AN INVESTIGATION OF TEACHER/PUPILS RATIOS ON THE INTERNAL EFFICIENCY INDICATORS OF PRIMARY SCHOOLS IN MVOMERO DISTRICT AND MOROGORO MUNICIPALITY

MUYA SALUM

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF A MASTER OF EDUCATION IN ADMINISTRATION, PLANNING AND POLICY STUDIES OF THE OPEN UNIVERSITY OF TANZANIA

2013

CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance by The Open University of Tanzania the dissertation titled *"An Investigation of Teacher/Pupils Ratios on the Internal Efficiency Indicators of Mvomero District and Morogoro Municipality"* in partial fulfillment for the Degree of a Master of Education in Administration, planning and policy studies.

……

Dr. E.B. Temu

……

Date

COPYRIGHT

"No part of this dissertation may be reproduced, stored in any retrieval system, or transmitted in any form by any means electrical, mechanical, photocopying, recording or otherwise without prior written permission of the author or The Open University of Tanzania in that behalf".

DECLARATION

I, Muya Salum hereby declare that this dissertation is my own original work and that it has not been submitted for a similar degree to any other University.

…….....

Muya Salum

……...

Date

DEDICATION

This dissertation is dedicated to my beloved late mother, Sakina Mussa Buge who laid the foundation of my education through her encouragement, guidance, counseling and moral as well as material support, until I managed to reach this level of education. Although she passed away 2011 before completion of this dissertation, her contribution will never be forgotten. May Almighty God rest your soul in enternal peace, Amen.

ACKNOWLEDGEMENTS

In the first place I convey my sincere gratitude to Almighty God who gave me a variety of resources for use in the study. Second, I would like to give special and sincere thanks to my supervisor, Dr. Temu, E.B. He gave me supportive and constructive guidance throughout the proposal preparation right through to the final preparation of this dissertation. His advice, commitment, prompt review of my work, tolerance and encouragement finally made this dissertation a reality. His contribution will never be forgotten.

Third, I wish to convey special thanks to my beloved wife, Fatuma Kassara Muya and our children Hamdan and Hamdoun for their encouragement and patience at the time of the study when I had to be away from them to get the quiet time I needed to write the dissertation. Fourth, I would like to thank Dr Hyera, R. and Mr Muya, S.H and all other people who, in one way or another, helped me psychologically and provided economic support during my studies as well as for their suggestions, encouragement and advice. To all of them may His Almighty God abundantly reward you for your contribution to the success of this dissertation.

Finally, but not least I remain fully responsible for any shortcomings that may be discovered in this dissertation.

ABSTRACT

This study investigated the Teacher/Pupils Ratios on the Internal Efficiency Indicators of Mvomero District and Morogoro Municipal. Five objectives were set; the Teacher Pupils Ratio for remote and peripheral schools compared to urban schools against internal efficiency parameters such as, the dropout rate, the transition rate, the pass rate, and the repetition rates. Methodologically both qualitative and quantitative approaches were used for data collection and analysis. Focused group discussions (FGD), semi–structured interviews, questionnaires and unpublished documentary reviews were used as instruments for data collection. The results of this study show that there are wide TPR between Morogoro urban 1:48 and Mvomero district 1:58; concerning dropout rates there are differences between Morogoro Municipality and Mvomero district schools. In terms of repetition rate the findings indicate that there is difference of 15 per cent between Morogoro urban with an average of 37 per cent in Mvomero district schools with an average of 22 per cent for Morogoro municipality schools. The transition rate shows that there is a lower transition rate in Mvomero district schools of 62 per cent compared to Morogoro Municipality of 82 per cent. The pass rate in Mvomero district schools was 74 per cent compared to Morogoro urban schools of 96 per cent. The remotely located schools in Mvomero are not attractive to teachers because they lack essential services as indicated in the text. It is recommended that the Government provide hardship allowances or the schools advertise the vacancies so that those who apply are those prepared to live and work in the remote and peripheral locations.

TABLE OF CONTENTS

CERTIFICATION ..... **ii**

COPYRIGHT ..... **iii**

DECLARATION ..... **iv**

DEDICATION ..... **v**

ACKNOWLEDGEMENTS ..... **vi**

ABSTRACT ..... **vii**

TABLE OF CONTENTS ..... **viii**

LIST OF ACRONYMS AND ABREVIATIONS ..... **xi**

CHAPTER ONE **1**

1.0 INTRODUCTION AND BACKGROUND **1**

1.1 Introduction 1

1.2 The Role of the Teacher in the Teaching and Learning Process 3

1.3 EFA and Millennium Development Goals (MDGs) 3

1.5 Definition of Terms and Concepts 10

1.6 Statement of the Problem 11

1.7 The purpose of the Study 11

1.8 Research Questions 12

1.9 Significance of the study 12

1.10 Organization of the study 13

CHAPTER TWO **14**

2.0 LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK **14**

2.1 Introduction 14

2.2 Shortage of Teachers in Developed Countries 14

2.3. Teacher Shortage in Developing Countries 15

2.4. Teachers shortage in Tanzania 18

2.5. Conceptual Framework 19

CHAPTER THREE 22

3.0 RESEARCH METHODS 22

3.1 Introduction 22

3.2 The Design 22

3.3 The Population 23

3.4 Sampling and Sampling Techniques 25

3.5 Research Instruments 26

3.5.1 Focused group discussions (FGDs) for Ward Education Coordinators 26

3.5.2 Semi-structured interviews 27

3.5.3 Questionnaires 27

3.5.4 Unpublished documentary reviews 28

3.6 Validity and Reliability Concerns 28

3.7 Data Processing, Analysis and Interpretation 29

3.8 Summary 29

CHAPTER FOUR 31

4.0 THE FINDINGS AND DISCUSSION 31

4.1 Introduction 31

4.2 The Internal Efficiency Indicators 31

4.2.1 Teacher pupils ratio 31

4.3 Availability of Important Social Services 33

4.4 Means of Transport and Relevant Costs 34

4.5 Walking Distance 36

4.6 Accommodation Costs and Availability 38

4.8 Perceptions of Ward Education Coordinators on the Causes of Teacher Shortages 39

4.10 Repetition rate 46

4.11 Completion Cycle 47

4.11.1 The effect of differential allocation of primary school teachers on internal efficiency of the primary school system 48

4.12 The transition rate from primary to secondary schools 48

4.12.1 Performance rates in Mvomero district and Morogoro municipality primary schools 49

CHAPTER FIVE 52

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS 52

5.1 Introduction 52

5.2 Summary 52

5.3. Conclusion 53

5.4.1 Recommendation for policy 54

5.4.2 Recommendations for research 55

REFERENCES 56

APPENDICES 61

LIST OF TABLES

Table 1. 1: Trend of Teacher Pupil Ratio (TPR) Before and After PEDP Implementation..... 4

Table 2. 1: School Data for Six Selected Interior Zones in Malawi 17

Table 3. 1: Composition of Sample Size..... 26

Table 4. 1: Enrolment Primary of Pupils against Availabile Teachers as per Pupils. 31

Table 4. 2: Teachers' Attitude towards Working in Remote Rural Schools..... 32

Table 4. 3: The responses on Availability of Important Social Services 33

Table 4. 4: Means of Transport From Home to School in Both Mvomero District and Morogoro Municipality 34

Table 4.5: Walking Distance Covered from the Respective Schools to the Lorry/ Bus Terminal per Month 36

Table 4.6: Source of Accommodation and Conditions of the Buildings 37

Table 4.7: Duration Teachers Stay at the Working Station 39

Table 4. 8: Dropout Rate for Mvomero District Schools..... 43

Table 4.9: Dropout Rate for Morogoro Municipal Schools..... 44

Table 4.10: Repetition Rates for 2 Mvomero District Schools..... 45

Table 4.11: Repetition Rate for 2 Morogoro Municipal Schools..... 46

Table 4.12: Transition Rates Between Mvomero District and Morogoro Municipality Schools 49

Table 4.13: Primary School Leaving Examinations Results Between 2007-2010 50

LIST OF FIGURES

Figure 1. 1: The Trend (TPR's) before and during PEDP Implementation (1996-2007) in Tanzania 5

Figure 2.1: The Trend of Teacher: Pupils Ratio Before and During PEDP Implementation (1996-2007) 18

Figure 2. 2: Conceptual Framework for the Teachers' shortage in Primary Schools on Internal Efficiency of Remote and Urban District Schools 21

LIST OF ABREVIATIONS AND ACRONYMS

BEDC	Basic Education Development Committee
BEST	Basic Education Statistics
CN	Candidates Number
DED	District Executive Director
DEO	District Education Officer
EFA	Education for All
ESR	Education For Self Reliance
FGD	Focused Group Discussion
HTs	Head Teachers
MDGs	Millennium Development Goals
NECTA	National Examination Council of Tanzania
NGOs	Non Governmental Organizations
NT	Specific Number of Teachers
NSGRP	National Strategy for Growth and Reduction of Poverty
PEDP	Primary Education Development Plan
REO	Regional Education Officer
T	Total
TD	Number of Teachers Deficit
TE	Specific Total Pupils Enrollment
TN	Number of Teachers Needed
TP	Number of Teachers Present
TPR's	Teacher: Pupils' Ratios
TS	Number of Teachers Supplied

Tsh.	Tanzanian shillings
UPE	Universal Primary Education
URT	United Republic of Tanzania
WECs	Ward Education Coordinators

CHAPTER ONE

1.0 INTRODUCTION AND BACKGROUND

1.1 Introduction

The cry on teachers' shortage in the education system in Tanzania can be traced back to the pre independence period. Schools, which had the problem of teachers' shortage, were mainly those meant for Africans, while European schools had no teachers' shortage. The Asians' schools were in between the two extremes (Bogonko, 1992, Njabili 1999). This situation was possible because Europeans and Asian were living in urban areas while Africans were found mostly in the remote rural areas. Apart from the remote location there was a policy of discrimination. To date the problem of shortage of teachers is still dominant, especially in the remote areas. The current study was intended to examine the effect of differential human resources allocation to urban and remote locations on the internal efficiency of primary schools in terms of dropout rates, completion rates, performance levels, school attendance and repetition rates. A school is a place purposefully established to facilitate the whole process of teaching and learning for a specific period of time at the end of which learners are tested to find out whether learning took place or not. It is expected to facilitate the process of learners acquiring knowledge, skills, attitudes and values that are essential in everyday life. As Nyerere (1968) points out, a child at school is expected to develop his/her mind to its maximum capacity. In the realization of this expectation a school should have sufficient resources both human, financial and material resources as important inputs thus facilitating the development of the learner in all aspects. Given the few resources given to African schools not many Tanganyikan children went to school. At independence Tanganyika had two types of

primary school teachers, Grades I and II. The Grade II primary school teachers were obtained after their completion of Standard Seven and Eight and two years of professional teacher training courses in college or three years by the distance programme after which they become Grade IIIC teachers. The Grade 'IIIB' teachers were obtained after completion of Standard Ten class and given two years courses and upon completion became known as Grade 'B' (Temu, 1995). Students who completed form four secondary education and underwent of teaching course for two years become Grade IIIA teachers. Today the issue of teachers' improvement has led to the decision to raise their professional and academic qualification at various levels. The 1995 Education and Training Policy emphasizes that, teacher professional development constitutes an important element for quality and efficiency in education and therefore in- service training and retraining shall be compulsory in order to ensure improved teachers quality and professionalism.

The demand for primary education in Tanzania is very high because it provides a base for national development. In essence, the Tanzania Development Vision 2025 perceives education as a critical factor in building the mind set necessary for national development. Moreover, education creates the necessary conditions for establishing a competitive economy that will be the driving force for the realization of the vision (Msekwa and Maliyamkono, 1975). The fact is that up to now it is the only level of the education system that supplies the majority of people in the work force in the national economy including the private sector, agriculture being the leading one. For this matter, one can suggest that education is a key instrument in achieving the first Millennium Development Goal which aims at eradicating extreme poverty and hunger (UN, 2006).

1.2 The Role of the Teacher in the Teaching and Learning Process

According to the Basic Education Development Committee (BEDC), (2001) the teacher in the classroom is the resource instrument for bringing about qualitative changes in the teaching and learning processes. As such, any problem related to the teachers' shortages impact the process of learning and teaching at the school. Omari (2006) points out that the teacher's role in the classroom consists of a variety of moves and activities meant to facilitate and advance the attainment of the lesson goals. Ishumi and Nyirenda (2002) suggest that, for learning and teaching to prosper, dynamic processes of interaction between the teacher, the learner and the subject matter is crucial. Thus, few educational authorities would disagree that, good schools have the best-trained and most experienced teachers. These statements highlight clearly the importance of the teacher in facilitating the process of teaching and learning in the classroom situation so as to bring about the desired quality education to learners. The Government therefore, should seriously ensure that teachers are equitably distributed and retained equally well in each school particularly those in the remote areas.

1.3 EFA and Millennium Development Goals (MDGs)

Improving the quality of education particularly, primary education has been one of the significant agenda in international discussions and conferences, including those held in Jomtien (1990) in Thailand; Cairo (1994) in Egypt; and Dakar (2000) in Senegal. The Dakar meeting postponed the period for achieving the goals of EFA after finding out that it could not be achieved in 2000 as it was planned. It was postponed to the year 2015. The main agenda in these conventions is Education for All (EFA) with emphasis on ensuring that quality education is provided to all

regardless of the geographical location, social status, religious affiliation, gender or ethnicity. Education in this matter is considered to be a crucial tool for achieving the Millennium Development Goals particularly poverty reduction. The idea is that one cannot participate effectively in eradicating poverty unless ones is equipped with quality education. For this reason, Tanzania is committed to provide quality education for all in the same context as declared by various global conventions.

1.4. Background to the Study

The balance between the demand and supply of teachers as an important resource in the provision of education in the country is not satisfactory. Statistics show that the number of new teachers recruited and deployed during the implementation of the Primary Education Development Plan (PEDP) was inadequate to keep pace with the need for teachers in all districts in the country hence resulting in teachers' shortages in all districts (MOEC, 2003). The status concerning teachers' shortage during the implementation of PEDP led to the widening of the Teacher Pupil Ratio (TPR), which deteriorated with each of the subsequent years of PEDP implementation (See Table1.1)

Table 1. 1: Trend of Teacher Pupil Ratio (TPR) Before and After PEDP Implementation

Years	**TPR before PEDP implementation**						**TPR After PEDP implementation**					
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
	36	37	38	40	41	46	53	57	59	56	53	54

Source: Best, 2007

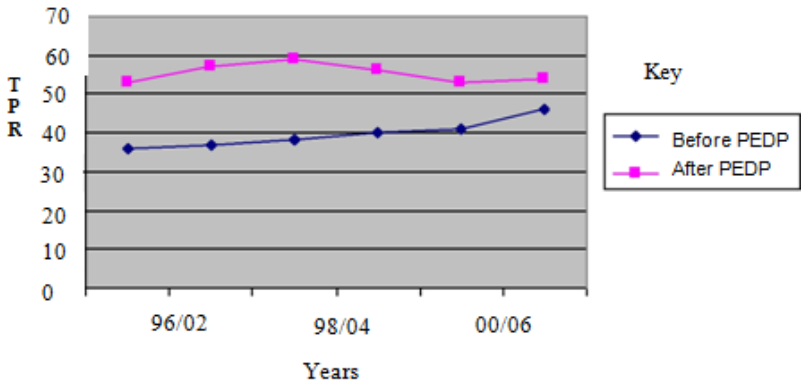

Figure 1.1: The Trend (TPR's) Before and During PEDP Implementation (1996-2007) in Tanzania

Source: Best, 2007

Teachers' shortage was more noticeable in the primary schools located in the remote areas than those in urban areas. For example, it was observed that in 2002 some remote districts received only 50 per cent of the new teachers allocated to them (MOEC, 2003). Similar observation was made by Mulkeen (2005) who states that, in many African countries, teachers prefer to teach in urban areas, resulting in rural schools having few teachers. Many remote rural schools have insufficient number of teachers. This implies that schools in the remote districts have always been subjected to constant problems of teachers' shortage and its influence on the quality of education. The teacher's shortage can be clearly discerned through examination of three periods of education provision in the country. These are pre-colonial period, the colonial period and the post-colonial period. During the pre-colonial period in Africa, it was the responsibility of elders in various African societies to provide education to the younger generation. They used to pass on to their young ones knowledge, skills and attitudes that were important in mastering their environment. During this period there were no teachers shortages because all elders played their role effectively in educating their children (Nyerere, 1967).

During the colonial era, the colonial powers took deliberate efforts to disrupt the indigenous education system by regarding African traditional education as primitive and barbaric, with no contribution to the development of the African people. Their introduction of a formal education system was intended to inculcate the western norms and values in the African minds (Nyerere, 1967). This colonial education also aimed at training few African individuals to serve the colonial Government in the lower cadres of the administrative hierarchy. It was colonial oriented for the purpose of serving the interest of the colonialists. The shortage of teachers during this period was a characteristic feature, which dominated the schools specifically for African shools (Njabili, 1999). During this period, the education system was run on racial bases whereby the best schools were for Europeans and Asians respectively leaving the citizens (Africans), with poor quality schools. For example, in 1946 the Government expenditure was £ 1.9 per African pupil's head, £ 4.4 for the Asians and £ 38.0 for Europeans (Msekwa and Maliyamkono, 1975). This discrimination affected negatively the availability of human and material resources to the schools during colonial period where the urban schools benefited a lot compared to remotely located schools.

Teachers' shortage continued to be a pervasive issue during the post-independence period. The problem became serious when Tanzania started to implement the Musoma Resolutions in 1974, as a strategic policy to achieve Universal Primary Education by 1977. The implementation of the Musoma Resolutions went hand in hand with the implementation of Education for Self-Reliance. Among other things, the Musoma Resolutions emphasized that every school age child had to be enrolled for primary education through the policy of Universal Primary Education (UPE). The

implementation of the Musoma Resolutions resulted into a sixfold increase in the number of primary schools, which required an additional 40,000 teachers out of the 10,000, who could be produced in Tanzania during UPE programme (MONE, 1977). As a result, the teachers' shortage continued to be a serious problem facing the primary schools in the country though differentially. Hussen and Neville (1985) and Bogonko (1992) point out that the teachers' shortage, caused by UPE implementation, was so serious that it negatively affected school teaching and learning processes.

After independence education was not provided on racial bases thus all the schools were made accessible to all (Njabili, 1999). However, the remote rural areas were, and still are, the most affected by the teachers' shortage (Galabawa and Narman 2004). For example, some studies point out that Kilimanjaro is the only region that has a sufficient number of teachers in relation to her needs. In the year 2006, the region had 325,261 primary school pupils demanding 8,132 teachers, but there were 8,863 teachers with TPR's 1:37 as Per Education Circular Number 4 and 5 of 2003 (MOEC, 2003) implying that Kilimanjaro had an excess of 729 teachers. Various factors such as the environment, economic and social amenities could have attracted teachers to teach in the region. As highlighted by Bogonko (1992). It is also one of the leading regions in the enrollment of school age children compared with other regions hence inspiring people's social development. For example, in 1969 Kilimanjaro managed to enroll 52 per cent and 82 per cent in 1978 of its school age population of net and gross enrolment ratio compared to 20 per cent and 64 per cent for Shinyanga respectively. Furthermore, Kilimanjaro region has a well established transport infrastructure such that most schools are located in the

areas which are easily accessible by different means of transport such as busses and other motor vehicle (Kaguruki, 2004) with the title, Walimu waghushi vyeti kuhamia mijini reveals that; the teachers who are currently teaching in the rural primary schools are not satisfied with the prevailing living and working conditions. These teachers fight painstakingly and even forge marriage certificates to secure transfers to enable them move from the remote areas to the more urbanized areas as observed below:

> *"Once the teachers were deployed, were able to request transfers to other areas, for female teachers, transfer was often requested on the basis of marriage, and there were even some reports of women faking a marriage certificate in order to get a transfer. It is rare to find female teachers in rural areas, unless they are with their husbands (if, for example, both are teachers). Male teachers were sometimes able to get a transfer on the basis of doing further study, and so needing access to electricity. Teacher illness is another major justification for movement".* (Mulkeen, 2005:8).

This apparent brain drain of teachers always causes a permanent teachers' shortage in the remote rural areas. As a result many of the primary schools in remote rural areas remain understaffed in most cases. George, (2007), January 30th, Mwananchi, Newspaper) with the title "*Shule ya Msingi Digalama yaachiwa mwalimu mmoja" (*Digalama primary school is left with only one teacher*);* (translated) Digalama primary school in Mvomero district, Morogoro region with 280 pupils from Standard one to seven had only one teacher. This suggests that, the Teacher Pupil Ratio (TPRs) in this primary school was 1: 280 and it is the common feature of most Tanzania remotely located primary schools. It is obvious that

teachers in these primary schools have heavy workload and possibly poor morale to do their responsibilities. Once a classroom is overcrowded the effect is that, teachers fail to reach individual learners who have difficulties in leaning. Equally, once schools face shortage of teachers they may experience inter related problems of pupils' dropouts, repetitions, examination failures and truancy. Which has a negative impact on the internal efficiency of the primary education system as well as the quality of education in general it is the purpose of this study to explore the influence of differential allocation of human resources on the quality and internal efficiency of remotely primary schools. The major focus being the internal efficiency as measured by the indicators such as enrollment rate, dropout rate, repetition rate, survival rate, pass rate, completion rate and transition rate. The possibility of shortage of teachers was accurately predicted in 1982 by the Presidential Commission on Education which was chaired by the late Jackson Makwetta by then Minister of Education who said:

> *"Takwimu hizi zinaonesha kuwa upungufu wa walimu utazidi kuongezeka kama hatua za haraka za kuwapata walimu wengi zaidi na kuwapa hali nzuri ya utumishi katika kazi yao hazitachukuliwa''* (Presidential Commission report, 1981 p. 228).

This statement indicates that, teachers deficit will keep on increasing unless some positive strategies are taken to give them better working conditions,-(Translation) .

Morogoro region like many other regions in Tanzania have remote schools which face the same problems of shortage of teachers. The region is made up of seven districts which are Morogoro Rural and Urban, Kilosa, Kilombero, Mahenge, Mvomero, and Gairo. In the region, the areas preferred by teachers are those

surrounding the centers of the municipality, district and division headquarters leaving the remote areas with pervasive problem of resources including teachers' shortages. The District Executive Director (DED) for Morogoro Rural reported, *"The current Teacher: Pupil Ratio stands at 1:52. However the council still experiences high rate of Teacher: Pupil Ratio especially in remote areas. The deficit is caused by the high rate of teachers' deaths and enrolment expansion* (DED, 2002:4)".

This is contrary to what the former Minister of Education observed:

> *"By introducing the Primary Education Development Plan, the Ministry of Education and Culture is embarking on a huge programme of education development to ensure that each child will get the best quality of education…each of these individual children is an individual in its own right with feelings, emotions, talents, aspirations and potentials that would contribute to the national development*" (Mungai, 2001: ii).

Haule (1979) comparative study in literacy achievement among Standard Seven rural and urban areas, it was observed that Morogoro Rural was more negatively affected by shortage of teachers in the sense that the Teacher: Pupil Ratio is 1:71 as compared to 1:40 for Morogoro town areas.

1.5 Definition of Terms and Concepts

Internal efficiency Is an education indicator that is measured by the rate of enrollment, dropout, repetition, pass, completion and transition from the point of entry to the point of exit.

External efficiency Is measured by the quality of the product of the education system and its usefulness to the society (Chiuri and Kiumi (2005).

Performance According to Hornby, (2000) is an action or achievement, considered in relation to how successful it is. For purpose of this study, performance is referred to as the level of pupils' achievement in the Standard Seven's examinations and the pass rates they obtained.

Remote areas According Hornby, (2000) it is an area, house, or village that is a long way from any town or cities'. For the sake of this study, remote areas are those found far away from the headquarters of the regions, districts division and sometimes wards. They are usually subjected to poor transport and other social services such as hospitals and market places.

1.6 Statement of the Problem

The internal efficiency of primary schools in remote settings is lower and likely to have few resources than urban schools. The problem becomes even worse when it comes to allocation of new teachers or deployment, where remotely located schools are disadvantaged. In addition, the study has shown that remotely located schools have more difficulties related to internal efficiency than their urban counterparts. These being related to shortages of resources. The current study intends to investigate the internal efficiency of remote primary schools compared to urban ones.

1.7 The purpose of the Study

The overall purpose of this study is to investigate the internal efficiency of remotely located district schools compared to urban district schools and to identify and account for the differences. More specifically this study aims to

(i) Investigate what the internal efficiency indicators are like in one remote district primary school compared to one urban district school in Morogoro Municipality.

(ii) Investigate why the internal efficiency indicators are the way they have been found.

(iii) Identify challenges posed by differential allocation of teachers and how to resolve them.

1.8 Research Questions

To accomplish the objectives of the study, the under mentioned are the research questions to be answered by the end of the study.

(i) What internal efficiency indicators are like in one of the remote district school and one urban Municipal school in Morogoro?

(ii) How and why the internal efficiency indicators are the way they have been found in the remote and urban Municipal schools in Morogoro Municipal?

(iii) What are the challenges posed by differential allocation of teachers to urban and remote schools and how can they be resolved?

1.9 Significance of the Study

The study is intended to provide a dense description of how remotely located district schools efficiency indicators are influenced compared to urban ones, since the effects of differential allocation of teachers are likely to affect education negatively in rural areas it serves to caution education officials to avoid such effects.

1.10 Organization of the Study

The study is organized into five chapters. The first chapter deals with background of the problem which includes introduction, definition of the terms, statement of the problem, Purpose of the study, objectives of the study, research questions, and significance of the study and organization of the study. Chapter two comprises literature review starting with introduction review of related literature and empirical studies, synthesis and identification of research gaps and an articulation of conceptual framework. The third chapter deals with research methods for data collection and analysis. This chapter include The research design, area of the study, sample of the study population, sampling techniques, types and sources of data, development of instruments, validating the instruments piloting the data collection instruments, data collection procedures and data analysis plan budget for the research time schedule and research ethics. Chapter four contain the findings of the study and discussions, while in chapter five the summary of the study, conclusions and recommendations for policy and for further research are provided.

CHAPTER TWO

2.0 LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Introduction

The chapter review of related literature is presented in this chapter the review provides information of studies and work done covering issues related to the shortage of teachers and its effect on the whole process of the provision of quality education. The health of any nation lies in the spirit and quality of teachers, so it is very vital for each nation to have the very best teachers and keep them there Mulkeen, A. (2006). The teacher is an important person in the teaching and learning process and in curriculum implementation as a whole. Despite this importance of teachers, the cry on their deficit is a common conspicuous feature in many of the education institutions particularly in rural and remote primary schools

2.2 Shortage of Teachers in Developed Countries

Teacher shortage seems to be a serious problem in many of the countries in the world particularly for remotely located primary schools. The posting of teachers to peripheral areas in many of the countries in the world is usually regarded by most teachers as punishment. For this reasons the shortage of teachers for countries such as Sri lanka is of the most frequently mentioned constraints in the provision of quality education. In most areas of Sri lanka periphery located schools, teachers find it hard to accept teaching in remote rural schools. Hence, causing the teachers' shortage in Sri lanka, periphery areas. Data indicates that, the widest Teacher: Pupils Teachers' Ratio (TPR's) was found in the interior mountain areas of Nepal and other interior areas of Sri lanka (Kandasamy and Blaton, 2004. Also, Geeves and

Brendenberg, (2005) highlight that teachers' shortage in the remote rural Combodia was so severe to the extent that the government decided to employ the contract teachers to fill the gap. These teachers made up 9 per cent of the teaching staff in country. Teachers' shortage was also observed impinging the remote rural areas of the United States of America particularly in the State of Alaska based on the UN recommended standard of TPR's 1: 40, there is currently a global shortage of nearly two million teachers (Doney and Wroe 2006).

2.3 Teacher Shortage in Developing Countries

The shortage of teachers is one of the troubling features in the education system in many of African countries. Galabawa and Ndibalema (2004) points out that many of the African countries started to face shortage of money in running the education sector since the 1980s when they started to face the problem of economic crisis. The situation of African countries adjustment to the economic crises had a negative impact in the production of professional experts in different sectors. The study by Sinyolo (2008) reveals that four of the six countries surveyed had a serious shortage of qualified teachers at both primary and secondary levels. They had failed to significantly increase the numbers of professionally trained teachers due to budgetary constraints and agreements reached with international financial institutions. However, the teachers' shortage was more acute in remote rural areas. This abrupt education economic budgetary change imposed problems on the production of teachers, hence resulted to the teachers' shortage.

On the other hand the insight on the teachers' shortage is discussed in the perceptions of urban areas and remote rural areas variations within a single country. On this

focus, different studies indicate that the urban areas were more favoured than the other. The reviewed literature revealed that the remote rural teachers shortage is intensified by teachers abhor in accepting the remote rural postings. Akyeapong and Lwin (2002) observed that over 80 per cent of the teachers preferred more to teach in urban schools than it was for remote rural ones. The teachers' shortage in developing countries can be assessed in two contexts, the context of one country to another and the urban and remote rural context.

In the context of one country and another, one may find that there are great variations in the degree of the teachers' shortage whereby some countries had a severer teachers' shortage than others. A good example is in the case of Chad and Mauritius where studies indicate that the former had a higher teachers' shortage than the latter. The former had an average of TPR of 1:71 as average TPR's while the latter had TPR of 1:26, Sedel (2005) in the study carried out in Malawi, Mozambique, Lesotho, Uganda and Tanzania; teachers are very reluctant to accept the remote postings. The study found out that in remote rural there were enormous variations in the numbers of teachers deployed to schools with similar pupil enrolments in urban areas in Africa. As it was found in the data collected in Mozambique, where Mulkeen (2005) found out that in 2004 in Zambezia region there were 630,622 pupils with 3929 qualified teachers making a Teacher Pupils Ratio of 1:162. However in the Maputo Cidade province the situation was found more favourable as there were 164,388 pupils with 2,782 which made TPR's of 1:59. The average national Teacher: Pupils Ratio in Mozambique was 1:121 with 3,071,564 pupils and 25,348 qualified teachers.

Teacher: pupil Ratios range from 1:26 in Mauritius to 1:71 in Chad (Sedel, 2003). However the fact is that the variation in the Teacher: Pupils Ratio within countries is even greater than between countries. The picture reveals rural-urban differentials as it was found in the study conducted by Mulkeen, (2005) in Lesotho had 76 per cent of qualified teachers in urban areas as compared to only 49 per cent in remote areas.Maputo had 92 per cent qualified teachers in urban schools as compared to 42 per cent of them in Manica. The poor deployment of teachers in remote rural schools made the Teacher: Pupils Ratio to be worse as well. The collected data indicates that Maputo had 1:59 as compared to 1:126 of the Manica remote rural. Malawi had 1:44 in urban areas and 1:139 in the remote zones of Kalulu.

In the case of Tanzania, Dar es Salaam had 1:53 while the remote areas of Kigoma had 1:74. In general it can be suggested that learners are abundant but much less abundant are good and reliable teachers, specifically in remote rural areas Onenham (2005). From this observation one can conclude that although all countries are have teacher shortages, in real sense it is only the remote rural areas which are affected. Table 2 vividly highlights on the situation in question in Malawi. The remote areas were found having wider TPR'S than the urban ones.

Table 2.1: School Data for Six Selected Interior Zones in Malawi

Name of zone	Comment	Schools	Pupils	Teachers	PTR
Ching'ombe	Near Lilongwe	15	15,387	355	1:43
Songani	Near zomba	21	18,574	321	1:58
Chikala	Near zomba	16	13,900	175	1:79
St Pauls,Zomba	Interior	6	3,955	28	1:141
Kalulu, Nsanje	Interior	8	5,956	43	1:139
Chilipa, Magochi	Interior	22	11,910	102	1:117

Key: The shaded part of the table is for remote locations

Source: **Mulkeen, (2005:9)**

The inevitable fact is that teachers, as other people tend to concentrate in attractive environments that are provided with a variety of important social services and infrastructures. Different studies found a number of rational reasons why teachers prefer town postings to interior posting. One of the concerns is about the poor working conditions of the rural and remote areas. These include substandard accommodation, poor school resources, poor access to leisure activities, poor health services, and fewer opportunities for professional advancement and poor transport facilities for the sake of fetching their entitlements from the district and regional headquarters (Akyeapong and Stephene, 2002).

2.4 Teachers Shortage in Tanzania

In Tanzania, improving the quality of education is a well thought-out primary goal towards Universal Primary Education (UPE) Although policy makers realize the central role teachers play in achieving this, they fail to make viable policies, which may ensure that a sufficient number of teachers are produced and deployed equally well in all areas of the country.

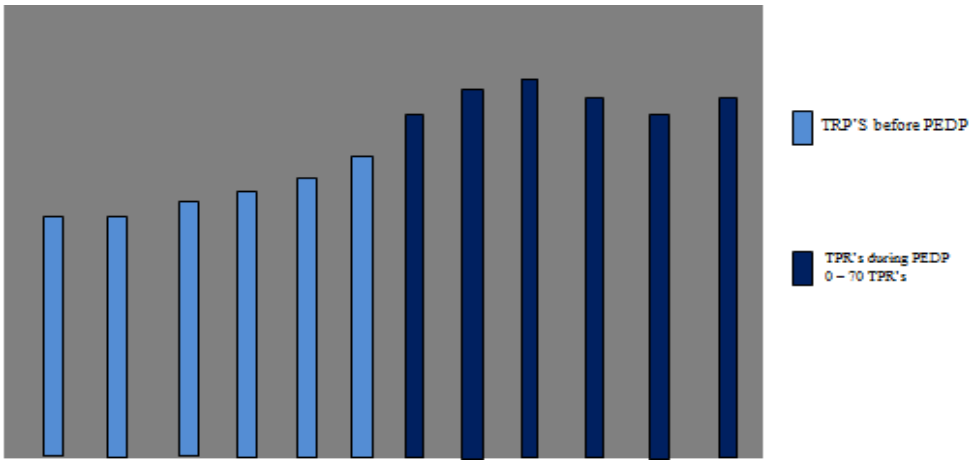

Figure 2.1: The Trend of Teacher: Pupils Ratio Before and During PEDP Implementation (1996-2007).

Source: BEST 2007

For this reason the remote areas seem to be subjected to permanent teachers' shortage. The Primary Education Development Plan (PEDP) has brought a significant increase in pupils' enrollment, classroom construction, funding and recruitment of teachers, nothing unique and solemn has been done to improve the Teacher Pupil Ratio in the remote rural area. The figure below indicates the state of Teacher: Pupil Ratio as it was before and during PEDP implementation. The figure covers the period of twelve years commencing 1996 to 2007.

Figure 2.1 summarizes the reviewed data from on the trend of TPR'S six years before PEDP implementation and six years during PEDP implementation. Generally, the following inferences were made. TPR's were narrower before PEDP implementation than it was with PEDP implementation. This can be interpreted that much effort was put in raising the pupils' enrollment rates and less effort was made in producing, deploying and retaining teachers to cope with the increased pupils 'enrollment. Hence, teachers' shortage was an inevitable end in the country. Galabawa (2004) argues that the shortage is still a serious problem in Tanzania, much as the government introduced the PEDP (2002 – 2006) to rescue the situation in her primary schools.

2.5 Conceptual Framework

Conceptual framework is an illustration, either graphically or narrative form of the main components of the study. It entails the main variables and their hypothesized relationship among or between them Punch, (2000). It simplifies the research proposal preparation task as it gives the general focus of the study.

For the purpose of this study, the conceptual frame work model developed by Omari, (2006) modified and then applied. Initially, Omari's model was developed for the use in analyzing the variables that contribute to effectiveness of a school system. It covers three dimensions, the predicator variables, mediating variables and target variables. The predicator variables are utilized in finding out the values of the target variable. They are analogous to the independent variable, while the targeted variable the values of which are influenced by the other variables. They are similar to dependant variables. Mediating variables indicate how effects will occur by assessing the relationship between the two parameters.

For the purpose of this study, the predicator variable is composed of Teacher: Pupil Ratio which is considered to be a crucial ingredient in facilitating the learning and teaching process. As per ETP (1995) and Negel (2003) wherever quality is concerned, teachers should not be left out. Compared to other resources required in the teaching and learning process, teachers should be given the first priority if quality education is to be achieved. They are the most critical resources, therefore they should be quantitatively and qualitatively sufficiently produced and deployed hypothesized relationship among or between them (Punch, 2000). It simplifies the research proposal preparation task as it gives the general focus of the study. Initially, Omari's model was developed for the use in analyzing the variables that contribute to the effectiveness of a school system. The conceptualization of the model is that, for the remote rural primary schools internal efficiency to be achieved there should be sufficient number of both female and male qualified teachers. The model suggests that availability of teachers requires favorable working conditions such as books and furniture. The mediating variables play an important role in ensuring that the

predicator variables and the target variables match each other in a positive direction. They are responsible in ensuring that a sufficient number of teachers are available and to a suitable working environment is prepared for them. The dependant variables suggest that the required Teacher: Pupils Ratio (1: 40).

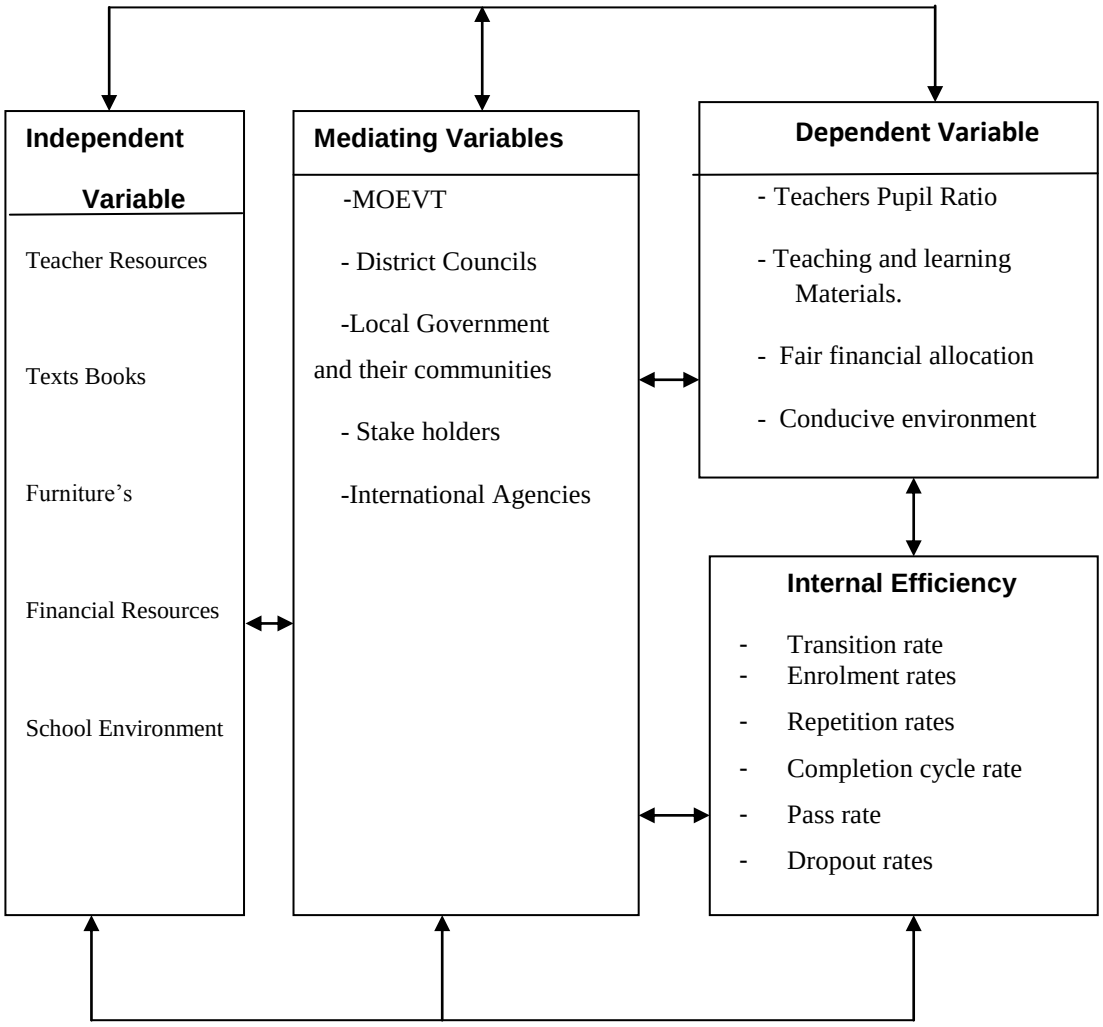

Figure 2.2: Conceptual Framework for the Teachers' Shortage in Primary Schools on Internal Efficiency of Remote and Urban District Schools.

Source: Adapted from Omari, (2006:35)

CHAPTER THREE

3.0 RESEARCH METHODS

3.1 Introduction

This chapter entails description of research methods which were used in this study. They comprise research approach, research design, geographical setting of the study and population of the study, sampling techniques, development and validation of research instruments, data analysis plan, schedule of activities, budget and summary.

3.2 The Design

Research design is defined by Mouton (1996) as a set of guidelines and instruction to be followed in addressing the research problem. Bless and Higson – Smith (2000) provide a closely related definition by referring to it as the set of procedures that guide the researcher in the process of verifying a particular hypothesis and excluding all other possible hypotheses or explanations. For the purpose of this study, a case study of two designated districts one urban and the other rural were selected to be used for data collection and analysis so as to help the researcher to be able to describe the outcome of the research in the two designated primary schools regarding the internal efficiency in the designated remote and urban districts in Morogoro region from a comparative perspective. The case study design was selected because it is suitable for collecting information for an in depth analysis and description. There are mainly two research approaches, quantitative and qualitative paradigms (Opie, 2007). This study employed research attributes from both quantitative and qualitative paradigms complementing each other. Parallel to this, Borg and Gall (1989) contend that, in many cases the combination of the two approaches is superior to either one or the other. For purposes of this study the qualitative approach was more dominant

than the quantitative one, because the researcher wanted to collect an in–depth information on individuals' opinions, views and feelings on the effects of differential allocation of human resources and the resultant teacher shortages in some of the primary schools, especially in the remote areas of the designated districts primary schools compared with the ones in the Municipal setting in Morogoro.

3.3 The Population

According to Opie (2007) a population is the entire cohort of subjects that a researcher is interested in. It is in this population, the researcher drew the sample for the study.The population comprised primary school pupils, teachers, head teachers (HTs), Ward Education Coordinators (WEC) and District Education Officers (DEOs) of the two designated districts.

District Education Officers are generally in charge of implementing education at the district level. One of their responsibilities is to ensure that the primary schools are provided with a sufficient number of teachers in all primary schools in the District. They are also required to ensure that there is effective curriculum implementation in their areas of jurisdiction. For the purpose of this study two District Education Officers were involved in the study for Morogoro and Mvomero districts. Ward Education Coordinators are responsible for the smooth running of the schools within their wards where they are in charge. One of their responsibilities is to ensure that an adequate number of the teaching staff is available in schools so as to maintain effective teaching and learning. For the purpose of this study eight Ward Education Coordinators were used.

The head teachers of four schools are to be selected. The head teachers' responsibilities are to make sure that teachers teach and pupils learn effectively so as to achieve the educational goals and objectives. They are educational leaders, who are the implementers of government policies, circulars and regulations in the process of education provision at the school level.

All teachers in the selected schools will be involved as they will be the ones determining the TPR. Teachers are intentionally involved because they directly facilitate the process of teaching and learning. They are directly affected by the insufficient number of teachers in their working stations so it is important to get their views on the problem in question**.**

All pupils took part in the study as they were the ones who determined the TPR. But only Standard VII pupils' examinations are taken into account because they are the ones, who are generally evaluated nationally. The pupils were involved because they were the ones directly influenced by inadequate or adequate number of teachers.

The two areas of research were purposefully selected because they have many primary schools, whose TPR's positively or negatively deviate from the norm or the average of 1:51 TPR's, according Morogoro Regional Education Officer (REO) Report in 2007. The TPR's for primary schools according to Government regulations is 1:40 (BEST 2006). The two designated districts are Morogoro municipality; comprising the urban area and the peripheral area and Mvomero urban and remotely located schools.

3.4 Sampling and Sampling Techniques

The sample represents the actual characteristics of the whole population involved in the study (Cohen et al, 2000). It is normally difficult for the researcher to reach and study the whole population within the available time due to time and resources constraints. As such the researcher selected a sample of the population to represent the whole population within the designated districts. Sampling technique is a procedure to be used to select units, areas, people, places or things to be included in the sample for the study (Kombo and Tromp, 2006). It is a process of selecting a subgroup from a larger group by using an appropriate strategy on basis of number of teachers but smaller number of pupils.

With respect to the sample size, six categories of entities were involved in the study namely, District Education Officers (DEOs) who were selected by virtue of their posts because in any district there can be only one District Education Officier. Their responsibilities are to ensure that the primary schools are provided with a sufficient number of teachers. They are also accountable for, Ward Education Coordinators (WECs) who were also selected by virture of their posts because they accommodated the primary schools which were selected to be in the sample. Similarly, head teachers were, selected by virtue of their posts because there can be only one head of a primary school at any one time and 196 pupils from standards V, VI and VII of selected schools to participate in the sample. The schools were selected on the advice of WEC of the two districts Mvomero and Morogoro Municipality. As far as the schools in the periphery and remote areas, the WEC suggested the names of the schools located in furthest locations. In Urban areas WEC proposed the schools with

most teachers but not too many pupils in both Urban location a proposal, which was heeded.

Table 3. 1: Composition of Sample Size

Category	Sample
DEOs (Morogoro Municipality and Mvomero District)	2
WECs (Two from Morogoro Municipality and two others from Mvomero District wards)	4
HTs (Two from each Morogoro Municipality schools and two others from Mvomero District Schools)	4
Teachers (five from each Morogoro Municipal and Mvomero District Schools). Teachers were selected through stratified sampling in which sex was also considered.	20
All standards v,vi and vii pupils	196
Four Primary schools were selected into the sample purposively	4
Pupils results (STD vii Final examination of four schools two from Morogoro Municipality (one in the peripherary and one in urban centre) and two others from Mvomero District (one from the remote areas and the other from urban areas).	160 (candidates)
Total Sample	390

Source: Field Data as Compiled by the Researcher, (2012)

3.5 Research Instruments

For the purpose of this study, focused group discussions, semi-structured interviews, questionnaires and reviews of unpublished documents were used for data collection.

3.5.1 Focused Group Discussions (FGDs) for Ward Education Coordinators

FGDs take place when a researcher works with several people simultaneously, rather than just one. Kombo, D.K and Tromp, D.A. (2007) argue that a focused group

should be composed of about six to seven participants, who share the same characteristics relating to the study. For the purpose of this study, the FGDs was used in the case of four WECs whose schools participated in the study. This strategy was selected because it provided an opportunity for the participants to be able to give their own information on the basis of their own experiences, beliefs and perceptions on a defined area of familiarity and interest simultaneously in a group rather than individually.

3.5.2 Semi-Structured Interviews

Semi-Structured Interview schedules comprise sets of questions administered through verbal communication in a face to face relationship between the researcher and the respondents. Typically, the interviewer followed a paper-based interview guide. Since semi-structured interviews containing open-ended questions and discussions may diverge from the interview guide, it is generally best to tape-record interviews and later transcribe for analysis. The Semi-structured interview schedule was used to obtain information from various respondents such as District Education Officers (DEOs) and Ward Education Coordinators (WECs). This schedule was selected because it provided a greater chance and freedom for the researcher and interviewee's to generate sufficient and in-depth data.

3.5.3 Questionnaires

Questionnaires are instruments containing a number of questions which participants have to complete themselves either by ticking in boxes or provide written answers/ information. The method is economical, respondents from distant locations can be reached, and the questions are standardized, anonymity can be assured and questions

can be written for specific purpose (Opie, 2007). In this research two types of questions which were prepared, open and closed ended questions. The open ended questions were 19 while closed ended ones were 39. The open ended questions were mostly used to allow respondents to freely respond to the questions the way they wished thus generating in-depth data for the study.

3.5.4 Unpublished Documentary Reviews

This strategy was applied because it enabled the researcher to collect information from the Government official documents. Unpublished documents, which included National Examination Council of Tanzania results for Standard Seven final examinations, Primary School Statistical forms (TSM1and TSM2) for the pupils continous assessment, inspectors' reports and the pupils' attendance registers. Through these forms, examination performances, pupils attendance and other valued information from school inspectors were obtained and used. The researcher traced the performance in the four years back since 2011 back 2008 in all the sampled schools. The study involved all standard Seven leavers from the schools located in the remote and in the urban areas.

3.6 Validity and Reliability Concerns

Validity refers to the degree to which an instrument, a test or a research tool actually measures what is supposed to measure while reliability entails the extent to which a test, an instrument or a tool gives consistent results across a range of settings and if used by a range of researchers (Wellington, 2000). To ensure validity and reliability of the research instruments for this study, the researcher first shared the instruments with peer masters, students and with the supervisor. Next the researcher piloted the

instruments to collect data from primary school teachers and pupils, so as to test their validity and reliability. Satisfactory results together with the supervisor's approval to go ahead to administer the instruments. Finally, the information was tested to observe its validity and reliability.

3.7 Data Processing, Analysis and Interpretation

Data analysis is a process that entails editing, coding, classification and tabulation of collected data. It involves organizing what the researcher has seen, heard and read so as to make sense of the collected data. Data analysis allowed the researcher to categorize, synthesize, search for patterns and interpret the data that were collected. Qualitative information were recorded from the interviews and focused group discussion reports based on verbatim, while the quantitative information obtained from data collected from questionnaires in numerical fingures, were analyzed and interpreted through quantitative procedures and reported in tables, fingures and charts.

3.8 Summary

This chapter has covered important elements of the study methodology. The research design which is a case study of four primary schools from two districts two urban and the other two from rural and remote location. Both quantitative and qualitative approaches were adopted to get information on the effect of differential human resources allocation on internal efficiency parameters of the sample schools. Different research instruments were used for data collection including interviews, focused group discussions, documentary reviews and questionnaires. The study

sample involved 386 participants of whom only 300 (78 per cent) of them participated together with the final Standard Seven examination results for 160 candidates. The study faced a shortfall of 86 participants (22 per cent) caused by small number of pupils found in some of the sampled schools, particularly those in the remote rural areas who did not participate effectively due to geographical location.

CHAPTER FOUR

4.0 THE FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the findings of the study. The first objective of the study was to identify internal efficiency indicators in one school in Mvomero district compared to one school in Morogoro Municipality. The comparison is between one school located at the urban centre with another in the periphery of the urban district to be the basis for differences between the schools internal efficiency indicators. Secondly to investigate reasons for the kind of internal efficiency indicators indentified. Thirdly, to identify challenges posed by differential allocation of teachers and how to resolve them.

4.2 The Internal Efficiency Indicators

4.2.1 Teacher Pupils Ratio

The PTR for one remote district, Mvomero compared to an urban district in Morogoro municipality and urban school in the urban part of the remotely located district compared to most peripherally located school in the remotely located district school are summarized in Table 4.1 below.

Table 4.1: Enrolment Primary of Pupils against Availabile Teachers as per Pupils

District	No. of Pupils	No. of Teachers	TPR
Mvomero District	48044	830	1:58
Morogoro Municipality	84515	1,767	1:48
Total	132559	2,597	1:51

Source: District Education Officers in Mvomero and Morogoro Districts annual report

The data in Table 4.1 indicate that, there is a total of 132,559 pupils enrolled in both districts and the teacher - pupils ratio is 1:51. The findings in Table 4.1 imply that schools in Mvomero district had larger class size (1:58) compared to their counterparts in Morogoro municipality (1:48); therefore 580 teachers were found to be needed cover to the shortage.

Table 4. 2: Teachers' Attitude towards Working in Remote Rural Schools

Mvomero remote schools		Morogoro urban schools	
"Yes"Responses	**"No"**Responses	**"Yes"**Responses	**"Yes"**Responses
Total responses (33)		Total responses (48)	
4(12%)	29(88%)	36(76%)	12(24%)

Source: Compiled by the Researcher from Respondents

The data summarized in Table 4.2 indicate that a great number of teachers, who were found in Mvomero schools disliked working in those areas. For example, teachers response were that 12 per cent of the teachers in Mvomero remotely located schools preferred working in the remote schools. Responses from these teachers show that they do not like to be transferred to other working stations because it was their home area and so they wanted to be close to their families. The other remaining respondents reported that they were about to retire and so they did not want any transfer. Most of the respondents 88 per cent in Mvomero schools reported that they disliked working in their working stations. It was found out that most of them preferred to be transferred to other schools so as to change their poor working environment as illustrated in Table 4.2.

In Morogoro Municipality schools, the situation was quite different as most of the teachers (76 per cent) reported to be comfortable working in their respective schools due to the fact that, their working stations were close to important social services such as hospitals, banks, and markets. For teachers in Morogoro urban schools the situation was the opposite. Most of the respondents reported not to prefer a transfer to other working stations as they feared being transferred far away from the important social services such as transport, markets and hospitals, which are currently easily accessible by being close to their present stations.

4.3 Availability of Important Social Services

Table 4. 3: The responses on Availability of Important Social Services

	Mvomero District.						Morogoro Municipality					
	Number of respondents33						Number of respondents 48					
	AF	RF	AF	RF	AF	RF	AF	RF	AF	RF	AF	RF
	YES		NO		TOTAL		YES		NO		TOTAL	
Social services												
Electricity	27	82	6	18	33	100	18	2	30	98	48	100
Transportation	28	85	5	15	33	100	23	48	25	52	48	100
Market	24	73	9	27	33	100	16	33	32	67	48	100
Hospital	12	36	21	64	33	100	1	2	47	98	48	100
Tap Water	21	64	12	36	33	100	18	38	30	62	48	100
Phone Communication	19	58	14	42	33	100	2	4	46	54	48	100
Upgrading Centres	13	39	20	61	33	100	5	10	43	90	48	100
Entertainment	24	73	9	27	33	100	18	38	30	62	48	100

AF: Absolute Frequency **RF**: Relative Frequency.

Source: Compiled From Field Study- (2012)

The data in Table 4.3 indicates that most responses indicate that teachers prefer to have electricity (82 per cent), transport (85 per cent), market (73 per cent) and hospital (36 per cent) as their main priorities in the selected social services. The respondents mentioned that the absence of electricity hinders them from using electronic devices like radio, televisions, computers, internet networks, cellular phones and many others in contemporary life. One respondent is quoted lamenting:

> *We feel as if we are separated from the rest of the world as an isolated island! I am not enjoying the world as other people from the urban areas do. No electricity, no transport services when the teacher falls sick it becomes a very great issue as the hospital is very far from the working station.*
> Source: (A primary school teacher).

In Morogoro urban schools the availability of hospital services, cellular phone network, social entertainments and market services were found to be in their favour.

4.4 Means of Transport and Relevant Costs

Morogoro urban primary schools were found to have more opportunities for good transport system than its counterparts (Table 4.3).

Table 4.4: Means of Transport From Home to School in Both Mvomero District and Morogoro Municipality

Mvomero District							Morogoro Municipality						
	Means of Transport							Means of Transport					
Total Respondents	Bus		M/cycle		On foot		Total Respondents	Bus		M/cycle		On foot	
	AF	RF	AF	RF	AF	RF		AF	RF	AF	RF	AF	RF
33	33	0	33	70	33	30	**48**	48	33	48	0	48	67

RF: Relative Frequency. **AF:** Absolute Frequency.
Source: **Compiled by the researcher from respondents**

Most respondents in Mvomero and Morogoro urban areas respondents reported that they used the transport that was of low quality, embarrassing and unreliable. For example, 70 per cent of respondents reported using M/cycle as their major means of transport to district urban centers for official and social matters; including for hospital services, travel together with other goods like sacks of maize and bags of potatoes en route to the market. Transport facilities in the remote schools of Mvomero were reported to be unsafe and degrading to teachers' professional status. One respondent reported to have seen a teacher to have lost life due to motorcycle accident, a case which occurred on June, 2012 when a motorcycle collided with a vehicle, resulting in the teacher being severely injured and later died in hospital. Respondents reported that they are forced to travel by using motorcycles because they do not have alternatives, and when motorcycles are not available, teachers walk. Teachers in Mvomero district incur higher transport costs from their working station to other places they use Lorries. Respondents reported that (24 per cent) of Mvomero district, incur transport costs exceeding Tsh 30,000/= (thirty thousands) per month whereas 18 per cent pay between Tshs 10,000/= to 15,000/=, 18 per cent pay less than Tsh 8,000/= (eight thousand) and 30 per cent are forced to walk as they have no substitute transport.

In Morogoro urban schools no respondents paid more than Tsh 5,000/=. It was reported that most teachers (61 per cent) pay less than Tsh 1,000/= as transport fare from their working stations to district head quarters. So teachers from Mvomero district schools pay more money for transport from their meagre salaries which discourage many from going to school, hence teachers' shortage.

4.5 Walking Distance

In both districts settings teachers reported to walk on foot as their means of transport. Those from Mvomero primary schools walked longer distances compared to their counterparts in Morogoro Municipality. Table 4.5 vividly portrays the situation.

Table 4.5: Walking Distance Covered from the Respective Schools to the Lorry/ Bus Terminal per Month

A. Distance covered from the working station to the bus stand /motorcycle stand								
Respondents	**Mvomero remote Primary Schools**				**Morogoro Primary Schools**			
		Km 0-10	Km 11-14	Km 14+		Km 0-5	Km 6-8	Km 8+
		Total respondents 33				Total respondents 48		
Absolute frequency	On foot	20	6	7	On foot	35	3	10
Relative frequency		61%	19%	20%		74%	6%	20%

Source: Field study, 2012

The information provided in Table 4.5 indicates that 80% of the respondents in Mvomero remotely located areas walk from their homes for 14 kilometers before they can access means of transport, commonly a motorcycle to the school. In Morogoro municipal schools corresponding respondents cover 8 kilometers walking before boarding commuter buses to the municipal head quarters. Too much walking on foot consumes much of the teachers 'energy and time to the extent that teachers either reluctantly accept the remote rural postings or abandon them. This factor was reported to contribute to the teachers 'shortages in

remote schools, poor morale in the teaching, long distance walked consume a lot of time, which could be used for teaching. The situation was different from their counterparts in Morogoro municipal schools.

Table 4.6: Source of Accommodation and Conditions of the Buildings

Location of schools	School owned houses		Private owned houses	
	Absolute frequency	Relative frequency	Absolute frequency	Relative frequency
Remote and peripheral area (Total respondents 33)	22	67%	11	33%
Morogoro Municipal areas (Total respondents 48)	11	23%	37	77%

Source: Compiled from responses

Data in Table 4.6 show that 67 per cent of the respondents in Mvomero district schools and periphery of areas of Morogoro district were accommodated in houses owned by the schools, while 33 per cent were owned by private owners. The study found that the condition of the houses which belonged to schools which were meant to motivate teachers to remain in the remote and peripheral schools were unfortunately poor-poorly roofed and poorly ventilated, had Poor windows, low quality walls, small partitioned rooms with poorly constructed pit latrines, bathrooms and kitchens. Villagers built these houses, latrines and kitchens to reflect and resemble their local housing conditions. Teachers were forced, as it were, to accept the accommodation in those locations as they lacked alternatives. If the villagers had good houses for themselves, teachers would depend on them to hire their accommodation. However, the villagers" houses in Mvomero areas are very poor and not suitable for the accommodation of teachers.

4.6 Accommodation Costs and Availability

Most of the teachers from Mvomero schools lamented that upon their arrival at the district headquarter they were forced to find a guest house for their accommodation pending settlement of official logistics for which they paid not less than Tsh.30,000/= . This implies that for transport and guesthouse costs, these teachers pay approximately Tsh.60,000/= per month. Taking the case of a newly employed Grade A teacher whose monthly salary is Tsh260,000/=, these costs made up to 20 per cent of the teacher's salary. They pointed out that the expenses are neither refundable nor recognized by their employers as addional expenses. In Morogoro Municipality schools are good as are favorable in buildings and in terms of accessibility. One respondent potrayed worse situations from the office staff, who treated them Most of the teachers did not pay for accommodation costs and paid little money for transport costs. One respondent potrayed worse situations from the office staff, who treated them negatively or unfriendly by the persons in charge as he was quoted saying, *"In general the accommodation in Mvomero district and peripheral schools of the Municipality seemed to degrade the status of the teaching profession".*

4.7 Period of Stay at the Working Station

Table 4.7: presents the general information regarding the duration teachers stay in particular station.

Table 4.7: Duration Teachers Stay at the Working Station

Years of stay at the duty station	Mvomero remote areas		Morogoro urban areas		Total Relative freguency
	Number of Respondents-. 33		Number of Respondents 48		
	Absolute frequency	Relative frequency (%)	Absolute frequency	Relative frequency (%)	
0-5 years	6	18.2	12	24.0	42.2
6 – 10	5	15.2	15	33.3	48.5
11-15	9	27.2	7	14.6	41.8
16-20	5	15.2	12	25.0	40.2
21+	8	24.2	2	4.1	28.3
Total	**133**	**100.0**	**48**	**100.0**	**100.0**

Source: Compiled by the researcher from the responses

From Table 4.7, the duration which teachers spent at the same working station without a transfer varies from 0-5 years to over 21 years. It is observed that this problem dominated both at Mvomero and Morogoro Municipal schools. For example, the data indicates that 18.2 per cent of teachers in remote rural schools and 28.3 per cent of teachers in Mvomero and Morogoro Municipality primary schools had spent more than 20 years in the same working station. The findings show that in both areas, teachers spend a long time at the same working station without transfer.

4.8 Perceptions of Ward Education Coordinators on the Causes of Teacher Shortages

Focused group discussion was conducted with a group of four Ward Education Coordinators (WECs). The participants were two from each Mvomero and Morogoro Municipal. WECs reported that teachers' postings differed from one school to another in the peripheral schools, the problem of shortage of teachers is common in the remotely and peripherally located schools in many Wards in Mvomero District.

Urban schools portrayed a different situation whereby there were more than enough teachers. For example, one of the respondents from Morogoro Municipality reported that Bungu primary school had more teachers than the standard required. The school had 376 pupils with 18 teachers with PTR's of 1: 21.When asked to discuss about different factors contributing to the teachers' shortage, the commonest reported reason for shortage of teachers was: "Poor postings of teachers at the district level, unjustified teachers transfer and the dislike of teachers to be posted in remote rural areas" (A WEC discussant). When discussing the poor postings of teachers at the district level there were uneven allocation of primary school teachers, the discussants argued that, whenever the District Education Officers was allocated the District share of teachers for the schools, they did it irrationally. The report read: "the deployment strategy did not consider the demands for teachers in the periphery or remotely located schools". In most cases they posted them in line with the teachers' wishes rather than the real schools demand. A WEC respondent commented on the most commonly mentioned reasons:

The postings of teachers at the district level is very biased to the extent that the Regional(sic) Education Officer (REO) saw (sic) that it was good for this task to be conducted at the regional level. For this reason REO did the distribution of teacher (sic) in all districts instead of being done by District Education Officers. Apart from the REO's strategy I was not allocated any teacher in my ward despite that all schools in my ward had shortages of teachers (One of the WEC group discussant).

The discussants argued that the hardships of life in the peripheral and remote areas projected a negative image to teachers, who were posted in these areas.

One respondent had this to say:

Last year I was given two newly employed teachers who were located at Digalama primary school. However, both of them reported at the school. After few (sic) days they asked for permission to go home to take their belonging (sic) for their survival (sic) but they never returned to the school thus sustaining the shortage of teachers (A WEC discussant).

The peripheral and remote environments do not seem to provide the services which teachers' desire hence mobility to district headquarters to fetch necessities of life tend to attract teachers to live and enjoy modern and civilized life as per another discussant who intercepted abruptly and roughly.

It is true who can post his close relative to Homboza, Hoza or Digalama places where you need to consume (sic) many hours descending, ascending again and again on foot before getting in or out of the working stations. There you find neither a vehicle for transportation nor a market, electricity or even a place to recharge a cellular phone. When it is out of energy it becomes any issue (A WEC discussant).

When the teachers asked WEC if differential allocation of primary school teachers contributed to the poor performance of pupils, the discussants responded by saying:
Most of the classes are left with no teachers to facilitate the teaching and learning process and sometimes teachers are forced to send the pupils outside the class so as to do other manual activities to keep them busy when class had no teachers' result, hence classes complete the academic year without covering the curriculum.

In a nutshell the teacher in classroom is the human resource that brings about qualitative changes in the teaching and learning process. Thus few educational

authorities would disagree that, good schools have the best-trained and most experienced teachers. These statements highlight clearly the importance of teachers in facilitating the process of teaching and learning in the classroom situation so as to bring about the desired quality education to learners. The findings show that the TPR's of Mvomero district was lower compared to its counterparts Morogoro Municipality. The findings show that Mvomero district which is remotely located has a teacher pupils ratio of 1:58 compared to its counterparts of 1:48 Morogoro Municipality. The wider teacher-pupils ratio could be interpreted that there was a shortage of teachers, who were needed in most schools in the remote schools, 580 teachers were needed to cover the deficit. Moreover, the shortage of teachers the remote schools was partly the result of some teachers attending upgrading programmes all over the country. While teachers' professional development is important; there is the problem that when these teachers complete their programmes they never go back to their original working posts, hence making the ratio worse. The findings show that the schools located in Morogoro Municipality areas were favoured by having sufficient number of teachers.

Generally, it was found that while PEDP had done a lot to increase pupils enrolment rate, classrooms and text books (PEDP, 2003; NSGRP,2005) but little had done to ensure an increase in the number of required teachers, their deployment and retention. The TPR which is seen in Mvomero located schools (1:58) exert great threat to the quality of education as PEDP (2005) suggested. So long as the TPR's of the remote located schools were poor, the impact was likely to threaten the quality of education as Malekela and Lugal (1993) commented: *"For us the poor the end of education is near".*

4.9 Dropout Rate

The findings in table 4.8 show that dropping out of school dominated over all the cohorts with only a few of exceptions particularly Standards Two, Five and Seven in the year 2005, 2008 and 2009 respectively.

Table 4.8: Dropout Rate for Mvomero District Schools

	2004	2005	2006	2007	2008	2009	2010
I	438	663	718	598	477	453	452
II	431	438 (0)	653	706	591	474	442
III	401	427	434 (-4)	644	711	592	469
IV	571	397	423	428 (-6)	663	707	589
V	363	559	396	426	429 (+1)	658	696
VI	237	358	557	393	414	436 (+7)	658
VII	454	231	355	547	390	396	428 (-8)

Source: Enrolment Register Book of District Education Officer in Mvomero

The information in Table 4.8 indicates that for the class cohort that started class one in 2004 with 438 pupils encountered a series of drop outs. The cohort had a smooth move from Standard One to Standard Two but in 2006 when it entered Standard Three things started to change when four pupils dropped out followed by 6 dropouts in 2007. In 2008 the trend experienced a drop in of one pupil as well as seven drop in pupils in 2009. In standard seven in 2010 dropouts were eight. The dropouts can be seen in various standards in Mvomero district schools in above Table. The total dropouts were 18 compared to 8 drop ins who were transfers from others schools.

Table 4.9: Dropout Rate for Morogoro Municipal Schools

	2004	2005	2006	2007	2008	2009	2010
I	713	780	815	717	650	596	640
II	614	712(-1)	770	804	706	641	588
III	550	602	706(-6)	777	815	717	641
IV	547	550	608	698(-8)	767	815	710
V	412	535	534	614	712(14)	770	803
VI	412	396	538	541	610	712(0)	768
VII	418	379	398	536	527	598	721(9)

Source: Enrolment Register Book of Municipal Education Officer in Morogoro.

The information in Table 4.9 shows that the recorded dropout rates in Morogoro Municipality schools reveal the same trend as the case in Mvomero remotely located schools. For example, the cohort which started class one in 2004 with 713 pupils faced a series of dropouts in all standards. In Standard Two in the year 2005 dropouts were 1 pupil, in Standard Three in 2006 they were 6, in Standard Four in 2007 they were 8, in Standard five in 2008 the trend experienced the drop in of 14 pupils, in Standard Six in 2009 there were no dropout while in 2010 there were 9 drop in. The total dropouts were 15 while there were 23 drop in ending up with a net dropout of 15.

The findings show that dropout in schools dominates both in Mvomero district (18 dropouts) and Morogoro Municipal Schools (15 dropouts). The information in table 4.9 and 4.10, indicate that the trend of dropouts is an indicator of the weakness in the internal efficiency of primary schools education.

In case of dropout rate, the findings show that, generally dropout in schools was higher in Mvomero remotely located schools compared to its counterpart. Respondents from Mvomero remotely located areas provided several reasons as major factors for pupils dropouts of school. The reasons included an irrelevant curriculum, dull and boring lessons, poor families income, unfair punishment, pregnancy and early marriages, ignorance on the importance of education; particularly for participants from Mvomero remotely located areas. Roaming in the streets looking for money and truancy were found to be a problem facing mostly the children who, were living in Morogoro Municipality, who belonged to the families with poor social economic background. This finding was in line with the findings obtained in the study conducted by WB (1999) where it was found that children from poor background tend to leave school earlier than those from the better off families. Therefore the reasons for dropping out differ from place to place, but the main factor is that the teaching and learning process does not take place to attract the pupils back to school.

Table 4.10: Repetition Rates for 2 Mvomero District Schools

Standard	2004	2005	2006	2007	2008	2009	2010	Average
I	438	663	718	598	477	453	452	
II	431	416 (22)	597(66)	583(135)	572(26)	474(3)	451(2)	
III	401	410(21)	408 (8)	477(120)	506(77)	564(8)	454(20)	
IV	571	375(26)	384(29)	390 (18)	476(1)	468(38)	553(11)	
V	363	399(172)	326(49)	369(15)	364 (26)	333(145)	451(17)	
VI	237	363(0)	399(0)	326(0)	369(0)	364 (0)	333(0)	
VII	454	237	363(0)	399(0)	326(0)	369(0)	364 (0)	12

Source: Enrolment Register Book of District Education Officers in Mvomero

4.10 Repetition Rate

The repetition rate between remotely located district schools compared to urban schools in Morogoro seems to be low compared to its counterpart (Tables 4.10 and 4.11). Findings in the Table 4.10 reveal the repetition rates in the remotely rural schools whereas Table 4.11 for the Morogoro urban schools respectively.

Repetition seems to dominate in all standards except Standard Six and Seven where there were no repeaters at all. The reason given for standard Five having large numbers of repeaters is that many pupils failed the National Standard Four Examinations, which is a prerequisite condition for them to proceed to Standard Five. The class cohort which started Standard One in 2004 with 438 pupils faced several incidences of repetitions starting in Standard Two where there was a slight repetition rate of 22 in 2005, 8 for 2006, 18 for 2007, 26 for 2008 and 0 for 2009 and 2010. The repetition rate average trend is 12 and total repetition rate were 74. The same trend was found in the other class cohorts' trends as seen in the Table 4.10.

Table 4.11: Repetition Rate for 2 Morogoro Municipal Schools

Standard	2004	2005	2006	2007	2008	2009	2010	
I	715	780	815	717	650	596	564	
II	614	677 (38)	664 (116)	619 (196)	624 (93)	511 (139)	527 (69)	
III	550	440 (175)	650 (27)	647 (17)	610 (9)	576 (45)	477 (34)	
IV	547	54 7 (3)	419 (21)	646 (4)	629 (18)	607 (3)	553 (26)	
V	412	398 (149)	409 (138)	415 (4)	634 (12)	629 (0)	437 (170)	
VI	412	412 (0)	398 (0)	409 (0)	415 (0)	634 (0)	629 (0)	
VII	418	412 (0)	412 (0)	398 (0)	409 (0)	415 (0)	634 (0)	14

Source: Enrolment Register Book of Municipal Education Officier in Morogoro

Table 4.11 indicates that in Morogoro Municipal schools, repetition cases affected all cohort class levels except in Standard Six and Seven where there were no repeaters. In these schools, extreme cases were also found in standard five as a large number of pupils failed the National Standard Four Examination. For example, it is reported that the Standard One cohort with 715 pupils in 2004 joined Standard Two with 38 repeaters in 2005, 27 repeaters in 2006, 4 repeaters in 2007, 12 repeaters in 2008, and 0 in 2009 and 2010 respectively. It's repetition rate averaging 14, all amounting 81. From the findings it is observed that the average of the seven years in one cohort in the context of repetition rate between Mvomero schools with an average of 12 and Morogoro urban schools with an average of 14, the implication of these findings show that the average are almost the same.

The findings, it was observed that, in the context of repetition rate there is no significant difference between Mvomero remotely located schools and Morogoro Municipality schools. Higher repetition rate is an indicator of the low internal efficiency as contributes to poor completion rates in the primary schools system. This suggests that the same efforts invested in raising the enrolment rates in the primary schools in the country, should be taken to reduce the repetition rates so as to achieve the desired goal of achieving better education for all, as one of the goal stipulated in the Second Millennium Development Goal.

4.11 Completion Cycle

Data summarized in Tables 4.10 and 4.11 indicate that there was a good completion cycle in both Mvomero district and Morogoro municipal schools. For example, in Mvomero primary schools, the class cohort, which started

Standard One in 2004 had a total number of 438 (100 per cent) pupils but 428 succeeded to reach Standard Seven, hence making a completion schooling cycle of 95 per cent for the cohort. The situation was also not so good with the schools in Morogoro municipality in which out of the cohort of 715 (100 per cent) in Standard One in 2004 only 679 (98 per cent) completed the full primary schooling cycle.

The implication of these findings is that there was no bigger wastage ratio in primary schooling in both Mvomero district (5 per cent) and Morogoro municipality (2 per cent) schools. With regard to this low wastage ratio, it is obvious that the education internal efficiency in terms of completion cycle was somehow good at both Mvomero district and Morogoro municipal schools.

4.11.1 The Effect of Differential Allocation of Primary School Teachers on Internal Efficiency of the Primary School System.

Internal efficiency describes the efficiency of the school to smoothly take through the learners from Standard I up to Standard VII by keeping down repetition, completion cycle, poor examinations performance rates and poor transition rates. It can be measured using indicators like dropout rates, repetition rates, completion cycle, examination performance rates, survival rates and transition rates.

4.12 The Transition Rate from Primary to Secondary Schools

Generally, Table 4.12 presents the state of the pupils' transition rates from primary to secondary education level.

Table 4.12: Transition Rates Between Mvomero District and Morogoro Municipality Schools

Year	Mvomero district Schools						Morogoro Municipality Schools			
	Candidates	Transition Rate		Sec schools	Per cent	candidates	Transition Rate	Per cent	Sec schools	Per cent
	No	No	%	No	%	No	No	%	No	%
2007	357	185	52	185	100	366	297	81	292	98
2008	307	193	63	192	99	369	288	78	280	97
2009	277	190	68	190	100	376	312	82	302	97
2010	282	195	69	195	99	413	356	86	346	97
Total	1,223	763	**62**	757	99	1,524	1253	**82**	1220	97

Source: District Education Officers in Morogoro and Mvomero Districts

The data in this study show that there is a lower transition rate in Mvomero district schools compared to Morogoro Municipality schools. The average transition rate for four years in the Mvomero district schools was 62 per cent compared to 82 per cent in Morogoro Municipality schools caused by several factors such as high rates of dropout.

4.12.1 Performance Rates in Mvomero District and Morogoro Municipality Primary Schools

Data summarized in Table 4.13 display the final Standard Seven Examination pass rates. The results were collected from two Mvomero district primary schools and two from Morogoro Municipal primary schools 2007 to 2010.

Table 4.13: Primary School Leaving Examinations Results Between 2007-2010

YEAR	CN	Mvomero District Schools					Morogoro Municipal Schools			
		Scored Grades					Scored Grades			
		A,B and C		D and F			A,B and C		D and F	
		AF	RF	AF	RF		AF	RF	AF	RF
2007	357	263	74	94	26	366	344	94	22	6
2008	307	193	63	114	37	369	354	96	15	4
2009	277	236	82	50	18	376	365	97	11	3
2010	282	238	75	71	25	413	401	97	12	3
Total	**1,223**	894	74	329	26	1,524	1464	96	60	4
Average Results (A,Band C)	Total Pass rate 74%				**Failure** 26%	Total Pass rate 96%				**Failure** 4%

AF: Absolute Frequency **RF:** Relative Frequency

Source: District Education Officers in Morogoro and Mvomero Districts

The findings show that in Mvomero, the remotely located primary schools had not been getting as good examination results as their counterpart in Morogoro municipal schools. For example 2007 it was found that 74 per cent of the candidates in Mvomero primary schools scored grades A, B and C as compared to 94 per cent of the candidates from Morogoro Municipal schools for the same grades. In Mvomero primary schools many scores were poor as 26 per cent of pupils scored D and F grade contrary in Morogoro Municipal schools scored 4 per cent for the same grades. The performance of the candidates in Mvomero schools in their final Standard Seven Examinations was not as good as their counterpart in Morogoro Municipal schools. Morogoro REO reported that on PSLE indicates that Morogoro Municipality performed better (96 per cent) of the candidates passed the examination by the year 2010 compared to its counterpart 74 per cent.

Completion cycle. The findings show that there was a poor completion cycle in both Mvomero remotely schools and Morogoro Municipal schools. The implications of these findings are that there was a bigger wastage ratio in primary schools in Mvomero remotely located schools than Morogoro Municipality schools. It was obvious that the education internal efficiency in terms of completion cycle was poor in Mvomero remotely located schools compared to its counterpart schools. In the perspective of education economics, one could suggest that there was great wastage of resources allocated for pupils, who dropped out on the way without reaching the desired level and double resource consumption for the pupils, who repeated classes. Therefore, if we are to achieve the desired quality education, steps to increase access to education must be paralleled by an endeavour to improve primary school completion rates. These findings on the low completion rates are in agreement with the findings revealed by Kuleana (1999) and Kumalu (2001) whose studies show that only two thirds of the primary school pupils managed to complete the primary schooling cycle in the country.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the findings, conclusions and recommendations for policy and further research are presented in this chapter.

5.2 Summary

The study investigated the effects of differential teachers allocation on internal efficiencies of respectively remote and urban primary schools in Mvomero district and Morogoro Municipality. The objectives of the study were to investigate the extent to which internal efficiency indicators of one remote and one urban district schools are affected in Morogoro districts by differential allocation of human resources and how and why the internal efficiency indicators are, the way they have been identified in the remote and urban districts schools, what are the challenges posed by differential allocation of teachers to urban and remote schools are and how they can be solved**.**

The study found out that Mvomero district schools had TPR of 1:58 while that of Morogoro Municipal schools was 1:48. The underlying reasons are that teachers are either reluctant to accept their postings in the remotely located schools due to the absence of; or poor availability of important social services, higher transport costs and poor living conditions. These resulted into wide TPR in Mvomero district schools compared to Morogoro Municipal schools. The repetition rates, dropout rates, poor completion cycle, poor examinations pass rate and poor transition rate

indicated that, the remotely located areas internal efficiency is negatively affected in almost all the parameters compared to its counterparts in Morogoro Municipality.

5.3 Conclusion

In view of these research findings on the effects of differential allocation of primary school teachers on internal efficiency of remote and urban district schools, the following conclusions are made.

(i) Wider TPR caused by shortage of the teachers was found to be a common characteristic feature in remote and peripherally located schools compared to those in urban primary schools. Despite the different strategies taken by the Government to improve the quality of education, teachers' shortages seem to be a chronic problem that impedes the provision of quality education.

(ii) In remote rural areas there are factors that impede incoming teachers from being retained, which include inadequate social services like access to hospital services, communication through cell phones, lack of electricity, clean and safe water, markets, education centres for upgrading and entertainment services, unreliable transport facilities. It was found that although education needs to be provided to all in an equitable manner, the remote rural primary schools seem to be deprived of quality education as compared to their counterparts in urban primary schools as discerned in their average quality of pass rates, which is in favour of the Municipal schools.

(iii) The dropout rate data indicate that dropouts in schools are relatively high in both Mvomero district (18 dropouts) and Morogoro Municipal schools (15 dropouts).

(iv) The transition rate from primary schools in Mvomero is moderate 62 per cent compared to its counterpart of 82 per cent due to the unevenly differential allocation of primary school teachers between rural and urban areas in Morogoro Municipal.

(v) Remotely located district schools in Mvomero have poor pass rates of 74 per cent compared to its counterparts of 96 per cent due to the fact that Mvomero remotely located primary schools TPR average of 1:58 is wider than its counterparts of 1:48.

(vi) As far as repetition rates are concerned reports show that remotely located district schools and Municipal schools in Morogoro Municipality do not differ much when the TPR of Mvomero is 1:58 against 1:48 of Morogoro Municipal due to effort done by PEDP during its implementation.

5.4 Recommendations

In the light of the findings, summary and conclusions of the study, the following recommendations are proposed for policy and further research.

5.4.1 Recommendation for Policy

Through decentralization approach, the local government may plan to train their own teachers in the Teachers' colleges by using their own resources to be employed in

the district schools in their locality because those coming from the locality resisted being transferred. The local community may also use different incentives which may act as pulling factors to attract teachers to remain in those peripheral or remote schools.

(i) The annual employment and deployment of teachers should be specific to the areas with shortages so that teachers are encouraged to apply for the advertised post in the specific schools.

(ii) Government should have a good strategy for motivating teachers to accept remote and peripheral posting areas which are accompanied with motivational packages as per Kiswahili proverbs "*Penye udhia penyeza rupia*".(To any hardship provide an incentive.)

5.4.2 Recommendations for Research

It is recommended that further research should be conducted in the following areas.

(i) A study to investigate the impact of teacher shortages on the curriculum implementation in remote rural areas versus urban centres.

(ii) A study to investigate the impact of Primary Education Development Plan (PEDP) especially in rural areas in Tanzania.

REFERENCES

Ary, D., Jacobs, L.C and Razavieh, A (1996), *Introduction to Research in Education (5ed),* New York: Hult Rinehart and Winston, Inc.

Ankyeampong, K. and Stephene,K. (2002). From student Teachers to Newly Qualified Teachers in Ghana: Insights into Becoming a Teacher. *Journal International of Education Development volume no 22, 339-352.*

Bless, C. and Higson – smith, C. (2000). *Fundamentals of Social Research methods. An African Perspective. Third edition. Juta and Co.*

Bogonko, S. N. (1992*). Reflections on Education in East Africa*. Nairobi: Oxford Unversity Press.

Borg, W.R. Gall, M. (1989*). Planning and Economics*. New York: Longman Inc.

Chiuri, L.W. and Kiumi, J. K. (2005). *Planning and Economics of Education.* Nairobi: Pangolin Publishers Ltd.

Doney, M. and Wroe, M. (2006). *Keeping our Promise Delivering Education to All*. Norwich: HM Treasury, DFID.

Galabawa, C. J. and Narman, A. (2004). "End Note Commentary. Education for Micro-Enterprise and Micro-Economy Growth or Poverty Alleviation through Education". In: *Galabawa, J. and Narman, A. (2004) Education Poverty and Inequality: Dar es Salaam, BARRIP a Project, Faculty of Education University of Dar es Salaam, Tanzania pp347-352.*

Galabawa C.J. and Ndibalema, A. (2004). "Poverty Alleviation through Primary Education: What work in Uganda and Taanzania". In Galabawa, J. and Narman, A. (2004). *Education Poverty and Inequality: Dar es Salaam:* BERRIPA Project, Faculty of Education University of Dar es salaam, Tanzania. Pp 275-300.

Geeves, R. and Bredenberg, K. (2005). *Contract Teachers in Cambodia:* Paris, UNESCO

George, V. (2007). Shule ya Msingi Digalama yaachiwa mwalimu mmoja. *Mwananchi Newspaper 30th January, 2007. pp 4.*

*Haule,G.S.M.(1979). A Comparative study in Literacy Achievement Among Standard Seven Rural and Urban Pupils.*Morogoro Case. *M.A (Education) Dissertation (Mimeo*) University of Dar es salaam.

Hornby, A.S. (2000). *The Oxford Advanced Learners Dictionary of Current English 7th ed.,* UK: Oxford University press.

Husen, T. and Neville, T.P. (1985). *The international Encyclopedia of Education: Research and Studies: Volume 9;* T- Z University of Stockholm- Sweden: U.K, USA, Japan and Pergamon press.

Ishumi G.M.A and Nyirenda,S.D. (2002). *Philosophy of Education: An Introduction to Concepts, Principles and practice:* Tanzania University of Dar es salaam.

Kaguruki, R. "Walimu Waghushi Vyeti kuhamia Mijini". *Majira Newspaper 28th November, 2004 . Pp 1, 9.*

Kombo, D. K. and Tromp, D.A. (2007). *Proposal and Thesis Writing: An Introduction.* Nairobi: Paulines Publications Africa.

Lockheed, M. and Verspoor, A. (1991). *Improving Primary Education in Developing Countries.* Oxford University Press: World Bank.

Maliamkono, T .L and Mason, H. (2006). *The Promise*. Dar es salaam. TEMA Publishers Company Ltd and Siyaya Publishing (Pty) Ltd.

Ministry of Education and Culture (2001). Morogoro Rural District Executive Director Report. *Quaterly Report; Second Quarter 2001*: Morogoro.

Msekwa, P. and maliyamkono, T.L. (1975). *The Experiments: Education Policy Formulation Before and After Arusha Declaration*. Dar es Salaam: Black Stars Agencies.

Mouton,J. (1996). *Understanding social research*. Van Schalk Publisher. Pretoria. South Africa.

Mulkeen, A. (2006). *Effective School and Quality Improvement: Teachers for Rural School: A Challenge for Africa association for the Development of Education in Africa* (ADEA) Libreville, Gabon.

Mulkeen, A. (2005: Teachers for Rural Schools: A Challenge for Africa Ministerial Seminar on Education for Rural people in Africa; Policy, Lessons, Options and priorities. Hostel by the Government of Ethiopia. UNESCO: Addis Ababa, Ethiopia.

Narman, A. (2004) *"We have Heard It All Before: The Millennium Goals and Education in Africa" in: Galabawa C. J. and narman, A. (2004) Education Poverty and Inequality. Dar es Salaam,*: BERRIPA Project, faculty of Education University of Dar es salaam, Tanzania. pp. 16-33.

Negel, P.T. (2003*). Education and why it is Important for Development*; Keynote Speech at the International Conference on Quality of Education, launched by save the Children Norway, Olso, June 11 – 13, 2003. NORAD..

Njabili, A. F. (1999). *Public Examinations: A Tool for Curriculum Evaluation.* Dar es salaam Tanzania: Mture Education Publishers.

Nyerere, J. K. (1968). *Education for Self Reliance: Freedom and Socialism*, Oxford University.

Nyerere, J. K. (1967*). Education for Self-Reliance. Dar es salaam: Government Printer:*

Omari, I. M. (2006). Effective Teaching and learning. *In: Omari, I.M. (ed) (2006) Education Psychology for Teachers:pp 54-72:* Dar es Salaam University Press.

Opie, C. (Ed). (2007*). Doing Education Research*. London: Saga publications.

Oso, W. Y. and Onen, D. (2008). *A General Guide Writing Research Proposal and Report.* Kampala- Makerere University printer.

Oxenham, J. (2005). "Diversity an Integrated Education system" *in: Verspoor, A.M. (ed). (2003). The Challenge of Learning: Improving the Quality of Basic education in sub-saharan Africa*. Paris: ADEA pp 219-239. Sedel, C. (2005). Setting the Scene in: verspoor, A.M. (ed). (2003). *The challenge of learning: Improving the Quality of Basic education in Sub-Saharan Africa.* Paris:ADEA pp 31 -51.

Punch, K. (2000). *Devoloping Effective Research Proposals*, London. Sage Publications.

Sinyolo, D. (2008). *Teacher Supply, Recruitment and Retential in Six Agoraphone sub-Saharan Africa*. Paris. *http://www.eldis.org/go/display&type=Document and id=36 191 Retrieved on 6th of June, 2009.*

Sumra, S. (2007). *Achievement in Primary Education: Enrollment versus Educational Quality* Dar es salaam: Haki Elimu.

Temu, E.B. (1995*).Success Schools in Tanzania; A case study of Academic and production programmes in primary and secondary schools*. Institute of Intrenational Education. Stockholm University.

Towse, P, Kent, D, Osaki, F. and Kirua, N. (2002). *"Non-graduate teacher effectiveness in Tanzania". Teaching and Teacher Education 18, 637-652*.Dar es Salaam.

URT-MOEC. (1981).*Presidential Commission Report*.Dar es salaam.

UN. (2006*).The millennium Development Goals Report 2006.*United Nations. New United Nations Department of Economics and Social Affairs DESA-June 2006,New *York.*

URT- MOEC. (2003).*Ministry of Education and Culture.Joint Review of Primary Education Development Plan (PEDP).*Dar es salaam.

URT- MOEC. (2003*).The Primary school class size.* Education Circular no.4 of 2003.

URT- MOEC. (2003). *The primary school Teacher Ratio*. Education Circular no.5 of 2003.

URT- MOEC. (1982*).Mfumo Wa Elimu Ya Tanzania 1981-2000.Ripoti Ya Mapendekezo Ya Tume Ya Rais.Juzuu La Kwanza:* Dar es salaam.

URT- MOEC.(1995). *Education and Training Policy,Ministry of Education and Culture.* Dar es salaam.

URT- MONE. (1977). *MTUU its Role in the Reform of Primary Education in Tanzania 1969-1976 Volume 1*. Dar es salaam: Ministry of National Education.

Wellington,W.J. (2000).*Education Evalution*.New Jersey:Prentice-Hall.

APPENDICES

Appendix I: Questionnaires for a District Education Officer (DEO)

I'm **Muya Salum** student from The Open University of Tanzania Faculty of education, doing investigation of Teacher/Pupils Ratios on the Internal Efficiency Indicators of primary schools in Mvomero District and Morogoro Municipality.

I kindly reguest you to fill my questionnaires accordingly to enable me complete the study well. Your name and responses would not be exposed to anybody else. These responses will be used for research purposes only.

Thanks for your cooperation and time in spending to the guestions.

1. How many:

a) Primary schools do you have in your district? . ……

b) Pupils do you have in your district primary schools?……

c) Teachers do you have in your district primary schools? ……

2. Is there any shortage or extra number of teachers in your schools?

   (Please tick where neccessary)

   Yes☐ No ☐

3. Do you think that you have shortage or extra number of:

   i. Teachers in your district primary schools

      (explain)……..……

      ……..

ii. What are the causes of shortages of text books in your district primary schools? (explain)

……..……

……

iii. If you have shortages of finance in your district schools what are the causes……..

……

……

4. Normally teachers prefer to be allocated to teach in which location of schools?

.....

.....

5. According to you what is to be done to rectify the problems of shortages or excesses of

   i. Teachers

   (Explain)……..……..…

   ……..

   ii. Text books

   (Explain)…….……...…..……

   ……...

iii. Finance (Explain)

……

……

6. How far is the problem of teachers' shortages, teaching and learning materials and finance in your district affect the provision of education in your district/ Municipal schools (Explain)……

Appendix II: Questionnaires for a Ward Education Coordinator (WEC)

I'm **Muya Salum** student from The Open University of Tanzania Faculty of education, doing investigation of Teacher/Pupils Ratios on the Internal Efficiency Indicators of primary schools in Mvomero District and Morogoro Municipality.

I kindly reguest you to fill my questionnaires accordingly to enable me complete the study well. Your name and responses would not be exposed to anybody else. These responses will be used for research purposes only.

Thanks for your cooperation and time in spending to the guestions.

1. How many:
   a) Primary schools do you have in your Ward? .....
   b) Primary school pupils do you have in your Ward? .....
   c) Primary school teachers do you have in your Ward……
2. Is there any school with shortage or excess of teachers in your ward?
   Yes ☐ No ☐
3. According to you shortage/excess of
   i. Teachers was caused by
      (Explain)…….
      ……
   ii. Text books in schools of your Ward caused by (Explain)
      ……
      ……

iii. The finance of running schools in your ward caused by (Explain)

……

……

4. Normally teachers preferred to be allocated to teach at which schools? (Explain)

……

……

5. According to you what is to be done to rectify the problem of shortage or excess of

i. Teachers (Explain) ……..…….

……

ii. Text books (Explain) ……...…...……

……

iii. Finance (Explain)

…….

6. How far the problem of teachers' shortage in your Ward affects provision of education? (Explain) ……..

…….

i. How far the problem teaching and learning materials in your ward affects provision of education (Explain) ……

…….

ii. How far the problem finance in your ward affects provision of education? (Explain)……..

…….

Appendix III: Questionnaires for Head Teachers (HT)

I'm **Muya Salum** student from The Open University of Tanzania Faculty of education, doing investigation of Teacher/Pupils Ratios on the Internal Efficiency Indicators of primary schools in Mvomero District and Morogoro Municipality.

I kindly reguest you to fill my questionnaires accordingly to enable me complete the study well. Your name and responses would not be exposed to anybody else. These responses will be used for research purposes only.

Thanks for your cooperation and time in spending to the guestions.

1. How many primary school teachers do have in your school? ……

   ……..
2. How many pupils do have in your primary school? …….. …

   ……..
3. Does each subject have qualified teacher? (Explain) **.....**

   ……..
4. Are there any subjects without teachers? (Explain)…….

   ……..
5. How did the pupils do in the subjects without teachers? (Explain)……

   ……..
6. How many books of :

   a. Text in the following subject:

      Kiswahili _____

      English _____

Mathematics _____

Science _____

b. Reference books?

Kiswahili _____

English _____

Mathematics _____

Science _____

7. How many desks do have in school? .....
8. How many pupils sit in one desk? .....
9. Are there any pupils sitting without desks? (Explain) ……

……

…….

10. Which reasons contributed to
    i. The shortage teachers in your school? ……
    ii. Excess of teachers in your school? .....
11. If there is shortage of teachers, how far is it affecting the provision of education in your school? …….

.....

12. How many teachers were transferred from your school to other schools in the following years
    - 2007…….
    - 2008…….
    - 2009…….
    - 2010…….

 2011……

13. How many teachers stayed more than five years?.....out of……..……who supposed to be in school
14. How many teachers were transferred from 2005 to 2011? …….why were transferred? (Explain)…….
    ……
15. How many times did you get text books and reference books of the following years :

    i. Text books 2007-2011: …….

SUBJECT	CLASS														
	V					VI					VII				
	YEARS					YEARS					YEARS				
	07	08	09	010	011	07	08	09	010	011	07	08	09	010	011
Mathematics															
English															
Science															
Geography															
History															
Kiswahili															
TOTAL															

ii. Reference book 2007 - 2011 : ……

SUBJECT	CLASS														
	V					VI					VII				
	YEARS					YEARS					YEARS				
	07	08	09	010	011	07	08	09	010	011	07	08	09	010	011
Mathematics															
ENGLISH															
Science															
geography															
History															
Kiswahili															
TOTAL															

16. Did the books for text and reference received fulfill the school needs in your school? ……..... Yes / No
17. What are the causes of the following problems to your pupils?
    - Truancy……
    - Dropout……
    - Repetition…….
    - Poor performance in STD Seven National Examination……...
18. Through your opinions what are measures should be taken to overcome the problem of shortage of teachers……

    i. Do you have shortage of the books for teaching and learning (Explain)……

    ……

ii. Desks? (Explain)……

……

iii. Classes? (Explain) ……

……

iv. Houses for the teachers? (Explain) ……..

……

19. You as the head teacher what measures do you take to overcome the problem shortage of

i. Teachers? (Explain) ……

……

ii. Shortage of text books and reference books (Explain)……

……

iii. Classes? (Explain) ……

……

20. How do you feel to be a head teacher of the school with such problems?

Shortage of houses for the teachers? (Explain) ……

……

……

Thank you for your cooperation

Appendix IV: Questionnaires for the Teachers

I'm **Muya Salum** student from The Open University of Tanzania Faculty of education, doing investigation of Teacher/Pupils Ratios on the Internal Efficiency Indicators of primary schools in Mvomero District and Morogoro Municipality.

I kindly reguest you to fill my questionnaires accordingly to enable me complete the study well. Your name and responses would not be exposed to anybody else. These responses will be used for research purposes only.

Thanks for your cooperation and time in spending to the guestions.

Put (√) where necessary

1. Sex: MALE……FEMALE……..
2. Text and reference books are they enough in your subject at school? ……
   i. If the answer is Yes, which subjects? ……
      If the answer is No, which subjects? .....
   ii. If the answer is No what do you do to overcome this problem ……
      …….
3. You have been in this school from……..
4. Do you prefer to continue teaching in this school? .....
   Reasons ……
5. If you are given a chance to decide to continue to teaching or asking for the transfer what will be your answer?

If would continue why? .....

……

If would ask for the transfer why? .....

……

6. How much distance (KM) from: School to district headquarters? .....
7. Which type of transport do you use from school to distinct headquarter? .....
8. How much do you pay? .....
9. Is that means of transport available daily? ……
10. Is there any important social services missing in your working station? Yes……No……..
11. If the answer is yes mention them

 A…….. ……..

 B…….. ……..

 C…….. ……..

 D…….. ……..

 F…….. ……..

 G…….. ……..

12. A house your living is belongs to: (put (√)where necessary)

 School…….. ……

 Village…….. ……

 Yours…….. ……

 Private owned…….. ……

13. A house your living is it durable? ……

Does the house have electricity?

(i). Yes……

(ii). No……

Is there any tap water in a place where you are living?

(i)Yes……..

(ii) No……..

Thank you for your cooperation

Appendix V: Questionnaires for the Pupils

I'm **Muya Salum** student from The Open University of Tanzania Faculty of education, doing investigation of Teacher/Pupils Ratios on the Internal Efficiency Indicators of primary schools in Mvomero District and Morogoro Municipality.

I kindly reguest you to fill my questionnaires accordingly to enable me complete the study well. Your name and responses would not be exposed to anybody else. These responses will be used for research purposes only.

Thanks for your cooperation and time in spending to the guestions.

1. Sex Male …… Female…… (Put (√) where necessary)
2. Which class are you studying? ……..
3. Do you think why some pupils:

   A).Dodge from school (Explain) ……..……

   B). Dropout from (Explain)…….

   C).Repeat classes (Explain) ……...……..

   □ Yes……

   □ No…….
4. Which type of teachers do you like to be present at your school? (put (√) where necessary).

   □ A Male only…… (Why?) ……..…….

   □ B Female only…… (Why?)……..…….

   □ C Both Male and Female…… (Why?)……

Reasons……..……

5. In your school which teachers do you like mostly Put (√) where necessary

   i. Female…….

   ii. Male……..……

   iii. Both Male and Fmale…….

   iv. Why do you like this group? …….....

6. A school has enough classes to accommodate all pupils?

   Yes/ No……..

7. Are books enough to all pupils, subjects and classes? Yes/No…….

   If the is No what are causes of it? **.....**

8. Is there any shortage or access of desks in school?

   Yes/No……..

   Shortage / access of desks caused by? **.....**

9. For your opinions the distance from home to school affects your academic progress? (put (v) where necessary)

   i. Yes…….reasons…….

   ii. No……reasons……

Thank you for your cooperation