 28.

**Table 28: Measures taken to ensure durability of textbooks according to teachers**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Covering books with polythene papers	92	82.1
Good storage	26	23.2
Bindings books	21	18.8
Good handling of books	12	10.7
Repairing torn books	10	8.9
Checking books regularly	10	8.9

The findings in Table 28 reveal that, majority of teachers (82.1%) said that durability was assured through covering of textbooks with polythene papers. This is followed by 23.2% who said durability was assured through good storage, 18.8% said it was through binding the books, 10.7% said it was through good handling of the books and lastly 8.9% said it was through repairing torn books and checking books regularly respectively. This shows that the most preferred measure to ensure durability in public primary schools in Central Division, Machakos District was through covering of textbooks with polythene papers.

### **Impact of teachers in-service on FPE**

**Research question 4:** To what extent has in-servicing of the teacher affected implementation of FPE in Central Division, Machakos District?

According to Shiundu and Omulando (1992) constant teacher in-servicing is very necessary as it fills gaps which were not filled during the time of teacher training. It was with this in mind that the researcher sought from headteachers

the in-service courses they had attended. The findings are as indicated in Table 29.

**Table 29: In-service courses attended by headteachers**

<b>In-service course</b>	<b>Frequency</b>	<b>Percentage</b>
Guidance and counselling	7	50.0
PRISM courses	5	35.7
KESSP	2	14.3
SbTD	2	14.3

The findings presented in Table 29, majority of headteachers (50.0%) had attended in-service courses in guidance and counselling. This is followed 35.7% had attended PRISM courses and lastly 14.3% of headteachers had attended KESSP and SbTD courses. The findings reveal that most headteachers had attended guidance and counselling which is key in managing pupil discipline in the absence of corporal punishment and PRISM which is key in primary school management.

The research further sought from teachers the in-service courses they had attended. Their responses are as shown in Table 30.

**Table 30: In-service courses/seminars attended by teachers**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Guidance and counselling	54	48.2
SbTD	37	33.0
HIV/AIDS courses	4	3.6
PRASUPE	3	2.7
Scouting	2	1.8
PRISM courses	1	0.9
None	1	0.9
SNE	1	0.9
Student – teacher environmental programme.	1	0.9
Subject panels	1	0.9
Early childhood development	1	0.9
Teacher proficiency course	1	0.9
Social studies workshop	1	0.9
Behavioural change and sexuality	1	0.9
Financial management course	1	0.9
Child rights	1	0.9
Special education	1	0.9
Rugby coaching and refereeing and English	1	0.9

According to Table 30, majority of teachers (48.2%) said they had undertaken in-service course in guidance and counselling. This is followed by 33.0% of teachers who had attended the SbTD course, then 3.6% of them had undertaken HIV/AIDS courses, 2.7% of them had attended Practical Subjects in Primary Education (PRASUPE) course, 1.8% had attended scouting courses, teacher proficiency courses, subject panels, student–teacher environmental programme, Special Needs Education (SNE), social studies workshop, rugby coaching and refereeing, PRISM courses, none, financial

management course, early childhood development, child rights, behavioural change and sexuality respectively. The findings indicate that most teachers had attended guidance and counselling courses just like headteachers to enable them handle pupil discipline in place of corporal punishment and the SbTD courses that are to enable them improve their teaching skills in key subjects.

### **Government funding**

**Research question 5:** How adequate is the government funding in the sustainability of the FPE programme?

#### **Month when funds are released**

The free primary education programme was initiated by the Government of Kenya whose responsibility was to provide funding for the programme. The researcher therefore sought to find out from headteachers the month in which funds are disbursed to schools in Central Division, Machakos District. Their responses are as shown in Table 31.

**Table 31: The month the government releases the funds according to headteachers**

<b>Month</b>	<b>Frequency</b>	<b>Percentage</b>
March	1	7.1
April	0	0.0
May	6	42.9
June	4	28.6
July	0	0.0
August	0	0.0
September	0	0.0
October	0	0.0
November	3	21.4
December	2	14.3
Not regular	4	28.6

From the findings in Table 31, majority of headteachers (42.9%) said that the funds are release in May, followed by 28.6%,who indicated that they are received funds in June and that it was not regular respectively, then 21.4% indicated that they received funds in November, 14.3% said in December and lastly 7.1% said the funds are received in January. The remaining months were cited by none of the headteachers. These findings are an indicator that government funds are mostly released between May just before the end of the financial year and in June at the beginning of the financial year.

### **How the school copes with financial demands before receiving money**

Given the information provided in Table 25, the researcher sought from headteachers on how they coped with financial demands before receiving money. Their responses are as shown in Table 32.

**Table 32: How the school copes with financial demands before receiving money**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Borrow the money	10	71.4
Parents meet the cost	3	21.4
Waits until the money comes	1	7.2

From Table 32, majority of headteachers (71.4%) said they borrowed money while waiting for the funds to be availed. This is followed by 21.4% of headteachers who said parents meet the cost and lastly, 7.2% said they wait until the money comes. The findings are an indicator that most schools in Central Division, Machakos District borrowed money with the hope of paying it back when funds are finally released.

### **Programmes forfeited by schools due to lack of funds**

The researcher sought from headteachers the programmes that are forfeited by the school due to lack of funds. Their responses are as indicated in Table 33.

**Table 33: Programmes forfeited by schools due to lack of funds**

<b>Programmes</b>	<b>Frequency</b>	<b>Percentage</b>
Cementing of the floor	9	64.3
Sponsoring teachers for training programmes	8	57.1
Games	7	50.0
Purchasing the fixing of shutters to classrooms	7	50.0
Development projects	6	42.9
Purchase of desks	4	28.6
School feeding programme	3	21.4

The findings in Table 33 indicate that majority of headteachers (57.1%) said in case of lack of funds, they do not cement floors of classrooms. This is followed by 57.1% who said they do not sponsor teachers for training programmes and if they did they could only afford to give them bus fare to attend such programmes at the Zonal or division levels and not beyond. The findings also established that 50.0% of headteachers said that they go for games, purchase of fix shutters in classrooms respectively, followed by 42.9% who said they suspend development projects and lastly 42.9% who said they suspend the purchase of desks, 21.4% who suspend the school feeding programme in case of lack of funds. These findings indicate that most schools public primary in Central Division of Machakos District suspend programme deemed to be not so essential when confronted with lack of funds or inadequate funds.



### **Challenges faced by headteachers when implementing FPE**

Being the major players in the implementation of the free primary education programme, the researcher finally asked headteachers and teachers to indicate some of the challenges they face when implementing the programme. The results are shown in Tables 34 and 35

**Table 34: Challenges faced by headteachers when implementing FPE**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Over enrolment in the classrooms	12	85.7
Lack of support from parents and the community	11	78.6
Dealing with inadequate teaching staff.	9	64.3
Dealing with over-age learners	9	64.3
Dropout cases	5	35.7
Famine	3	21.4
Poverty	2	14.3
Absenteeism among pupils	1	7.1
Truancy	1	7.1
Drug abuse	1	7.1
Delayed release of government funds	1	7.1

According to the findings in Table 34, majority of headteachers (85.7%) cited over enrolment in the classrooms as the major challenge facing them when implementing the FPE programme. This is cited by 78.6% who cited lack of support from parents and the community, then 64.3% who cited dealing with inadequate teaching staff and dealing with over-age learners respectively, then

35.7% who cited dropout cases, 21.4% who cited famine, 14.3% poverty and lastly 7.1% of headteachers who cited truancy, drug abuse, delayed release of government funds and absenteeism among pupils respectively. From the findings, it is clear that most public primary schools in Central Division, Machakos District were faced with the challenge of over enrolment in classrooms.

**Table 35: Challenges faced by teachers when implementing FPE**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Over-enrolment	77	68.8
Non-co-operative parents	74	60.1
Inadequate teaching and learning materials	66	58.9
Unattended lessons	17	15.2
Absenteeism among pupils	11	9.8
Many orphaned pupils	6	5.4
Truancy	6	5.4
Poverty among families	6	5.4
Negative influence from the school neighbourhood	3	2.7
Slow learners	2	1.8
Heavy workload	2	1.8
Lack of interest in education among pupils	1	0.9
Learning difficulties among pupils	1	0.9
Laziness among pupils	1	0.9
Under-age pupils coming to school	1	0.9
Sickness among pupils	1	0.9
Lack of corporal punishment	1	0.9
Dropout cases	1	0.9
Slow learners	1	0.9

According to Table 35, majority of teachers (68.8%) cited over-enrolment as the major challenge facing them when implementing FPE. This is followed by 60.1% who cited non-co-operative parents, then 58.9% who cited inadequate teaching and learning materials, 15.2% who cited unattended lessons, 9.8% who cited absenteeism among pupils, 5.4% who cited truancy, poverty among families and many orphaned pupils respectively, 2.7% who cited negative influence from the school neighbourhood, 1.8% who cited slow learners, 1.8% who cited heavy workload and lastly 0.9% who cited under-age pupils coming to school, slow learners, sickness among pupils, learning difficulties among pupils, laziness among pupils, lack of interest in education among pupils, lack of corporal punishment and dropout cases respectively. These findings just like those of headteachers have over enrolment of pupils to school as the major challenge facing the implementation of FPE in public primary schools in Central Division in Machakos District.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **Introduction**

This chapter looks at the summary of the findings as obtained from respondents who included headteachers and teachers of public primary schools in Central Division, Machakos District. It also contains the conclusion of the study, recommendations and suggestion for further research.

#### **Summary of the findings**

The purpose of the study was to investigate factors affecting sustainability of FPE programme in Central Division, Machakos District. To achieve this, research questions of the study on availability of physical facilities, teacher pupil ratio, levels of provision of teaching and learning resources, in-service of teachers and the government funding were formulated. The study adopted a descriptive survey design to establish the factors contributing to the sustainability of FPE. The targeted population was all the 76 headteachers and 608 class teachers in public primary schools in Central Division of Machakos District. A sample of 15 headteachers and 120 class teachers was selected for the study. Data was collected using questionnaires and an observation schedule. Questionnaires were coded and classified into major topics from which summary report was made. Quantitative data was analyzed by use of descriptive statistics supported by tables, frequency distributions and percentages. Statistical Package for Social Sciences (SPSS) was used to process data obtained

The results obtained from classteachers and headteachers as well as from the observation carried out by the researcher reveal that gender parity has not been observed in the posting and promoting of headteachers in Central Division, Machakos District as seen by a higher number of male headteachers as compared to female headteachers.

The findings of the professional qualification of teachers and headteachers revealed that most headteachers had minimum qualifications to head in public primary schools and therefore failure to sustain the free primary education programme can not be very much attributed to headteachers' qualifications. It was also established that most teachers had minimum qualifications to teach in public primary schools and therefore failure to sustain the free primary education programme can not be very much attributed to teachers' qualifications.

The findings on administrative experience of headteachers revealed that most teachers did not have sufficient teaching experience and could therefore have a negative effect on the implementation of the free primary education programme. Teachers had teaching experience that can be said to be enough to ensure that the implementation of the free primary education goes on smoothly.

Findings on enrolment of pupils as a result of the implementation of FPE revealed that public primary schools in Central Division, Machakos District

had overcrowded classes given that most of them had higher number of pupils enrolled per class than the recommended 40 pupils. This is attributed to the sudden influx of pupils in school due to the introduction of FPE. It can also be established that the number of pupils per class was diminishing progressively towards the end of the primary school cycle as seen by standard eight having fewer pupils. This can be attributed to dropout or repetition which casts a dark cloud on the sustainability of the FPE.

On the physical facilities in schools, the study revealed that most schools had not built enough toilets to serve the pupil population but most of them had built classroom and did have playgrounds. The study further revealed that most schools in the Division had enough teachers and therefore failure to sustain the free primary education programme cannot be attributed to lack of teachers. However, this was contradicted by views of headteachers who said schools lacked enough teachers and therefore were forced to employ teachers most of whom were paid by money contributed by parents or from the funds allocated by the government.

UNIVERSITY OF NAIROBI  
EAST AFRICANA COLLECTION

This study also revealed that as much as teachers in public primary schools in Central Division of Machakos District give assignments to pupils' frequently, they are not able to mark the assignments. This defeat the purpose of giving pupils assignments as assessment can not be done due to lack of feedback. This coupled with heavy teaching workload on teachers had impacted negatively on the implementation of FPE.

On the teaching and learning resources, the findings reveal that as much as public primary schools in Central Division of Machakos District had English textbooks they did not have adequate facilities such as English dictionaries, audio visual facilities, class readers and libraries. This has impacted negatively on the implementation of free primary education. These resources were stored mostly in deputy headteachers offices with some being stored in headteachers' offices and classrooms. This is due to the fact that these offices were secured facilities mostly with steel doors. It was established that the most preferred measure to ensure durability of textbooks in public primary schools in Central Division, Machakos District was through covering of textbooks with polythene papers.

On in-service training for headteachers and teachers, the findings revealed that most headteachers had attended guidance and counselling which is key in managing pupil discipline in the absence of corporal punishment and PRISM which is key in primary school management. Teachers had also attended guidance and counselling courses just like headteachers to enable them handle pupil discipline in place of corporal punishment. They had also attended SbTD courses that are to enable them improve their teaching skills in key subjects.

On government funding, the findings show that government funds are mostly received between May just before the end of the financial year and in June at the beginning of the financial year. It was also established that most schools borrowed money with the hope of paying it back when funds were finally received. It was further revealed that most public primary schools in Central

Division, Machakos District suspend programme deemed to be not so essential when confronted with lack of funds or inadequate funds.

Finally the study looked at the challenges facing headteachers and teachers when implementing FPE. The study also revealed that over enrolment of pupils to school was a major challenge facing the sustainability of FPE in public primary schools in Central Division, Machakos District.

### **Conclusion of the study**

The introduction of Free Primary Education (FPE) in Kenya was greeted with much jubilation. However, this jubilation did not last long as a number of challenges emerged which made the sustainability of FPE almost impossible. Some of the factors as addressed in this study included over enrolment of pupils in schools which overstretched the available facilities, inadequate teaching staff leading to high teacher/pupil ratio, inadequate physical facilities to support the increased pupil population, inadequate teaching and learning resources and lack of funds to effectively support the programme. It is therefore necessary that these challenges be addressed so as to ensure that that this noble idea retains its intended purpose which is to ensure education for all regardless of personality, tribe and race thus ensuring sustainability of Free Primary Education.

### **Recommendations of the study**

In view of the findings discussed above, this study makes the following recommendations:



1. New physical facilities should be built in public primary schools and the existing ones repaired or maintained in good condition in order to serve effectively the increased pupil population.
2. The provision of teaching and learning resources should be improved in public primary schools especially supplementary readers, audio-visual teaching aids, class readers. Adequate storage facilities such as libraries should be provided as well as upholding good handling of books to ensure durability.
3. Headteachers, teachers and other members of staff should be encouraged and sponsored to attend in-service programmes so as to improve their teaching skills thus improve the sustainability of FPE programme.
4. Funding of the free primary education programme should be increased by the government increasing its allocations as well as seeking for other sponsors to assist in financing the programme.

### **Suggestions for further research**

In view of the delimitations of the study, the researcher suggested that:

1. Since the study targeted Central Division of Machakos district leaving out other divisions, similar study be undertaken in the whole of Machakos District and if possible the whole of Eastern Province.
2. The study did not involve other stakeholders such as parents and pupils and therefore a similar study should be done with these persons as respondents.

## BIBLIOGRAPHY

- Abagi, O. (1997). **The impact of Politicized Education on the Quality of Primary Education Reforms on the Quality of Education, Experience from Kenya.** London: Waston Ketel.
- Anandu, D. (1990). **"Factors Affecting the implementation of the 8-4-School Curriculum in primary Schools. A Survey of Emuhaya Division of Vihiga District."** Unpublished M.Ed Thesis. Kenyatta University.
- Augo, O. (2001). **"Influence of Domestic Labour and Role Expectations on the Performance of School Girls in Gucha District."** Unpublished M. Ed Thesis, University of Nairobi.
- Ayoo, S. (2002). **"Factors Affecting Students Performance in KCSE in Public Secondary Schools in Maseno Division."** Unpublished M. Ed Research Project. University of Nairobi.
- Ayot, H. (1982). **Teacher Advisory Centres in Kenya.** Bristol: Bristol University of Education.
- Best, J. & Kahn, V. (1993). **Research in Education, 6th ed.** Englewood Cliffs, New Jersey: Prentice Hall.
- Best, J. & Kahn, V. (1998). **Research in Education.** Boston: Alyn and Bacon.
- Best, W. & Kahn, V. (2006). **Educational Research in Education.** New Dheli: Pearson Education Inc. in Kenya.
- Borg, R. & Gall, M.(1996). **Educational Research: An Introduction.** New York: Longman.
- Bruns, B. (2003). **Achieving Universal Primary Education by 2015. A Chance for Every Child.** Washington, D.C.: World Bank.
- Eastern Province, (2009). **Eastern Province Capacity Building Workshop Report. 41/36/31.** Machakos Town.
- Eshiwani, G. (1983). **Education in Kenya since Independence.** Nairobi: East African Publishers.
- Eshiwani, G. (1983). **Education Kenya since Independence.** Nairobi: East African Publishers
- Everest, K. (1986). **Developing Management in Schools.** Nairobi: Blackwell Ltd.

- Gakuru, O. (1982). **Who goes Secondary School in Kenya: A Study of Pre-School Education and Socio-economic Background of a child.** Nairobi: Institute for Development Studies.
- Gay, L. (1981). **Educational Research: Competencies for Analysis and Application.** Toronto, London: Charles E. Mairil Publishing Company.
- Glatter, R. (1989). **Educational Institutions and their Environments, Managing the Boundaries.** Miltone Keynes Philadelphia: Open University.
- Huha, J. (2003). "A Comparative Study of Factors that Influence Performance in Kenya Certificate of Primary Education (KCPE) in Public and Private Schools in Karai Location Kikuyu Division in Kiambu District." Unpublished M.Ed Research Project, University of Nairobi.
- Kombo, D. & Tromp, D. (2006). **Proposal and Thesis writing An Introduction.** Nairobi: Paulines Publications Africa.
- Kothari, L. (2000). "Students Perception of the Marriage Institution: Survey of Selected Colleges in Embu, Kenya." Unpublished M.Ed Thesis. Kenyatta University.
- Kothari, C. (2005). **Research Methodology, Methods and Techniques (2nd Edition).** New Delhi: New Age International (p) Ltd. Publishers.
- Lodiaga, J. (2001). **Teachers Resource Centres: Baseline Study Report.** London: Commonwealth Secretariat.
- Lokesh, R. (1984). **Methodology of Educational Research.** New Delhi: Vani Educational Books Publishers
- Mbatia, M. (East African Standard 28th July 2005). **Classroom Overload.**
- MOEST, (2001). **Education for All in Kenya: A National Handbook in EFA 2000 and Beyond.** Nairobi: Government Printer.
- MOEST, (2003). **Free Primary Education: Every Child in School.** Nairobi: Government Printer.
- MOEST, (2004). **Report of the Task Force on Implementation\_of FPE.** Nairobi: Government Printer.
- MOEST, (2006). **Coping With Rapid Expansion within the Framework of EFA Policy: Kenya's Experience.** Nairobi: Government Printers.

- MOEST, (2009). **School Enrolment Statistical Analysis**. Nairobi: Ministry of Education.
- Mogere, O. (1997). **Causes of Continued Decline in Performance Among Schools in Suneka, Kisii District**. Unpublished PGDE Project: Kenyatta University.
- Mugenda, M. & Mugenda, G. (1999). **Research Methods: Quantitative and Qualitative Approaches**. Nairobi: Acts Press.
- Muhoho, G. (1975). **Universal Primary Education: The Kenyan Experience**. Paper presented at the Association of African Teachers. Nairobi: Oxford University Press.
- Nafula, J. & Ngoma, C. (1998). **Educational Foundations**. Nairobi: Kenyatta University Press.
- Okumbe, J. (1998). **Educational Management. Theory and Practice**. Nairobi: Nairobi University Press.
- Olembo, J. Wanga, P. & Karagu, N. (1992). **Management in Education**. Nairobi: ERAP.
- Orodho, A. (2003). **Essentials of Educational and Social Sciences. Research Methods**. Nairobi: Masola Publishers.
- Orodho, A. (2005). **Elements of Education and Social Sciences. Research Methods**. Nairobi: Masola Publishers.
- Republic of Kenya, (1964). **Kenya Education Commission Report (Ominde Report)** Nairobi: Government Printer.
- Republic of Kenya, (1976). **Report of the National Committee on Educational Objectives and Policies (Gachathi Report)**. Nairobi: Government Printer.
- Republic of Kenya, (1988). **The Report of the Presidential Working Party on Education and Manpower Training for the Next Decade and Beyond (Kamunge Report)**. Nairobi: Government Printer.
- Republic of Kenya, (1999). **The Commission of Enquiry into Educational Systems in Kenya. (Koech Report)**. Nairobi: Government Printer.
- Republic of Kenya, (2001). **Report of the Taskforce on the Implementation of Free Primary Education**. Nairobi: Government Printers.

- Republic of Kenya, (2003). **MOEST Free Primary Education. Every Child in School.** Nairobi: Jomo Kenyatta Foundation.
- Republic of Kenya & United Nations, (2003). **Millennium Development Goals, Progress Report for Kenya,** Nairobi: Government Printer.
- Republic of Uganda, (1999). **Three Years after Jomtien. The Uganda Case,** Ministry of Sports: Uganda.
- Rosenburg, K. (1993). **Foundations of Behavior Research,** Massachusetts: Harcourt Publishers.
- Shiundu, J. & Omulando, S. (1992). **Curriculum Theory and Practice in Kenya.** Nairobi: Oxford University Press. .
- Sifuna, D. (1990). **Development of Education in Africa. The Kenyan Experience.** Nairobi: Initiatives Ltd.
- Thomas, G. (1980). **Systems Theory for Organization Development.** London: John Wiley Publishers Ltd.
- Thornbury, D. (1973). **Applied Strategies for Curriculum Evaluation.** London: Macmillan Publishers.
- UNESCO, (2003). **Kenya & UNESCO Magazine 2002 /2003 annual report,** Nairobi: Government Printer.
- UNESCO, (2004). **National Development Plan 2002-2003.** Nairobi: National Bureau of Statistics.
- UNESCO, (2005). **Challenges of Implementing Free Primary Education in Kenya Assessment Report,** Nairobi: Government Printer.
- United Republic of Tanzania, (1993). **Three Years after Jomtien. The Case of Tanzania.** Ministry of Education: Zanzibar.
- Wanjala, G. (1999). **Factors Causing Poor Performance in Moi Girls Isinya-Kajiado District.** Unpublished PGDE Project: Kenyatta University.
- Wragg, E. (1990). **Classroom Management and Control: A Teaching Skill Workshop.** Hong Kong: Macmillan Education Limited.

## **APPENDICES**

### **APPENDIX ONE**

#### **INTRODUCTORY LETTER TO RESPONDENTS**

Monicah Muindi,  
University of Nairobi,  
P.O Box 92,  
Nairobi, Kenya.

Dear respondent,

RE: QUESTIONNAIRE ON THE FACTORS AFFECTING  
SUSTAINABILITY OF FPE IN CENTRAL DIVISION, MACHAKOS  
DISTRICT

I am a postgraduate student at the University of Nairobi, undertaking a research on the factors affecting sustainability of Free Primary Education in public primary schools. Your school has been selected to participate in the research. I request you kindly to fill the attached questionnaires as sincerely as possible.

You are assured that the information you will give will be treated with utmost confidentiality and used for the purposes of this research only.

Thank you very much for your cooperation.

Yours Sincerely,

Monicah Muindi

## APPENDIX TWO

### QUESTIONNAIRES FOR HEADTEACHERS

This questionnaire is designed to establish factors affecting sustainability of free primary education. The information you give will be treated with absolute confidentiality. Please respond to all the questions.

#### PART A: Demographic information.

Please indicate the correct option by ticking in the space provided (  ). For the structured questions use the space provide-----

1. What is your gender?

Female (  )                      Male (  )

2. What is your professional qualification?

P1 (  )                      Diploma (  )

ATS (  )                      Bed (  )

Any other specify-----

3. How long have you been head teacher?

1-10 years (  )                      21-30 years (  )

10-20 years (  )                      over 30 years (  )

#### PART B: Physical facilities

4. What educational projects have the school undertaken since 2003 to date?

Please tick as many as applies to you.

a) Head teachers office (  )

b) Deputy Head teacher's office (  )

c) Staff room (  )

d) Water tank (  )

e) Class rooms (  )

f) Any other please specify -----

5. Please indicate the current school enrolments by class (2009).

Class	Enrolment	
	Boys	Girls
Standard 1		
Standard 2		
Standard 3		
Standard 4		
Standard 5		
Standard 6		
Standard 7		
Standard 8		

6. Please indicate the school enrolments by class before the introduction of FPE in 2002.

Class	Enrolment	
	Boys	Girls
Standard 1		
Standard 2		
Standard 3		
Standard 4		
Standard 5		
Standard 6		
Standard 7		
Standard 8		

7. How many pupil toilets do you have for:

Boys-----

Girls-----

**PART C: Teacher-Pupil ratio.**

8. Give the total number of teachers in the school-----



9. Comment on the adequacy of the teaching staff. That is a teacher per class of not more than 40 pupils.

Adequate ( ) Inadequate ( )

10. If the answer to number 8 above is inadequate, how have you been able to cope with the inadequate teaching staff? Please tick as many as applies to you.

a) Employing PTA teachers ( )

b) Volunteer teachers ( )

c) Teaching in shifts ( )

d) Others please specify-----

11. What is the average teaching workload on the teachers in this school?

a) Less than 20 lessons per week ( ) c) 31- 40 lessons per week ( )

b) 21-30 lessons per week ( ) d) more than 40 lessons per week ( )

#### **PART D: Teaching and learning materials**

12. Do you have proper storage facilities for the textbooks in the school?

Yes ( ) No ( )

13. On average what is the current textbook/pupil ratio?

Lower Primary 1: 2 ( ) 1: 1 ( ) 1: 3 ( )

Upper Primary 1: 2 ( ) 1: 1 ( ) 1: 3 ( )

14. Where do you store the textbooks in the school?

a) Head teacher's office ( ) b) Deputy Head teacher's office ( )

c) In the class rooms ( )

d) Any other please specify-----

15. Are the storage facilities secured?

Yes ( ) No ( )

16. Have all the textbooks been covered using polythene covers?

Yes ( ) No ( )

#### **PART E: Government funding**

17. Which month does the government release the funds towards the FPE programme?-----

18. If the money is released after the month of May, how does the school cope with the
19. Financial demands before the release of the government funds? Please explain-----  
-----  
-----
20. Are there programmes in the school which are not attended to due to lack of funds?  
Yes ( ) No ( )
19. If yes, which are some of these? -----  
-----
20. Has the school been able to provide pupils' basic needed like provision of:  
Desks ( ) Shutters ( ) Cementing classroom floors ( )

**PART F: In-Service teacher training**

21. Which of the following courses have you attended?  
a) Guidance and counselling ( ) b) PRISM courses ( ) c) KESSP ( )  
d) Any other please specify-----
22. Has the school been sponsoring teachers to attend educational seminars/courses since the inception of FPE? Yes ( ) No ( )
23. If the answer is no, what are the reasons for not sponsoring them? -----  
-----  
-----
24. If the answer if yes, comment on the adequacy of the courses in terms of:  
(a) Number of teachers attending -----  
-----  
(b) Relevance of the courses to meet the challenges brought about FPE-----  
-----  
-----  
-----

25. What are some of the challenges you face as a head teacher in your administrative duties? Please tick as many as applies to you.

a). Lack of support from parents and the community ( )

b). Dealing with inadequate teaching staff. ( )

c). Inadequate teaching / learning materials ( )

d). Over enrolment in the class rooms ( )

e). Dealing with over- age learners ( )

f). Others please specify-----

**Thank you**

**APPENDIX THREE**

**QUESTIONNAIRE FOR THE CLASSTEACHERS**

You are kindly requested to complete this questionnaire by indicating your honest response in the space (✓ ) and by filling the blanks \_\_\_\_\_ by giving as many details as possible

**PART A: Demographic information**

1. What is your gender?

Male ( ) Female ( )

2. What is your highest professional qualification?

(a) P I ( ) b) ATS ( )

(c) Diploma ( ) d) B. Ed ( )

3. Any other specify -----

What is your teaching experience in years?

1 -5 years ( ) 6 -10 years ( ) 11- 15years ( )

16 -20 years ( ) Over twenty years ( )

**PART B: Physical facilities**

4. Please indicate the class-----

5. What is the current pupil enrolment in the class?

(a) Less than 40 ( ) c) 51-60 ( )

(b) 41-50 ( ) d) over 61 pupils ( )

6. How many desks do you have in your class-----

**PART C: Teacher-Pupil ratio**

7. Do you give assignments?

Yes ( ) No ( )

8. How often do you give assignments?

a) On daily basis ( ) b) Once a week c) Not given at all ( )

d) Any other please specify-----

-----  
-----  
-----

9. On average how many questions do you give to your pupils as assignment and home work?

- (a) Less than 5 questions ( ) (c) More than 10 questions ( )  
b) 5-10 questions ( ) d) Over 10 questions ( )

10. Do you manage to mark all the assignments you give to the pupils?

- Yes ( ) No ( )

**PART D: Teaching /Learning materials**

11. Do you have proper storage facility for the class text books?

- Yes ( ) No ( )

12. How do you ensure the durability of the textbooks? Please explain-----  
-----

**PART F: In-service teacher training courses**

13. Which of the following in-service courses or seminars have you attended?

- a) Guidance and Counselling ( )  
b) PRISM courses ( )  
c) SbTD ( )

d) Any other please specify-----  
-----

14. What challenges have you encountered as a class teacher?

- a) Non cooperative parents ( )  
b) Inadequate teaching and learning materials ( )  
c) Over-enrolment in classes ( )  
d) Unattended lessons ( )

e) Any other please specify-----  
-----

**THANK YOU**

APPENDIX FOUR

RESEARCH PERMIT

REPUBLIC OF KENYA



**NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY**

Telegrams: "SCIENCETECH", Nairobi

Telephone: 254-020-241349, 2213102

254-020-310571, 2213123

Fax: 254-020-2213215, 318245, 318249

When replying, please refer to

**NCST/5/002/R/536/5**

P. O. Box 30623-00100

NAIROBI-KENYA

Website: [www.ncst.go.ke](http://www.ncst.go.ke)

23<sup>rd</sup> June 2009

Our Ref:

**Ms. Monicah Muindi**  
**University of Nairobi**  
**P. O. Box 30197**  
**NAIROBI**

Date:

Dear Madam

**RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on "**Factors affecting sustainability of Free Primary Education in Public Schools in Central Division, Machakos District**", I am pleased to inform you that you have been authorized to carry out research in Machakos District for a period ending 31<sup>st</sup> December, 2009.

You are advised to report to the District Commissioner and the District Education Officer Machakos District before embarking on your research.

Upon completion of your research, you are expected to submit two copies of your research report/thesis to our office.

A handwritten signature in black ink, appearing to read 'S. A. Abdulrazak'.

**PROF. S. A. ABDULRAZAK Ph.D, MBS**  
**SECRETARY**

Copy to:

The District Commissioner  
Machakos District

The District Education Officer  
Machakos District

THIS IS TO CERTIFY THAT  
Prof./Dr./Mr./Mrs./Miss MONICAH  
MUINDI

of (Address) UNIVERSITY OF NAIROBI  
P.O. BOX 30197 NAIROBI

has been permitted to conduct research in  
CENTRAL DIVISION  
MACHAKOS District,  
EASTERN Province,

on the topic FACTORS AFFECTING SUSTAIN-  
ABILITY OF FREE PRIMARY EDUCATION  
IN PUBLIC SCHOOLS IN CENTRAL  
DIVISION, MACHAKOS DISTRICT

for a period ending 31ST DECEMBER  
2009

Research Permit No. NCST/5/002/R/536

Date of Issue 23.6.2009

Fee received KSHS. 1000



[Signature]  
Applicant's  
Signature

[Signature]  
Secretary  
National Council for  
Science and Technology