

**FACTORS INFLUENCING ACADEMIC PERFORMANCE OF STUDENTS IN
COMMUNITY AND GOVERNMENT BUILT SECONDARY SCHOOLS IN
MBEYA MUNICIPALITY, TANZANIA**

BY

FORTUNATUSY EMILLIO KAGUO

**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN
AGRICULTURAL EDUCATION AND EXTENSION OF SOKOINE
UNIVERSITY OF AGRICULTURE. MOROGORO, TANZANIA.**

2011

ABSTRACT

The study investigated factors that influence the academic performance of students in the community and government built secondary schools in Mbeya municipality. The study, specifically assessed the adequacy of school inputs, examined the existing learning process in schools, compared students' academic performance in form II and IV national examination results in 2006 - 2008 and explored peoples' perceptions on community built secondary schools. This study adopted a cross-sectional survey method; teachers were selected randomly, while education administrators and community respondents were purposely selected. Descriptive statistics and multiple linear regressions were used to summarize the information obtained from respondents in the studied schools. Findings of this study showed that there were not enough teaching and learning materials, teaching and learning processes were poor especially in the community built secondary schools. Also, availability of facilities in the schools did not match with number of students. Teaching was dominated with a mixture of English with Kiswahili. The study findings showed that academic performances of community built secondary schools were poorer than government built secondary schools in Form II and IV national examinations from 2006 to 2008. This study recommends that the government should increase number of teachers; provide teaching and learning materials such as textbooks, laboratories, classrooms, provide lunch to students staying far away from schools; introduce bonus schemes for teachers serving in difficult environment so as to facilitate them work for longer hours . Other education stakeholders such as parents, NGOs and local communities in collaboration with the government should build hostels and dormitories around the community built secondary schools for retention of students. People in Tanzania society should have positive perceptions on community built secondary schools so as to eliminate

some problems like decreased enrollment of pupils, thus increase access in education and reduce number of street children in the society.

DECLARATION

I, FORTUNATUSY EMILLIO KAGUO do hereby declare to the Senate of Sokoine University of Agriculture that this dissertation is my own work, and has neither been submitted nor being concurrently submitted for a degree award in any other university.

Fortunatusy, Emilio Kaguo.
MSc. candidate

Date

The above declaration is confirmed by:

Prof. Malongo R.S. Mlozi
Dissertation Supervisor

Date

COPYRIGHT

No part of this dissertation may be reproduced, stored in any retrieval system or transmitted in any form or by any means without prior written permission of the author or Sokoine University of Agriculture in that behalf.

ACKNOWLEDGEMENT

Many people have directly or indirectly contributed towards the achievement of this study and their contribution and effort is greatly appreciated. Firstly, I wish to express my heartfelt thanks to the Embassy of Belgium through Belgian Technical Cooperation, for the scholarship to pursue this study. Secondly, I would like to express my heartfelt thanks to my supervisor Prof. Malongo R.S. Mlozi for his encouragement, constructive criticisms and support throughout the study process. In addition, I greatly appreciate the DAEE members of staff, especially Mr Mwajombe Kizito for their contribution and assistance throughout my study and life at Sokoine University of Agriculture (SUA).

Special thanks go to my family and parents for their love, moral and materials support during the study period. I wish to extend my gratitude to the headmasters, teachers, regional and district education administrators and students of the community and government built secondary schools of Uyole, Iganzo, Samora, Mbeya and Iyunga for their valuable assistance.

I am deeply indebted to Prof. A.Z Mattee, Prof. S.M.Neke, Dr. A.D.B.S Mwakalobo, Dr. E.E. Chingonikaya, Dr. S.I. Kimera, Dr. Selia Masole, Ms. Serafina Vilanculous, Mr Henry Mgao, Mr Zebedayo Kyomo, Mr. Kenneth F. Kalinga, Mr G. Shausi, Mr. M. Amani, Mr F.F Mng'ong'o, Mr Clemence L. Kikusange and Mr. Sigisto Amon who read the manuscript and gave their comments.

Lastly, I thank relatives, friends and colleagues who supported me during the study period. Above all, I thank the Almighty God for bestowing me with the good health till the completion of this work.

DEDICATION

This dissertation is dedicated to my beloved parents Mr. Emillio M. Kaguo and Mrs. Therezia T. Kalinga who laid down the foundation of my education.

TABLE OF CONTENTS

| | |
|---|-------------|
| ABSTRACT..... | II |
| DECLARATION..... | IV |
| COPYRIGHT..... | V |
| ACKNOWLEDGEMENT..... | VI |
| DEDICATION..... | VII |
| TABLE OF CONTENTS..... | VIII |
| LIST OF TABLES..... | XI |
| LIST OF FIGURES..... | XIII |
| LIST OF APPENDICES..... | XIV |
| LIST OF ABBREVIATIONS..... | XV |
| CHAPTER ONE..... | 1 |
| 1.0 INTRODUCTION..... | 1 |
| 1.1 BACKGROUND INFORMATION..... | 1 |
| 1.2 PROBLEM STATEMENT..... | 3 |
| 1.3 JUSTIFICATION..... | 4 |
| 1.4 LIMITATIONS OF THE STUDY..... | 4 |
| 1.5 OBJECTIVES..... | 5 |
| 1.5.1 <i>General objective</i> | 5 |
| 1.5.2 <i>Specific objectives</i> | 5 |
| 1.6 HYPOTHESES OF THE STUDY..... | 5 |
| 1.7 RESEARCH QUESTIONS..... | 7 |
| CHAPTER TWO..... | 8 |
| 2.0 LITERATURE REVIEW..... | 8 |
| 2.1 INTRODUCTION..... | 8 |
| 2.2 ACADEMIC PERFORMANCE..... | 8 |
| 2.3 THEORETICAL FRAMEWORK OF THE STUDY..... | 10 |
| 2.4 CONCEPTUAL FRAMEWORK..... | 11 |
| 2.4.1 <i>Availability of teaching materials</i> | 11 |
| 2.4.2 <i>School teaching/learning environment</i> | 12 |
| 2.4.3 <i>Number of qualified teachers</i> | 14 |
| 2.4.4 <i>Instructional methods</i> | 15 |
| 2.4.5 <i>Students' assessment</i> | 15 |
| 2.4.6 <i>Size of class</i> | 16 |
| 2.4.7 <i>Time for learning in school</i> | 17 |
| 2.4.8 <i>Availability of library and books</i> | 19 |
| 2.4.9 <i>Ownership of schools</i> | 20 |
| 2.4.10 <i>Source of school funds</i> | 20 |
| 2.4.11 <i>Distances to schools</i> | 21 |
| CHAPTER THREE..... | 24 |
| 3.0 RESEARCH METHODOLOGY..... | 24 |

| | |
|---|------------|
| 3.1 INTRODUCTION..... | 24 |
| 3.2 DESCRIPTION OF THE STUDY AREA..... | 24 |
| 3.3 RESEARCH DESIGN..... | 27 |
| 3.4 STUDY POPULATION..... | 27 |
| 3.5 SAMPLE SIZE AND SAMPLING METHOD..... | 28 |
| 3.6 STUDY VALIDITY..... | 29 |
| 3.7 RELIABILITY..... | 29 |
| 3.8 DATA COLLECTION..... | 30 |
| 3.9 DATA ANALYSIS..... | 31 |
| CHAPTER FOUR..... | 33 |
| 4.0 RESULTS AND DISCUSSION..... | 33 |
| 4.1 SOCIO DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS..... | 33 |
| 4.2 AVAILABILITY OF TEACHING AND LEARNING MATERIALS..... | 35 |
| 4.3 SCHOOL LEARNING ENVIRONMENT..... | 37 |
| 4.4 ADEQUACY OF SCHOOL FACILITIES..... | 40 |
| 4.5 NUMBER OF EXERCISES PROVIDED FOR DIFFERENT SUBJECTS | 44 |
| 4.6 LANGUAGE USED FOR INSTRUCTION IN SECONDARY SCHOOLS..... | 46 |
| 4.7 PRESENCE OF SUBJECT SPECIFIC CLUBS AND LUNCH PROVISION IN SCHOOLS..... | 47 |
| 4.8 AVAILABILITY OF TEACHERS AND SYLLABUS COMPLETION | 48 |
| 4.9 SOURCES OF FUNDS AND STUDENTS' ACADEMIC PERFORMANCE | 50 |
| 4.10 DISTANCE OF SCHOOLS FROM HOMES/DORMITORIES AND LEARNING CENTRES | 51 |
| 4.11 COMPARING ACADEMIC PERFORMANCE BETWEEN SCHOOLS..... | 53 |
| 4.12 RESPONDENTS PERCEPTIONS ABOUT COMMUNITY-BUILT SECONDARY SCHOOLS | 65 |
| 4.13 HYPOTHESES TESTING..... | 66 |
| 4.13.1 Relationship between the availability of school inputs and students' academic performance in the community-built secondary schools..... | 66 |
| 4.13.2 Relationship between the availability of school inputs and students' academic performance in the government-built secondary schools..... | 69 |
| 4.13.3 Relationship between the availability of school inputs and students' academic performance in the community and government-built secondary schools..... | 71 |
| 4.13.4 Relationship between teaching-learning process and students' academic performance in community-built secondary schools. | 73 |
| 4.13.5 Relationship between teaching-learning process and students' academic performance in the government-built secondary schools. | 75 |
| 4.13.6 Relationship between teaching-learning process and students' academic performance in the community and government-built secondary schools. | 77 |
| 4.13.7 Relationship between teachers' better working conditions and students' academic performance in the community -built secondary schools..... | 79 |
| 4.13.8 Relationship between teachers' better working conditions and students' academic performance in the government-built secondary schools..... | 81 |
| 4.13.9 Relationship between teachers' better working conditions and students' academic performance in the community-and government-built secondary schools..... | 83 |
| CHAPTER FIVE..... | 86 |
| 5.0 CONCLUSION AND RECOMMENDATIONS..... | 86 |
| 5.1 OVERVIEW..... | 86 |
| 5.2 CONCLUSIONS..... | 88 |
| 5.3 RECOMMENDATIONS..... | 89 |
| REFERENCES..... | 91 |
| APPENDICES..... | 102 |

| | |
|----------------------------|------------|
| TOTAL..... | 130 |
| STUDENTS' PERFORMANCE..... | 131 |
| TEACHING MATERIALS | 133 |

LIST OF TABLES

| | |
|--|-----------|
| TABLE 1: NUMBER OF INTERVIEWED STUDENTS (N=375) | 29 |
| TABLE 2: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS (N=430)..... | 35 |
| TABLE 3: AVAILABILITY OF TEACHING AND LEARNING MATERIALS (N=430) | 37 |
| TABLE 4: SCHOOL LEARNING ENVIRONMENT (N= 430)..... | 39 |
| TABLE 5: ADEQUATENESS OF SCHOOL FACILITIES (N=430)..... | 42 |
| TABLE 6: SUBJECT EXERCISES PROVIDED IN THE SCHOOLS (N=430)..... | 46 |
| TABLE 7: MEDIUM OF INSTRUCTION IN THE SCHOOLS (N=430)..... | 47 |
| TABLE 8: PRESENCE OF SUBJECT SPECIFIC CLUBS AND LUNCH PROVISION IN SCHOOLS (N=430)..... | 48 |
| TABLE 9: AVAILABLE TEACHERS AND THEIR EFFECT ON STUDENTS' ACADEMIC PERFORMANCE (N=430)..... | 49 |
| TABLE 10: SOURCE OF FUNDS AND THEIR IMPACT ON STUDENT'S ACADEMIC PERFORMANCE (N=430)..... | 51 |
| TABLE 11: DISTANCE OF SCHOOLS FROM HOMES/HOSTELS/LEARNING CENTRES AND ITS EFFECT ON TEACHING (N=430)..... | 53 |
| TABLE 12: FORM II NATIONAL EXAMINATIONS RESULTS OF THE COMMUNITY BUILT SECONDARY SCHOOLS IN 2006 - 2008..... | 54 |
| TABLE 13: FORM II OVERALL GRADES OF EXAMINATIONS RESULTS OF THE COMMUNITY BUILT SECONDARY SCHOOLS IN 2006 – 2008..... | 55 |
| TABLE 14: FORM II EXAMINATIONS RESULTS OF THE GOVERNMENT BUILT SECONDARY SCHOOLS IN 2006 - 2008..... | 56 |
| TABLE 15: FORM II OVERALL GRADES OF EXAMINATIONS RESULTS IN THE GOVERNMENT BUILT SECONDARY SCHOOLS FROM 2006 TO 2008..... | 57 |
| TABLE 16: OVERALL FORM IV NATIONAL EXAMINATIONS RESULTS IN THE COMMUNITY BUILT SECONDARY SCHOOLS FROM 2006 TO 2008..... | 58 |
| TABLE 17: OVERALL FORM IV EXAMINATIONS RESULTS OF THE GOVERNMENT BUILT SECONDARY SCHOOLS IN 2006 – 2008..... | 61 |
| TABLE 18: COMBINED OVERALL FORM II NATIONAL EXAMINATIONS RESULTS FROM 2006 TO 2008 AMONG THE COMMUNITY AND GOVERNMENT BUILT SECONDARY SCHOOLS..... | 63 |
| TABLE 19: COMBINED OVERALL FORM IV NATIONAL EXAMINATIONS RESULTS FROM 2006 TO 2008 AMONG THE COMMUNITY- AND GOVERNMENT BUILT SECONDARY SCHOOLS..... | 64 |
| TABLE 20: REGRESSION MODEL TO TEST FOR INFLUENCE OF AVAILABILITY OF SCHOOL INPUTS ON THE STUDENTS' ACADEMIC PERFORMANCE IN THE COMMUNITY-BUILT SECONDARY SCHOOLS..... | 68 |

| | |
|--|-----------|
| TABLE 21: REGRESSION MODEL TO TEST FOR INFLUENCE OF AVAILABILITY OF SCHOOL INPUTS ON THE STUDENTS' ACADEMIC PERFORMANCE IN THE GOVERNMENT-BUILT SECONDARY SCHOOLS..... | 70 |
| TABLE 22: REGRESSION MODEL TO TEST FOR INFLUENCE OF AVAILABILITY OF SCHOOL INPUTS ON THE STUDENTS' ACADEMIC PERFORMANCE IN COMMUNITY AND GOVERNMENT-BUILT SECONDARY SCHOOLS..... | 72 |
| TABLE 23: REGRESSION MODEL TO TEST FOR THE INFLUENCE OF TEACHING-LEARNING PROCESS ON THE STUDENTS' ACADEMIC PERFORMANCE IN THE COMMUNITY-BUILT SECONDARY SCHOOLS..... | 75 |
| TABLE 24: REGRESSION MODEL TO TEST FOR THE INFLUENCE OF TEACHING-LEARNING PROCESS ON THE STUDENTS' ACADEMIC PERFORMANCE IN THE GOVERNMENT-BUILT SECONDARY SCHOOLS..... | 76 |
| TABLE 25: REGRESSION MODEL TO TEST THE INFLUENCE OF TEACHING-LEARNING PROCESSES ON THE STUDENTS' ACADEMIC PERFORMANCE IN THE COMMUNITY AND GOVERNMENT-BUILT SECONDARY SCHOOLS. | 78 |
| TABLE 26: REGRESSION MODEL TO TEST FOR THE INFLUENCE OF TEACHING-WORKING CONDITIONS ON THE STUDENTS' ACADEMIC PERFORMANCE IN THE COMMUNITY-BUILT SECONDARY SCHOOLS. | 80 |
| TABLE 27: REGRESSION MODEL TO TEST FOR THE INFLUENCE OF TEACHING-WORKING CONDITIONS ON THE STUDENTS' ACADEMIC PERFORMANCE IN THE GOVERNMENT-BUILT SECONDARY SCHOOLS. | 82 |
| TABLE 28: REGRESSION MODEL TO TEST FOR THE INFLUENCE OF TEACHING-WORKING CONDITIONS ON THE STUDENTS' ACADEMIC PERFORMANCE IN THE COMMUNITY AND GOVERNMENT-BUILT SECONDARY SCHOOLS. | 83 |

LIST OF FIGURES

FIGURE 1: CONCEPTUAL FRAMEWORK OF FACTORS THAT INFLUENCE ACADEMIC PERFORMANCE OF COMMUNITY AND GOVERNMENT BUILT SECONDARY SCHOOLS IN MBEYA MUNICIPALITY, TANZANIA.....23

FIGURE 2: A MAP OF MBEYA MUNICIPALITY SHOWING WARDS AND STUDY SCHOOLS 26

LIST OF APPENDICES

APPENDIX 1: TEACHERS QUESTIONNAIRES102
APPENDIX 2: STUDENTS QUESTIONNAIRES116
APPENDIX 3:SCHOOL ACADEMIC MASTER/MISTRESS STUDENTS' PERFORMANCE.....130
APPENDIX 4: SCHOOL ACADEMIC MASTER/MISTRESS131
APPENDIX 5: CHECKLIST FOR KEY INFORMANTS132

LIST OF ABBREVIATIONS

| | |
|--------|---|
| BTC | Belgian Technical Cooperation |
| CSEE | Certificate of Secondary Education Examination |
| DAEE | Department of Agricultural Education and Extension |
| FGDs | Focus Group Discussions |
| GoT | Government of Tanzania |
| MoEC | Ministry of Education and Culture |
| MoEVT | Ministry of Education and Vocational Training |
| NGOs | Non- government organizations |
| PEDP | Primary Education Development Programme |
| PSLE | Primary School Leaving Examination |
| SEDP | Secondary Education Development Programme |
| SPSS | Statistical Package for Social Sciences |
| SUA | Sokoine University of Agriculture |
| UNESCO | United Nations Education Scientific and Cultural Organization |
| UPE | Universal Primary Education |
| URT | United Republic of Tanzania |

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background Information

Education is the primary agent of transformation towards sustainable development since it increases people's capacities to transform their visions into reality. Education not only provides scientific and technical skills, it also provides the motivation, justification, and social support for pursuing and applying them. The international community now strongly believes that we need to foster-through education-**the values, behaviour and lifestyles required for a sustainable future (Delors, 1998). Education for sustainable development has come to be seen as a process of learning how to make decisions that consider the long-term future of the economy, ecology and equity of all communities.**

Building the capacity for such futures-oriented thinking is a key task of education (UNESCO, 2005). The education and training policy of the United Republic of Tanzania, defines education as the process of initiating and preparing man through training, in his environment, to play active roles in society (MoEC, 1995). Education provides desirable and worthwhile broad and in-depth modes of thought, skills, attitudes and understanding needed for the full development of human thinking and actions (URT, 1995).

The implementation of UPE has created unprecedented social demand for secondary education. The increasing number of pupils in primary education has led to more demands of secondary schools in Tanzania to absorb qualified candidates from primary schools (URT, 1999). This occurred mainly from the 1990's in different regions of Tanzania. The

introduction of Primary Education Development Programme (PEDP) in late 1999 increased the number of pupils enrolled in the primary schools resulting into an increased number of standard seven schools leavers (Mosha, 2000). Previously, a large number of pupils did not join secondary schools education due to shortages of secondary schools. From 2000 the Government of Tanzania (GoT) initiated a programme of increasing secondary schools in the country through self-reliant programs, by encouraging citizens to build secondary schools in their communities to absorb the many standard seven pupils from their localities (Mushi, 2000). The government intends to give education to many Tanzanians to fight illiteracy in the country.

The intentions of establishing community secondary schools are to provide good education to many Tanzanians who missed this right due to shortages of government secondary schools places and to increase enrollment of pupils to fight poverty, hence develop the nation. The basic challenge in the development of any nation is how to educate its own citizens. It is believed that most students become very similar with regard to the rate of learning and motivation for further learning when a favourable learning condition is provided to them (Bloom, 1982). Eicher (1984) maintains that in any productive process, the quality of the output depends upon that of inputs. Schools have got human, financial and material resources as inputs that are all directed towards the attainment of school goals (Knezevich, 1975). Moreover, the study of academic performance of the community and government built secondary schools looked at the adequacy of school inputs, learning processes, compared the national examinations results and people's perceptions towards the community built schools.

1.2 Problem Statement

Community secondary schools are built by the people in their localities and then handed over to the government which then supplies the teaching staff, teaching and learning materials and management. The government secondary schools on other hand are completely owned and controlled by the government. In 1981, a Presidential Commission was appointed to review the existing system of education and propose necessary changes to be realized by the country towards the year 2000. One of the significant recommendations was the expansion of secondary education (URT, 1995). Since 1990 when community secondary schools started to operate in Tanzania, there has been an alarming increase in their numbers; in Mbeya municipality particularly there are about 26 community built secondary schools and only three (3) government built secondary schools in 2007 (Mbeya Regional Education Officer, 2009).

Then, the government of Tanzania introduced secondary education program – SEDP for expansion and improvement of government and community built secondary schools. A number of studies were conducted on academic performance of community and government built schools in Tanzania. However all did not focus on Mbeya Municipality. For instance, Lam (1999) investigated the community secondary schools phenomena and the perpetuation of inequality in performance. Omari (2002) examined the widespread community and government built schools in Tanzania and their poor performance, Boma (1980) accessed factors influencing good performance in Tanzanian secondary schools. This study, therefore, investigated the academic performance of the community and government- built secondary schools in Mbeya municipality.

1.3 Justification

Due to the increase of community and government- built secondary schools in Tanzania, it is important to establish modalities of understanding the academic performance of community and government- built secondary schools. This study was set to provide insights, particularly on the academic performance of community and government- built secondary schools. The study has revealed and created awareness on the problems facing community and government- built secondary schools. Therefore, the findings of this study will form baseline information for planners, policy makers, administrators, and stakeholders of education. Furthermore, the study findings will contribute to the improvement of academic performance of the community and government built secondary schools in Tanzania and provides a base for further research related to academic performance of secondary schools. Data on students' academic performance will reveal strengths and weaknesses for future improvement.

1.4 Limitations of the Study

This study had certain limitations, which included social problems, and unwillingness of the respondents to fill the questionnaires, respondents wanted to be paid which was not possible due to shortage of funds. The inability of teachers to fill in the questionnaires which due to their absence from their workstations attending to other duties such as marking National Form II and IV Examinations was also a problem. Other constraints include long distances covered to the schools. This study was limited in Mbeya Municipality.

1.5 Objectives

1.5.1 General objective

The general objective of this study was to investigate factors that influenced the academic performance of the community and government built secondary schools in Mbeya municipality, Tanzania.

1.5.2 Specific objectives

- i. To assess the adequacy of school inputs in community and government-built secondary schools.
- ii. To examine the existing teaching-learning process in community and government-built secondary schools.
- iii. To evaluate students' academic performance in Form II National Examinations in the community and government-built secondary schools from 2006 to 2008.
- iv. To assess students' academic performance in Form IV National Examinations in the community and government-built secondary schools from 2006 to 2008.
- v. To explore people's perceptions on community-built secondary schools.

1.6 Hypotheses of the Study

This study was guided by the following hypotheses;

1. There is no significant statistical relationship between the availability of school inputs and students' academic performance in community and government built secondary schools.
2. There is no significant statistical relationship between teaching-learning process and students' academic performance in community and government built secondary schools.

3. There is no significant statistical relationship between teachers' better working conditions and students' academic performance in community and government built secondary schools.
4. There is no significant statistical relationship between respondents' perceptions towards community built secondary schools.

1.7 Research Questions

1. Are there adequate school inputs in the community and government built secondary schools?
2. What is the situation like of the learning process in community and government built secondary schools?
3. What are the differences between academic performance of students in Form II National Examinations in the community and government built secondary schools from 2006 to 2008?
4. What are the differences between academic performance of students in Form IV National Examinations in the community and government built secondary schools from 2006 to 2008?
5. What are the perceptions of the people towards community built secondary schools in Mbeya Municipality?

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

Secondary education refers to a post primary formal education offered to persons who will have successfully completed primary school leaving examinations (PSLE) and have to meet the requisite entry requirements (URT, 1999). In the context of this study it refers to Ordinary Level Secondary Education that means from Form I to Form IV, which is performed by the community and government built secondary schools in Tanzania. A community secondary school refers to schools owned by a local community or owned by an institution on behalf of the community (URT, 1995). Community secondary schools are built by local people and then handed over to the government to run by supplying them with teaching materials, teaching staff, workers, management and administration.

The communities continue to be responsible for development and improvement of basic infrastructure, including classrooms, laboratories, toilets, staff quarters, offices and furniture, under their local government (MoEC, 2000). Government secondary schools refer to schools which are/were built, owned, managed and controlled by the government and those which were nationalized in 1967 during the Arusha Declaration.

2.2 Academic Performance

Academic performance refers to school rank based on students' scores in a particular examination. At an individual level it refers to grades or scores awarded to students who sat for a prescribed examination. In this study, academic performance refers to the ability of an individual student to present concepts learned during a specific period of time and

conditions in a prescribed examination. It is the standard of achievement in an examination. In conceptualizing education performance, scholars have tended to fall under four groups, namely education inputs, education processes, educational output and education policy (Lugayila, 2002).

Studies show that a number of low-and middle-income countries, including Chile, Brazil, Egypt and Mexico, initiative to school quality has substantial pay-offs in terms of children's cognitive skills, their school achievement levels and their ultimate success in the labour market (Delors, 1998). Policy-makers in Scotland use academic performance management and measurement in a number of ways, in particular, as part of their efforts to raise pupils' attainment and improve teacher performance. Academic performance management has become the key instrument used by policy-makers to improve the education system, to raise levels of attainment and to increase the accountability of teachers (Ozga, 2003).

Quality refers to levels of performance, which can be measured by establishing an acceptable benchmark or criteria and standards of good performance (Mosha, 2000) In this study, quality education refers to education that enables one to perform well in examinations and various activities as a reflection of the knowledge and skills acquired. It is education that enables one to be successful in life. Hoy *et al.* (2000) define quality in education as being part of an evaluation process of educating, which enhances the need to achieve and develop the talents of customers.

An effective secondary school is one with high academic achievements, that offers practical skills and knowledge for life and which has high social, economic, political and

cultural self-reliance context (Mosha, 2000). In this study, an effective secondary school was the one with adequate essential learning requirement such as school inputs, appropriate teaching and learning processes, and the expectations of parents and students. School infrastructure refers to the basic structures like classrooms, toilets, laboratories, staff houses, libraries, offices, water supply systems, playgrounds, dormitories/hostels, dinning halls and kitchens (Mosha, 2000).

2.3 Theoretical Framework of the Study

The study was guided by the open system model in investigating factors influencing the academic performance of community-and government-built secondary schools in Mbeya Municipality. The model regarded community-and government-built secondary schools as an open system, thus needed to look at how the various components within inputs, processes and outputs are related to one another (Scott, 2003; and Rizzo, 1987). The open system model ideally views community and government-built secondary schools as being highly interdependent with their environment. Moreover, the output was examined and linked with inputs and processes. In this model, inputs referred to students, teachers and other teaching and learning facilities; processes involved in teaching, time for learning, students' assessment and output as examination results of form II and IV.

Also, this study was guided by the interactive systems model which is somehow relating to open system model. However, interactive systems approach by Spector (2001) introduced the idea that community and government-built secondary schools as social units allow the interaction among elements of school inputs, process and outputs. The ideal model of interactive system essentially consists of intra schools and external school inputs, processes and outputs (Spector, 2001). In conceptualizing education performance

scholars have tended to fall under four groups, namely education inputs, education processes, educational output and education policy (Lugayila, 2002). This study was guided by a conceptual framework which consists of several variables as shown in figure 1.

2.4 Conceptual Framework

A conceptual framework can be defined as an abstract indicating how basic concepts and constructs are expected to interact with definite settings and experiences that form a foundation of the research study (Kothari, 2000). In this study there are twelve independent variables that appear to influence the dependent variable: the academic performance of students in community and government built secondary schools. The independent variables and dependent variable interact in a Tanzanian context consisting of socio-economical, political, educational and cultural manifestations. Each of independent variable is reviewed in Fig.1.

2.4.1 Availability of teaching materials

Availability of teaching materials involves textbooks, teacher's guides, reference books, classroom charts, maps, chemicals and laboratories apparatuses. These are key ingredients in learning and teaching thus enhances students' academic performance (Wiggins, 1998). Some factors which can lead to good performance in secondary schools include the availability, relevance and sufficient teaching materials. Chonjo (1994) identified that insufficient teaching materials and poor methods of teaching were factors that led to poor performance in secondary schools in Tanzania.

The government provides teaching materials according to the level of education (MoEVT, 2006). Most of the community and government built secondary schools face acute problems of teaching materials which contribute to unstable students' academic performance in the schools. Tanzania like any other developing countries in the sub-Saharan Africa faces many problems as far as education is concerned. One among the problems is lack of learning materials for secondary schools, leading to inequality in accessing learning materials among schools and individual students. The problem has been there for a longtime due to the economic hardships that the government faces which has been the sole supplier of text books and learning aids to secondary schools. This problem hinders better performance of secondary schools in the compulsory national examinations

(<http://webcache.googleusercontent.com/search>, visited on 30/7/2009).

2.4.2 School teaching/learning environment

The school learning environment involves surroundings, atmosphere and location of the school, which should be conducive for student learning. Learning is the process by which individuals acquire and retain attitudes, knowledge, understanding, skills and capabilities that cannot be attributed to inherited behaviour patterns or physical growth (Farrant, 1980). Also, learning can and often does take place without the benefit of teaching and sometimes even in spite of it, there is no such a thing as effective teaching in the absence of learning. Teaching without learning is just talking (Angelo and Cross, 1998).

In order to achieve good performance in education, superior education environment should be strongly considered. Delors (1998) examined the principal factors affecting school performance, which are the level of training of teachers, instructional materials,

class size, language of instructions and curriculum reform. Sayi (1993) argues that physical school facilities such as instructional materials, school compound, buildings with requisite facilities, teachers' houses, health facilities, recreation facilities, school transport and others resources are most needed by the school system to attain their goals. The Education and Training Policy of the United Republic of Tanzania (URT, 1995) has ordered all owners and managers of secondary schools to ensure that standard infrastructure, facilities, equipment and instructional materials necessary for effective and optimum teaching and learning, which are of good quality are available in adequate quantities and are regularly maintained.

Mosha (2000) mentioned four things that are necessary to make a school effective, which are desirable internal characteristics, supportive external environment, and good teaching-learning and favourable school climate. Desirable internal characteristics are related to effective leadership, capable teachers, open way of working, clear objectives, quality staff and students' time in schools. Supportive external environment relates to education system, parents, community, children and facilities. Emphasis on good teaching and learning environment considers curriculum, high learning time, frequent monitoring, while evaluation covers order and discipline, incentive and positive students' and teachers' attitude. According to Basque and Dore (1998), learning and teaching environment ought to implement six functions: inform, communicate, collaborate, produce, scaffold, and manage. They added that conceptually speaking, the learning environment refers to the whole range of components and activities within which learning happens.

2.4.3 Number of qualified teachers

Qualifications of teachers available deal with the levels of formal education attained, experiences, specialization and subject mastery. The minimum qualification for secondary school teacher in both government and non-government schools shall be a possession of a valid diploma in education obtained from recognized institution (URT, 1995). Windham (1988) classified teachers into three categories: qualified teachers who have appropriate academic and professional education; under qualified teachers who have academic qualification but without professional education; and unqualified teachers consisting of those who possess neither academic nor professional training appropriate to the level of assignment.

The academic performance of certain types of secondary school can be affected by the teachers' characteristics available. The quality of student learning is directly, although not exclusively, related to the quality of teaching. Therefore, one of the most promising ways to improve learning is to improve teaching (Angelo and Cross, 1998). Teachers need to understand the subject enough to convey its essence to students. While traditionally this has involved lecturing on the part of the teacher, new instructional strategies such as team-based learning put the teacher more into the role of course designer, discussion facilitator, and coach; and the student more into the role of active learner discovering the subject of the course.

In any case, the goal is to establish a sound knowledge base and skill set on which students will be able to build as they are exposed to different life experiences. Good teachers can translate information, good judgment, experience and wisdom into relevant knowledge that a student can understand, retain and pass to others (<http://en.wikipedia.org>

/wiki/Education visited on 3/3/2009). Thus, it is important to have a sufficient number of qualified teachers in the community and government built schools for good students' academic performance.

2.4.4 Instructional methods

Instructional methods concern the ways, methods, language of instruction used in the process of imparting knowledge and skills to students. Instruction methods involve how a teacher presents materials in the classroom, involvement of students in the learning process and application of reinforcement. Mushashu (2000) observed that whatever methods of teaching and techniques the teachers use in a particular topic, the aim should be to promote student learning activities. Mosha (1995) asserts that teaching methods are related to the students' achievements and therefore, proper instructional methods used in schools will lead to good academic performance.

2.4.5 Students' assessment

Students' assessment involves the number of tests, home works, internal examinations administered and managed in various secondary schools, and their outcomes in the National Form II and IV External Examinations. This may contribute to academic performance of community and government-built secondary schools. Classroom assessment helps teachers to obtain useful feedback on what, how much, and how well their students are learning and also use the information to refocus their teaching/learning to help teachers/students make their teaching/learning more efficient and more effective (Angelo and Cross, 1998). Through observations of students in the process of learning, the collection of frequent feedback on students' learning, and the design of modest classroom experiments, teachers can learn much about how students learn and, more specifically, how students respond to particular teaching approaches (Bloom, 1982).

Classroom assessment helps individual teachers obtain useful feedback on what, how much, and how well their students are learning (www.celt.iastate.edu/teaching/cat.html visited on 4/9/2009).

2.4.6 Size of class

Number of students available in the school, classrooms, libraries, laboratories, toilets, dormitories, desks, tables, chairs available, are indicators that can influence academic performance of community- and government-built secondary schools. Class size is one factor to be considered when evaluating a school's effectiveness. The relationship between class size and academic performance is a major controversy. For example, lower teacher-pupil ratio allows for more effective communication between the learner and the teacher (Hattie, 2005). The effect of class size on cognitive achievement has been debated and researched for many years and has been inconclusive. Bourice (1986) and Robinson (1990) found that even with these methodological problems, research has generally demonstrated the influence of class or teacher –students' ratio on student's performance in a variety of educational settings. In this view, it could be said that teacher-pupil ratio is one of the important factors determining good academic performance of students in the teaching -learning situation.

A recent study, Idienumah (1987) found that there is a positive relationship between certain variables such as class size, teacher – pupil ratio, student factors and performance in examination. These were found to be factors that have strong and direct influence on academic performance of schools. Schools with larger class size and high teacher-pupil ratio recorded poor performance while better academic performance is associated with schools with small size and lower teacher-pupil ratio. Other studies like Bozzomo (1978), Bourice (1986) and Bolton (1988) conducted in Oyo state, Nigeria, confirmed that there was no relationship between the size of the class and the results.

Ojoawo (1989) in one of his major findings revealed that the class sizes were found to be negatively related to school academic performance. Bolton (1988) found that there were no statistical significant differences in post-test achievement scores between large classes and small class control groups in developmental English. According to Bolton's (1988) experience, larger class is sometimes better. Grissmer (1999) identified two of the problems, in which large classes make (1) the provision of an opportunity for discussion or for any kind of oral input to the written work is difficult; and (2) the amount of marking involved can dissuade even the not enthusiastic teacher from setting the amount of written work that he/she feels would benefit the students. Class sizes have also been identified as determinants of academic performance; for which studies have indicated that schools with smaller class sizes perform better academically than schools with larger class sizes. Blachfold *et al.* (2007) in his study of the ideal class size and its effects on effective teaching and learning in Ghana concluded that class sizes of above 40 have negative effects on students' achievement. However, small class size alone does not ensure a good education but the quality of the teaching, the school leadership, the size of the school, the amount of parent involvement and other factors are important to consider too (UNESCO, 2008).

2.4.7 Time for learning in school

Time management skills are also important to academic success. Time management has been defined as clusters of behavioural skill sets that are important in the organization of study/course load (Smith, 1999). Time management skills include activities performed by students such as planning in advance, prioritizing work, test preparation, and following schedules (Walker and Siebert 1980). Higher academic performance may be achieved by

balancing time management and study techniques effectively. In this study the time management domain was operationalized as the ability of students to juggle leisure and study time to prepare for their examinations (Britton and Tesser, 1991).

Under community and government built secondary schools, time for learning seemed to be the factors, which influence academic performance. Related studies in Tanzania have also dealt with time as an input in learning process. Keith (1982) reported that teachers felt that leadership styles that enhanced academic performance include a balance in the use of time for academic, and other related activities which made their students perform well in examinations. Holmes and Croll (1989) investigated the effects of time spent on homework/tests on subsequent performance in which for example. Aksoy and Link (2000) concluded that an increase in time spent on homework/tests had a positive effect on students' performance.

In education, time is a resource that refers to human factors. Time for learning in academic institutions is the amount of time available for students to gain knowledge. Effective schools are time conscious, and a large percentage of the school day is devoted to academic subjects at every level. Time has been significantly associated with the outcome of students' achievements (Bloom, 1974). Therefore, good teaching is a time consuming task and teachers should recognize that time is a necessary investment if students are to learn satisfactorily. The amount of time devoted to academic activities is considered to be an important variable in effective teaching and learning process, because it would affect students' academic performance in the community- and government-built secondary schools.

2.4.8 Availability of library and books

Availability of library and books is crucial for any school academic performance. The quality of teaching and learning is influenced by adequate resources including well planned, up to date materials, well kept school library and equipments. As Williams and Wavell (2001) pointed out, traditional evaluations of library services have focused on outputs relating to expenditure, resources and use rather than on service outcomes. Performance indicators have been identified in relation to student achievement, framed in terms of performance on reading tests rather than in terms of curricular goals or broader learning outcomes. Hence, the need to gain a better understanding of the nature of the contribution of school libraries to student learning is important. The school libraries have to be adequately staffed and resourced, for them to have the expected impact on student learning and performance (Oberg, 2001).

Along with changes in the amount and quality of information potentially available to students, and the increasingly sophisticated technological means of accessing this information, the most significant change for school libraries in terms of educational practice has been the shift from a content-based education to an outcomes-based education (Oberg, 2001). Whereas a content-based education focuses on what students have been taught, an outcomes-based education focuses on what students have learned; that is, on their skills and understandings. For example, Loertscher (1999) looks at the growing popularity of constructivism, which encourages students to take control of their own learning. Also, a Kuhlthau (1993) talk about the constructivist theory of learning, which builds on what students already knows and actively involves them with a range of resources. Hence, these changes in approaches to teaching and learning require that school libraries are given priority.

2.4.9 Ownership of schools

In Tanzania, individuals, religious organizations, government, NGOs, communities together with religious organizations, and communities in collaboration with the government own secondary schools. The partnership between communities and the government in owning secondary schools is just recent in Tanzania (MoEVT, 2000). Secondary schools differ much in a number of aspects including quality and quantity of school infrastructure, facilities, quality and quantity of teachers, characteristics of students and students' academic performance, which are among the observed factors that bring differences is school ownership. Kweka *et al.* (2000) stated that the type of ownership and the resources invested in a school contribute much to students' academic performance.

2.4.10 Source of school funds

The construction of secondary schools by local communities, in the face of extensive poverty and limited government support, is indicative of the high social demand for secondary school education (URT, 1995). Since demand for education and ability to construct schools is not evenly distributed, the growth of community schools has increased regional disparities (MoEVT, 2004). Despite its relative neglect in terms of funding, both from the government and from donors, and its low profile within the national development vision, *Vision 2025*, the secondary school system grew considerably from 1999 to 2004 with the majority of the growth being accounted for by new community-built government day schools (URT, 1999). The main sources of funds in the community and government -built secondary is through community participation, local government contributions, government through internal and external sources and from development partners. Public financing of secondary school education depend on the government. Highly centralized government tend to use central funding, while regional

and local authorities depend on local funding as authorities impose taxes (Mushashu, 2000).

However, reforms in the education sector encourage reforms in financing education by encouraging individuals and NGOs to invest in the education sector (Mosha, 2006). Another source for financing secondary school education is through partnership. Different sectors finance secondary education in partnership through partnering with international and national institutions funded mobilized to finance education (Glewwe and Jacoby, 1994). The source of school funds has a relationship with the academic performance in the community- and government-built secondary schools because funds are needed to buy school facilities and pay salaries of teachers. Woessmann (2003) point out that there is a direct link between the quality of education provided and the amount of finance provided for such a provision. Fernandez and Rogerson (2003) have the same observation when they argue that the quantity or the quality of education has a direct link to financial support. They further argue that when the quantity or the quality of education is increased, financial support generally needs to be increased too.

2.4.11 Distances to schools

How far is the school from students' homes to learning materials such as internet booths and libraries? How long do students take to get to school? Most of the community and government built secondary schools are far away from people's homes and essential learning resources. The increasing demand for secondary education has forced the opening up of more secondary schools, which are likely to be ineffective due lack of resources (URT,1995). Malekela (1983) found that access to secondary education was highly determined by the social and economic status of individual families in Tanzania. Students sometimes have to travel long distances before they get to schools decreasing their productivity because they become tired. Long distances to schools promote truancy

among students, resulting in missing the early morning lessons which in many secondary schools is mathematics (<http://www.unesco.org/education/en/ev.UNESCO> 2005 visited on 1/5/2008).

The literature shows that availability of teaching and learning materials, number of qualified teachers, instructional methods, students' assessment, size of class, time for learning, availability of library and books, ownership of school, school teaching and learning environment, source of school funds and distance to schools influencing students' academic performance in community and government built secondary schools in Mbeya municipality.

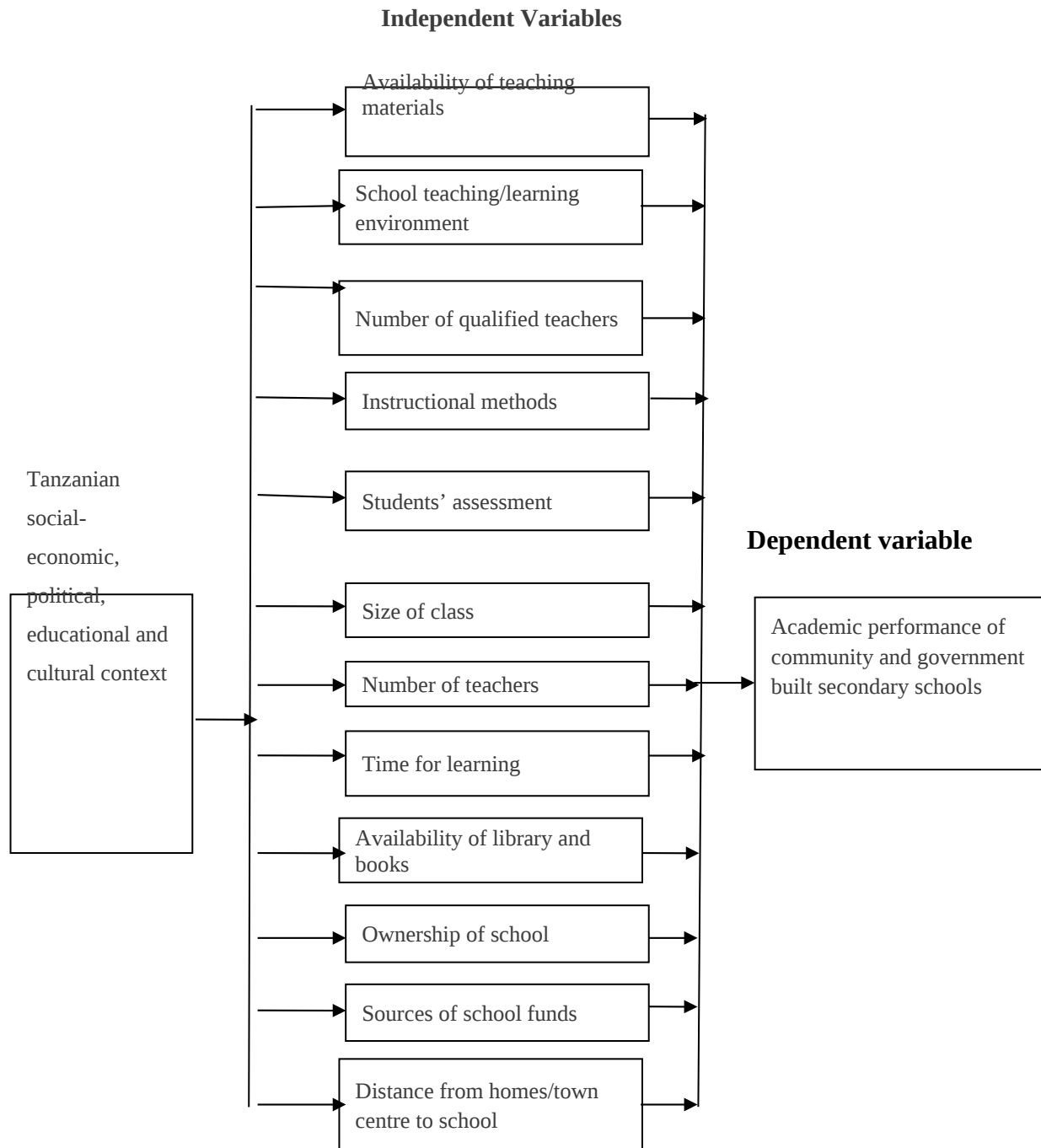


Figure 1: Conceptual framework of factors that influence academic performance of community and government built secondary schools in Mbeya municipality, Tanzania.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology which was used in this study. The chapter covers the research design and approach, sampling techniques used, nature of the sample and the population involved, the geographical area of the study, methods of data collection and the relevant instruments used as well as the methods used in data analysis.

3.2 Description of the Study Area

This study was conducted in Mbeya Municipality. Mbeya municipality is one of the eight districts of Mbeya region which is located at latitude: (8°54'0.000"S), longitude; (33°27'0.000"E). The Mbeya region lies between latitudes 7° and 9° South of Equator, and between longitudes 32° and 35° East of Greenwich. It covers an area of 63 420 sq. km. The municipality is bordered, to the North by the Mbeya Rural district, to the East by the Rungwe district, to the South by the Ileje district and to the West by the Mbozi district (http://en.wikipedia.org/wiki/Mbeya_Region, visited on 30/07/2009). With thirty six wards, the municipality has a population of 266 422 people. This population account for 9.5 % of the total population of Mbeya region, estimated to be above 2.8 million (URT, 2002).

With its location in the high altitude of 848m (above sea level), availability of rainfall averaging 1650mm per year is common, mean annual temperature ranges of between 16°C in the highlands and 25°C in the lowlands areas that are relatively fertile (http://en.wikipedia.org/wiki/Mbeya_Region, visited on 30/07/2009). Most people in this area engage agriculture as smallholder farmers growing maize, beans, potatoes, coffee and

vegetables. Other economic livelihood activities of the people include petty businesses, transport and manufacturing industries.

The growth of many economic activities in the area has also influenced population increase and the nature of settlement patterns, which partly determines the distribution of social infrastructures including schools and hospitals (<http://www.tzonline.org/pdf/Mbeyareg.pdf>, visited on 30/07/2009). This area of the study was selected because it has many recently community built schools which offer secondary education along with the government built schools. Secondly, the choice was also made of the fact the academic performance in the community schools, however, is relatively low. There are 210 secondary schools, of which four are government built secondary schools, 206 are community built secondary schools in Mbeya region (Mbeya REO, 2009).

Apparently, most of the government-built secondary schools are located in the urban areas, while the recently community-built secondary schools are found in the outskirts of the city and in remote areas with poor infrastructure access. These schools have both few human and physical resources available such as teachers, learning and teaching materials and laboratories and consequently, their academic performances, regionally and nationally appeared to be lower than of the government-built secondary schools (http://www.tenmet.org/public_html/Ndabise%20SEDP.pdf, visited on 30/07/2009). This study therefore sought to examine factors that influenced academic performance in these schools.

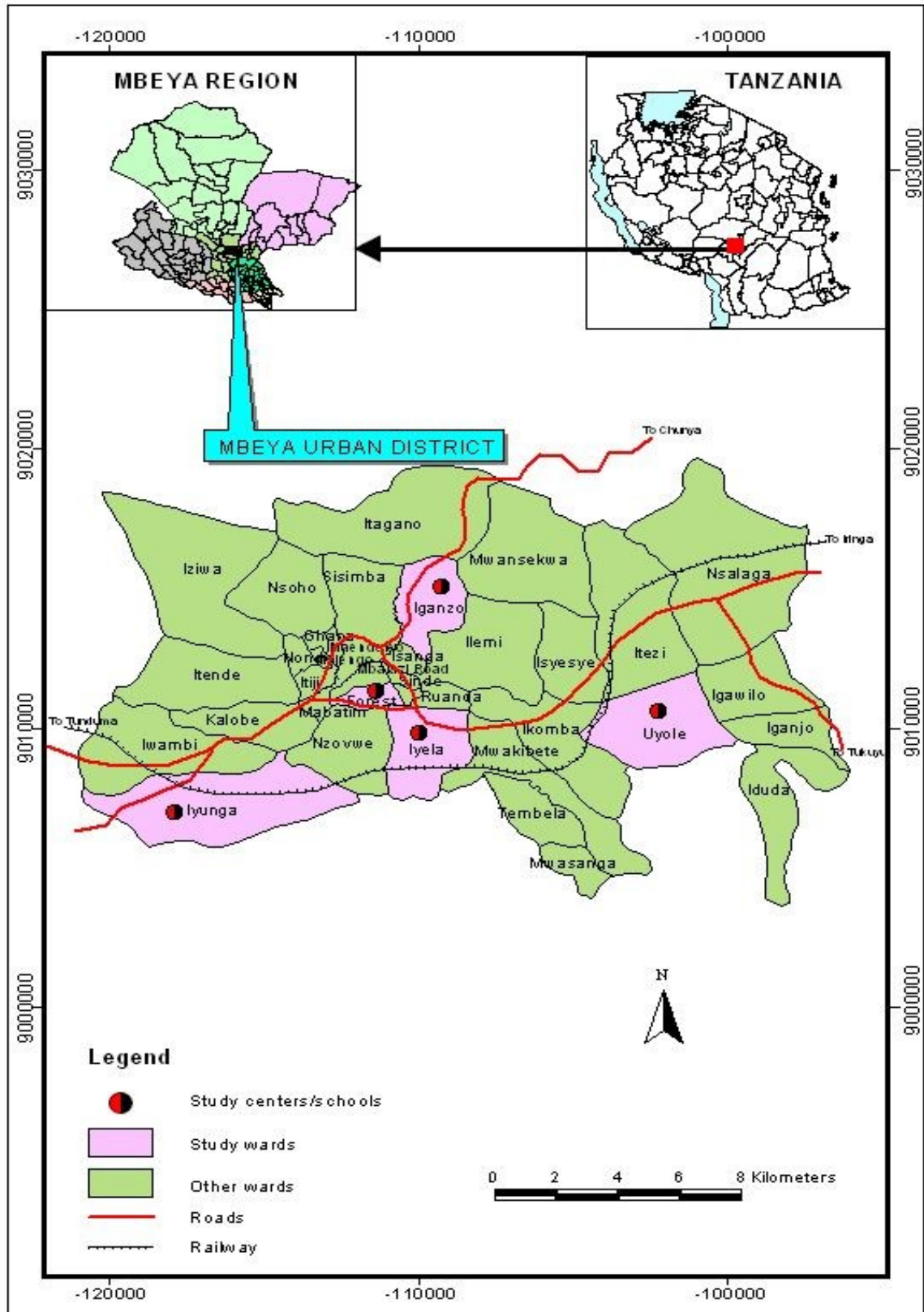


Figure 2: A map of Mbeya municipality showing wards and study schools

3.3 Research Design

This study employed the survey research design. More specifically, this study employed the cross-sectional survey approach, which involved collection of data at one point in time (Babbie, 1990). This quantitative research design is claimed to be relevant, effective and most appropriate when one seeks to understand the best predictors of outcomes (Creswell, 2003). As this study seeks to comparatively understand factors that greatly influence academic performance in community and government built secondary schools, the cross-sectional survey approach is more likely to be appropriate for the study. This design is relatively feasible, economical, and data collected could easily be analyzed to determine relationship between variables.

3.4 Study Population

In research, population includes all members, or individuals or things of a specific group that fit certain specification (Keya *et al.*, 1989). The target population in this study included teachers, students from community and government built secondary schools, education administrators, as well as members of communities in Mbeya municipality. Mbeya municipality has 29 secondary schools from which 26 were community built secondary schools and three were government built secondary schools (Mbeya REO, 2009). Therefore, five secondary schools were drawn from 29, whereby there were community built secondary schools and two government built secondary schools. Of the 3500 students, 375 (10.7%) were selected from community and government built secondary schools. A total of 55 teachers were selected from 125 teachers from community and government built secondary schools. 10 education administrators and 10 community members were included in the study

3.5 Sample Size and Sampling Method

Sampling involves procedures by which some members of the population in the study are selected to represent the entire population (Keya *et al.*, 1989). From the target population in this study, the sample included two purposively selected government built secondary schools; three community built secondary schools randomly selected from a list of 26 secondary schools.

Names of the 26 community built secondary schools were arranged alphabetically and assigned with numbers serially whereby using systematic random sampling three schools were selected. For the government built secondary schools, out of the three schools, two were purposely selected; the criterion for schools to be selected was because both had ordinary level school students. In each of the five selected secondary schools, 25% of girls and boys in Form II and Form IV were randomly selected from the students' attendance lists in the respective forms by using simple random sampling technique whereby a table of random numbers was used (<http://www.evaluationwiki.org/index.php>, visited on 28/05/2010). The table of random number also used to obtain female and male teachers who were involved in the study, while education administrators and community respondents were purposively selected. In total, the study involved a sample size of 375 students and 55 teachers from community and government built secondary schools, 10 educational administrators and 10 community members in Mbeya municipality.

Table 1: Number of interviewed students (N=375)

| School | Number of Form II (N=212) | | Number of Form IV (N= 163) | | Total |
|--------------|---------------------------|--------------|----------------------------|--------------|------------|
| | Boys (n=137) | Girls (n=75) | Boys (n=75) | Girls (n=68) | |
| Iyunga | 48 | 0 | 40 | 0 | 88 |
| Mbeya | 46 | 20 | 20 | 29 | 115 |
| Iganzo | 10 | 15 | 10 | 12 | 47 |
| Samora | 20 | 26 | 12 | 14 | 72 |
| Uyole | 13 | 14 | 13 | 13 | 53 |
| Total | 137 | 75 | 95 | 68 | 375 |

3.6 Study Validity

A study is said to be valid if one can draw meaningful and useful inferences from scores on the instruments (Creswell, 2003). Both content validity and concurrent validity were checked in this study to ensure the items measured the content they were intended to measure, and whether or not the results correlated with other results, respectively. To ensure content validity, each survey instrument was examined by the supervisor, two staff of the agricultural education and extension department at Sokoine University of Agriculture, two school headmasters, two secondary school teachers and peer debriefing of fellow students. Some items in the instruments were then restructured, reconstructed and others deleted. Furthermore, findings from this study were cross-checked against those from other secondary data to ensure concurrent validity.

3.7 Reliability

Reliability in research refers to whether the items' responses are consistent across constructs and whether scores are consistent over time. Internal consistency is a measure of how well each item relates to other items, thus homogeneity of items of the instrument, and how well they relate (Eagly & Chaiken, 1993). So, the internal consistency reliability of an instrument is estimated by calculating how well the items that test the same

construct yield the same results. To ensure reliability, a pilot study was necessary the pilot study involving two community-built and two government-built secondary schools-Iduda, Iganzo, Mbeya and Iyunga respectively in Mbeya municipality which has similar socio-economic and demographic characteristics to the study area.

Names of the 26 community-built secondary schools were arranged alphabetically and assigned with numbers serially whereby using systematic random sampling three schools were selected. For the government built secondary schools, out of the three schools, two were purposely selected; the criterion for schools to be selected was because both had ordinary level school students. The pilot test involved respondents close to 10% of the target sample (Mugenda and Mugenda 1999). Questionnaires on some items were administered in the schools selected for pilot study and computed for alpha-Cronbach coefficient. When the results were computed, scores in one item correlated with scores in other items at the Cronbach's Alpha Coefficient of 0.72, which is in line with recommended levels (Fraenkel and Wallen, 2000). If the alpha-Cronbach coefficient is above 0.6, then it is a desirable one demonstrating that items are homogeneous hence reliability on samples used in the study.

3.8 Data Collection

Primary data was obtained using questionnaires, FGD, observation check-list, while secondary data was collected from various documents, journals, books, the internet, websites, reports and other written materials relating to community and government built secondary schools. Questionnaires composed of close and open ended questions were administered to students and teachers alike, while the observation check-list was used to elicit information from education administrators in community and government built secondary schools, districts and region offices to elicit data on the prosperity, problems,

challenges and solutions towards students' academic performance in community-and government-built secondary schools.

Observations and FGDs were used by the researcher to complement data obtained using questionnaires. Observation is a procedure by which the observer notes and records what is occurring or what has occurred in some situations (Kathuri and Pals, 1983). The observation schedule was used to draw out data on schools inputs such as number of classrooms, laboratories, staff houses, availability of library(ies), school learning processes and students' academic performance. As a tool for data collection, the observation schedule helps in giving insight and validation of information (Russel, 1995). Observation was done on the same day when questionnaires were delivered and administered.

A focus group discussion is a form of research instrument in which a group of people are asked about their perceptions, opinions, beliefs and attitudes towards a product, service, concept, idea, or packaging. Questions are asked in an interactive group setting where participants are free to talk with other group members (Joppe, 2000). During the study, FGDs were employed to elicit information from community members around Mbeya municipality, teachers and students separately in regard to their perceptions towards academic performance in community and government built secondary schools. It was also used to explore peoples' perceptions on community built secondary schools.

3.9 Data Analysis

The process of data analysis involves making sense out of text data collected. This was done through organising and breaking data into manageable units, and synthesizing them to make meaningful patterns. These response patterns were then coded and analyzed using

the Statistical Package for Social Sciences (SPSS). Descriptive statistics such as frequencies, Chi-square and cross tabulations were used to summarize the information for interpretation; a cross-examination was then done against the secondary data to check their validity, reliability and their implication to the expected outcomes. Descriptive statistics such as frequencies and percentages were used to obtain variability among different variables. Chi-square test was performed to investigate whether there were significant differences between community and government-built secondary schools in academic performance. The multiple linear regression models were used to determine the relationship between the dependent and independent variables.

CHAPTER FOUR

4.0 RESULTS AND DISCUSSION

This chapter presents findings of the study conducted to investigate factors that influence students' academic performance in community and government built secondary schools in Mbeya municipality. The study had the following specific objectives: assess the adequacy of school inputs; examine the existing learning process; evaluate and compare students' academic performance in Form II and Form IV National Examinations; as well as identify people's perceptions on community built secondary schools. The study results presented in this chapter were based on primary and secondary data sources. The chapter provides socio-demographic characteristics of the respondents, the available of teaching and learning materials and school learning environment. Others were number of qualified teachers, size of class, students' assessments, time for learning in school, instructional methods, source of school funds, distance from home to school, and distance from school to town centre. Also, there are tables that show students' academic performance in Form II and Form IV National Examinations Results from 2006 to 2008. Lastly, the chapter presents the respondents' perceptions on community built secondary schools.

4.1 Socio Demographic Characteristics of the Respondents

The socio-demographic characteristics of respondents shown in Table 2 indicate that there were 32 (58.2%) male teachers and 23 (41.8%) female teachers. Of the 375 students, 236 (62.9%) were male students and the remaining 139 (37.1%) were female students. Of the 375 students, 188 (50.1%) were Form II students and the remaining 187 (49.1%) were Form IV students. Of the 55 teachers, 37 (67.3%) were diploma graduates and about a third (32.7%) had degree level of education. Over half, 218 (50.9%) of the total

respondents had age ranging between 15 and 20 years while 157 were between 21 to 25 years and all teachers were above 25 years of age. Community built secondary schools had more male teachers than female teachers, while government built secondary schools had about equal numbers of male and female teachers. Of the 24 teachers in community built secondary schools, 16 (66.7%) were males, and eight (33.3%) were females, while of the 31 teachers from government built secondary schools, 16 (51.6%), 15 (48.4%) were males and females teachers, respectively. Of the 172 students from the community built secondary schools, 101 (58.2%) were males and 71 (41.8%) females, while of the 203 students from government built secondary schools, 135 (66.5%) were male and 68 (33.5%) female students.

The study found that community built secondary schools had more teachers with diploma level of education and few with degrees, while in the government built secondary schools there was a balance between teachers with diploma and degree levels of education. Probably this could be due to allocation of teachers by the government in the government built schools compared to those in the community built secondary schools, which employment of teachers depended on their availability.

Table 2: Socio-demographic characteristics of the respondents (N=430)

| Variable | | Community built sec school N (%) | Government built sec school n (%) | Total N (%) |
|------------------------|----------------|--|---|----------------|
| Sex | | | | |
| Teachers | Male | 16 (66.7) | 16 (51.6) | 32 (58.2) |
| | Female | 8 (33.3) | 15 (48.4) | 23 (41.8) |
| Students | Male | 101 (58.2) | 135 (66.5) | 236 (62.9) |
| | Female | 71 (41.8) | 68 (33.5) | 139 (37.1) |
| Age | | | | |
| Students | 15 to 20 years | 108 (25.1) | 110 (25.6) | 218 (50.9) |
| | 21 to 25 years | 88 (20.5) | 69 (16.0) | 157 (36.5) |
| | > 25 years | 24 (95.6) | 31 (7.2) | 55 (12.8) |
| Education level | | | | |
| Teachers | Diploma | 20 (83.3) | 17 (54.8) | 37 (67.3) |
| | Degree | 4 (16.7) | 14 (45.2) | 18 (32.7) |
| Students | Form II | 112 (26.0) | 76 (17.7) | 188 (50.1) |
| | Form IV | 99 (23.0) | 88 (20.5) | 187 (49.1) |

4.2 Availability of Teaching and Learning Materials

Availability of teaching and learning materials by school are shown in Table 3. The availability of teaching and learning materials referred to textbooks, reference books, teaching guides, supplementary books, journals, magazines and newspapers. In almost all cases inquired, students and teachers from government built secondary schools indicated that teaching and learning materials were enough as shown by 135 (66.5%), 114 (56.2%), 113 (55.7%) 117 (57.6%) and 114 (56.2%) students in geography, physics, text books, reference books and laboratory equipments, respectively and 17 (54.8%), 16 (51.6%), 17 (54.8%), 18 (58.1%) and 16 (51.6%) teachers in mathematics, geography, textbooks, reference books and laboratory equipments, respectively.

Generally, students and teachers in community built secondary schools claimed that teaching and learning materials were not enough. The differences seen could be due to the fact that government built secondary schools are allocated funds to acquire teaching and

learning materials compared to the community built schools and this could be a reflection on the results seen in most community built secondary schools.

Teaching and learning processes bases on reflection, experience, and instructions upon the availability of teaching and learning materials (Johnson *et al.*, 2004). Although, Altbach (1982) pointed out that, there was a problem of textbooks in developing countries' schools where in many cases students either lacked textbooks or were forced to share a few available textbooks. Community built secondary schools seemed to suffer more compared to government-built secondary schools. The importance of textbooks and other instructional materials for teaching and learning of students is evident and lacking them greatly affects student performance. The differences in views on the availability of teaching and learning materials in schools between teachers and students, except for students in physics, were found to be statistically significant at $p \leq 0.01$

Table 3: Availability of teaching and learning materials (N=430)

| Variable | Community built sec- schools | | Government built sec- schools | | χ^2 | p-value |
|------------------------------|-----------------------------------|---------------------|-------------------------------------|------------------------|----------|---------|
| | Teachers(n=24) Students(n=172) | Not enough n (%) | Teachers (n=31) Students (n=203) | Not enough n (%) | | |
| Mathematics | | | | | | |
| Teachers | 6 (25) | 18 (75) | 17 (54.8) | 14 (45.2) | 24.77 | 0.009** |
| Students | 64 (37.2) | 108 (62.8) | 74 (36.5) | 129 (63.5) | 132.65 | 0.000** |
| Geography | | | | | | |
| Teachers | 1(4.2) | 23 (95.8) | 16 (51.6) | 15 (48.4) | 46..87 | 0.000** |
| Students | 65 (37.8) | 107 (62.2) | 135 (66.5) | 68 (33.5) | 56.78 | 0.004** |
| Physics | | | | | | |
| Teachers | 4 (16.7) | 20 (83.3) | 9 (29.0) | 22 (71.0) | 38.98 | 0.000** |
| Students | 79 (45.9) | 93 (54.1) | 114 (56.2) | 89 (43.8) | 159.76 | 0.326* |
| Text books | | | | | | |
| Teachers | 9 (37.5) | 15 (62.5) | 17 (54.8) | 13 (41.9) | 28.77 | 0.000** |
| Students | 48 (27.9) | 113 (65.7) | 113 (55.7) | 90 (44.3) | 24.54 | 0.000** |
| Reference books | | | | | | |
| Teachers | 5 (20.8) | 19 (79.2) | 18 (58.1) | 13 (41.9) | 27.63 | 0.000** |
| Students | 48 (27.9) | 116 (67.4) | 117 (57.6) | 86 (42.4) | 28.78 | 0.000** |
| Laboratory equipments | | | | | | |
| Teachers | 7 (29.2) | 17 (70.8) | 16 (51.6) | 14 (45.2) | 26.64 | 0.000** |
| Students | 55 (32.0) | 117 (68.0) | 114 (56.2) | 89 (43.8) | 42.54 | 0.000** |

* = not significant at $p > 0.01$ ** = statistically significant at $p < 0.01$

4.3 School Learning Environment

Views of students and teachers on their school learning environment are shown in Table 4. In the study the respondents were asked if the number of available students matched with the existing facilities in the community-and government built secondary schools in Mbeya municipality. Most teachers showed a concern that the number of students available did not match with the existing facilities in their schools as shown by 25 (80.6%), and 22 (91.6%) teachers from government and community built secondary schools, respectively. Similarly, most students also showed that their number did not match with the facilities

available in their schools, as indicated by 137 (78.76%) and 150 (73.9%) of the students from community and government built secondary schools, respectively. One third, (60.5%) and 136 (66.9%) of the students from the community built secondary schools and government-built secondary schools reported that their learning environment was not conducive.

When asked if the learning environment was likely to affect the students' academic performance, most teachers indicated that such a learning environment could greatly affect the students performance as shown by 17 (70.8%) and 25 (80.6%) teachers from community and government built secondary schools, respectively. Again, most students, 157 (91.3%) and teachers, 17 (70.8%) from community built secondary schools showed that there were no enough houses for the teachers. A similar trend was reported in the government built secondary schools by both teachers and students. Unavailability of houses for the teachers affects the performance of students.

Table 4: School learning environment (N= 430)

| Variable | Community built sec-schools | | Government built sec-schools | | χ^2 | p-value |
|--|-------------------------------------|----------------|-------------------------------------|-------------|----------|---------|
| | Teachers (n=24) Students (n=172) | | Teachers (n=31) Students (n=203) | | | |
| | Yes n (%) | No (%) n | Yes n (%) | No n (%) | | |
| Existing facilities | | | | | | |
| Teachers | 2(8.3) | 22(91.7) | 6(19.4) | 25(80.6) | 23.03 | 0.000** |
| Students | 35(20.3) | 137(78.7) | 53(26.1) | 150(73.9) | 24.02 | 0.000** |
| Learning environment conducive | | | | | | |
| Teachers | 5(20.8) | 19(79.2) | 10(32.3) | 21(67.7) | 49.56 | 0.000** |
| Students | 68(39.5) | 104(60.5) | 67(33.0) | 136(66.9) | 24.02 | 0.000** |
| Learning environment effect | | | | | | |
| Teachers | 17(70.8) | 7(29.2) | 25(80.6) | 6(19.4) | 46.87 | 0.000** |
| Students | 123(71.5) | 49(28.5) | 55(27.1) | 148(72.9) | 28.68 | 0.000** |
| Teachers houses | | | | | | |
| Teachers | 7(29.2) | 17(70.8) | 13(41.9) | 18(58.1) | 46.87 | 0.000** |
| Students | 15(8.7) | 157(91.3) | 66(32.5) | 137(67.5) | 46.87 | 0.000** |
| Effect of availability of teachers houses | | | | | | |
| Teachers | 19(79.2) | 5 (20.8) | 21(67.7) | 10(32.3) | 47.65 | 0.000** |
| Students | 89(51.7) | 83(48.3) | 31(15.7) | 172(84.3) | 46.78 | 0.000** |

** = statistically significant at $p < 0.01$

The differences between students and teachers on views of school learning environment and its influence on students' performance were found to be statistically different and significant at $p \leq 0.01$. Similar findings were reported by Mlozi and Mwajombe (2007) who revealed that conditions or environment of the school affects students' academic performance. The school learning environment as an input must be conducive to facilitate students' learning, hence good performance. Boma (1980) contends that improving quality and quantity of school learning environment will normally improve attendance, academic performance and completion rates. Ishumi *et al.* (1995) conducted a study on the quality of education provided in community-initiated secondary schools in comparison with those in state-maintained schools with respect to current costs. The study found that not all

community-built secondary schools in Tanzania are well gifted in teachers supply and competence, the school buildings and the environment they create for learning, all of which constitute factors of quality education hence good academic performance.

4.4 Adequacy of School Facilities

Respondents were asked about the school learning environment adequateness as shown in Table 5. Of the 31 teacher respondents from government built secondary schools, 12 (38%) agreed that desks were about adequate, while for those in the community built secondary schools, 12 (50%) indicated that desks were not adequate. Of the 55 teacher respondents, 30 (54.5%) reported that there were no adequate desks in the schools.

Opinions on adequacy of school facilities, like desks, chairs, tables, classrooms, laboratories, library, dormitories and toilets shown in Table 5 indicate that most of the facilities were not adequate to match with either the number of students and or requirements for the subjects. Most students both from the government and community-built secondary schools indicated that desks were not adequate as shown by 103 (50.7%) and 107 (62.2%) of students from the government and community built secondary schools, respectively.

On availability of chairs, few teachers 13 (41.9%) and 9 (37.5%) from government and community built secondary schools agreed that chairs were about adequate, respectively. Similarly, most 128 (74.4%) students from community built secondary schools indicated that chairs were not adequate, while more than half (52.7%) of the students from government built secondary schools showed that chairs were adequate. Availability of funds disbursed by government to its schools greatly assists in having enough facilities,

while the case could be different with community built secondary schools where sometimes they have to wait funds collected from parents.

The study results showed that there were shortages of tables in both the community and government built secondary schools. For instance, of the 55 teachers, 14 (58.3%) and 18 (58.1%) teachers from community and government built secondary school, respectively, and 152 (88.3%) of students from community built secondary schools, indicated that tables were not adequate.

Also, the study asked respondents if classrooms were adequate or not in the community and government built secondary schools. Generally, teachers and students both from government built secondary schools and from community built secondary schools indicated that classrooms were not adequate as shown by 16 (66.7%) and 18 (58.1%) of teachers from community built and government built secondary schools, respectively. One hundred and thirty two (76.7%) and 106 (52.2%) of the students from the community and government built secondary schools indicated that classrooms were not adequate. Recruiting many students with an intention of training more students at secondary education level, might have forced many schools to have inadequate classrooms. The differences in views of adequacy of desks, chairs, tables and classrooms between students and between teachers were statistically significant at $p \leq 0.01$.

This study too asked the respondents about the adequacy of laboratories in their secondary schools. Of the 24 teachers from the community built secondary schools, 18 (75%), and of the 172 students, 126 (97.5%) reported that laboratories were not adequate. Of the 16 (51.6%) teachers and 104 (51.2%) of students from government built secondary schools

showed that laboratories were adequate. Library facilities were reported inadequate by students and teachers from both community and government built secondary school (Table 5).

Table 5: Adequateness of school facilities (N=430)

| Variable | Community built sec-schools | | Government built sec-school | | χ^2 | p-value |
|-------------------|-----------------------------------|--------------------------|-----------------------------------|--------------------------|----------|---------|
| | Teachers(n=24) Students(n=172) | | Teachers(n=31) Students(n=203) | | | |
| | About adequate n (%) | Not adequate n (%) | About adequate n (%) | Not adequate n (%) | | |
| Desks | | | | | | |
| Teachers | 9(37.5) | 12(50.0) | 12(38.0) | 18(58.1) | 24.88 | 0.000** |
| Students | 65(37.8) | 107(62.2) | 98(48.3) | 103(50.7) | 22.58 | 0.000** |
| Chairs | | | | | | |
| Teachers | 9(37.5) | 12(50.0) | 13(41.9) | 15(48.4) | 26.15 | 0.001** |
| Students | 40(23.2) | 128(74.4) | 107(52.7) | 95(46.7) | 128.2 | 0.000** |
| Tables | | | | | | |
| Teachers | 9(37.5) | 14(58.3) | 12(38.7) | 18(58.1) | 28.20 | 0.000** |
| Students | 15(8.7) | 152(88.3) | 105(51.7) | 97(47.8) | 130.8 | 0.002** |
| Classrooms | | | | | | |
| Teachers | 8(33.3) | 16(66.7) | 13(41.9) | 18(58.1) | 24.60 | 0.000** |
| Students | 38(22.1) | 132(76.7) | 96(47.3) | 106(52.2) | 108.2 | 0.000** |
| Laboratory | | | | | | |
| Teachers | 6(25.0) | 18(75.0) | 16(51.6) | 15(48.4) | 22.59 | 0.000** |
| Students | 37(21.5) | 126(78.5) | 104(51.2) | 99(48.8) | 155.0 | 0.000** |
| Library | | | | | | |
| Teachers | 3(12.5) | 21(87.5) | 16(51.6) | 14(45.2) | 23.57 | 0.000** |
| Students | 26(15.1) | 145(84.3) | 95(46.8) | 106(52.2) | 188.0 | 0.000** |
| Dormitory | | | | | | |
| Teachers | 1(4.1) | 23(95.9) | 2(6.5) | 28(90.3) | 17.54 | 0.009** |
| Students | 17(9.9) | 150(87.2) | 5(2.5) | 196(96.6) | 23.73 | 0.000** |
| Toilets | | | | | | |
| Teachers | 6(25.0) | 18(75.0) | 14(45.2) | 16(51.6) | 22.59 | 0.000** |
| Students | 5(2.9) | 166(96.5) | 80(39.4) | 121(59.6) | 169.4 | 0.023* |

** = statistically significant at $p < 0.01$

* = not significant at $p > 0.01$

When asked on adequateness of library in the community and government built secondary schools in Mbeya municipality, of the 24 teachers from the community-built secondary schools, 21 (87.5%) said that library facilities were not adequate in their schools, while of the 31 teachers from government built secondary schools, 14 (45.2%) said that library were not adequate. Of the 172 students from the community-built secondary schools, 145 (84.3%) indicated that there were no adequate libraries in their schools while of the 203 students in the government built secondary schools, 106 (52.2%) reported that there were inadequate library facilities in their schools. The findings from the study showed that most secondary schools did not have adequate library facilities, which could be one of the factors influencing students' academic performance.

The presence of well-furnished and adequate dormitories/hostels and enough toilets offer favourable conditions for teaching and learning process hence enhances students' academic performance in the schools. From this study, the respondents were asked about the condition of dormitories, hostels and toilets in the community and government-built secondary schools. Twenty three (95.9%) and 28 (90.3%) of teachers from the community built secondary schools, and government built secondary schools, respectively, indicated that there were no adequate dormitories in their schools. Similarly, 150 (87.2%) and 196 (96.6%) of the students from community and government built secondary schools also showed that dormitories were not adequate.

The same trend was shown in adequacy of toilet facilities for the schools, where of the 24 teachers from the community-built secondary schools, 18 (75%) showed that toilets were not adequate in their schools while of the 31 teachers from the government-built

secondary schools, 16 (57.6%) reported also that toilets were not adequate in their schools. Of the 375 students, 166 (96.5%) from the community built secondary schools and 121 (59.6%) from government-built secondary schools indicated that toilets were not adequate. The situation might have been caused by the increased enrollment of students in the schools that did not match with the facilities available. Differences in opinions between students and teachers on adequacy of facilities in secondary schools were statistically significant at $p \leq 0.01$.

4.5 Number of Exercises Provided for Different Subjects

Respondent's opinions on the number of exercises given to students on different subjects were as shown in Table 6. In the government-built secondary schools, of the 31 teachers, 17 (54.8%) indicated that there were no enough mathematics exercises provided. Similarly, 20 (83.3%) of the 24 community built secondary schools teachers indicated the same. On the hand of the 172 students from the community built secondary schools, 98 (57%) said that mathematics exercises provided were not enough. Contrarily, 118 (58.1%) of students from the government built secondary schools indicated that number of mathematics exercises provided were enough. The study showed that government built secondary schools had enough mathematics exercises provided compared to community-built secondary schools. This perhaps was due to set control measures and supervision in most of the government built secondary school, and differences in opinions between students and teachers were statistically significant at $p \leq 0.01$.

When asked to comment on whether exercises provided in geography subject were enough or not, 16 (51.6%) of teachers from government-built secondary schools and 20 (83.3%) from community built secondary schools. Indicated that exercises in geography subject

that were provided were not enough, contrary to the views by students from which, of the 203 students from government built secondary schools, 109 (53.7%) reported that the geography exercises provided were enough. However, of the 172 students from the community built secondary schools, 97 (56.4%) responded that the exercise on geography were not enough. Also, the study findings showed that community built secondary schools had no enough geography exercises in the process of teaching and learning, and the differences were statistically significant at $p \leq 0.01$.

Opinions on adequacy of biology exercises indicated that students and teachers from community built secondary schools showed that numbers of exercises on biology subject were not enough and differences in views between students and between teachers from community and government built secondary schools were found to be statistically significant at ≤ 0.01 . The differences observed might due to little funds allocated by community built secondary schools on acquiring facilities for science subjects.

The overall study findings revealed that there was not enough biology exercises provided to students in community built secondary schools, a situation which could hinder the students' academic performance in the schools. The situation of biology subject exercises provision in the community and government built secondary schools was statistically different at $p \leq 0.01$.

Improvement on students' academic performance in the community and government-built secondary schools in Mbeya municipality could be improved through provision of quality education by ensuring facilities are available for exercises on students side. Quality education is the complex concept that often means different things to different

stakeholders. Attempting to conceptualize quality education which leads to students' academic performance, Lugayila (2002) argues that quality is not a system element like teachers, textbooks, classrooms, pupils, but an attribute of any element that can vary according to at least one aspect or dimension. In conceptualization of education quality and students' academic performance scholars have tended to fall under four categories namely teaching and learning inputs, processes, output and education policy (Lugayila, 2002).

Table 6: Subject exercises provided in the schools (N=430)

| Variable | Community built sec-schools | | Government built sec-schools | | χ^2 | p-value |
|--------------------|-------------------------------------|---------------------|-------------------------------------|---------------------|----------|---------|
| | Teachers (n=24) Students (n=172) | | Teachers (n=31) Students (n=203) | | | |
| | Enough n (%) | Not enough n (%) | Enough n (%) | Not enough n (%) | | |
| Mathematics | | | | | | |
| Teachers | 4(16.7) | 20(83.3) | 14(45.2) | 17(54.8) | 36.47 | 0.000** |
| Students | 74(43.0) | 98(57.0) | 118(58.1) | 84(41.4) | 32.39 | 0.000** |
| Geography | | | | | | |
| Teachers | 4(16.7) | 20(83.7) | 15(48.4) | 16(51.6) | 11.56 | 0.021* |
| Students | 75(43.6) | 97(56.4) | 109(53.7) | 94(46.3) | 33.02 | 0.000** |
| Biology | | | | | | |
| Teachers | 5(20.8) | 19(79.2) | 16(51.6) | 15(48.4) | 11.55 | 0.021* |
| Students | 65(37.8) | 107(62.2) | 108(53.2) | 95(46.8) | 34.01 | 0.000** |

** = statistically significant at $p < 0.01$ * = not significant at $p > 0.01$

4.6 Language Used For Instruction in Secondary Schools

Opinions on type of language used for instruction shown in Table 7 indicate that majority, 18 (75%) of teachers from the community built secondary schools and over one third of teachers from government built secondary school showed that English was rarely used as a medium of instruction and instead a mixture of Kiswahili and English was a usual practice. Similarly, opinions were given by the students, who indicated that a mixture of

Kiswahili and English was the most used medium of instruction as shown by 101 (58.7%) and 112 (55.2%) of students from the community and government built secondary schools, respectively. The results found by this study contradicts with directives of the Ministry of education which says, the medium of instruction for secondary education shall continue to be English except for teaching of other approved languages (URT, 1995). According to the Tanzania secondary education curriculum, the medium of instruction in secondary schools is English and examinations are written in English with exception of Kiswahili (URT, 1995).

Table 7: Medium of instruction in the schools (N=430)

| Medium of Instruction | Community built sec-schools | | Government built sec-schools | | χ^2 | p-value |
|------------------------------|-----------------------------|-------------|------------------------------|-------------|----------|---------|
| | Teachers=24, Students=172 | | Teachers=31, Students=203 | | | |
| | Yes n (%) | No n (%) | Yes n (%) | No n (%) | | |
| English | | | | | | |
| Teachers | 6 (25.0) | 18 (75.0) | 18 (58.1) | 13 (41.9) | 2.57 | 0.630* |
| Students | 66 (38.3) | 101 (58.7) | 91 (44.8) | 112 (55.2) | 39.59 | 0.000** |
| English and Kiswahili | | | | | | |
| Teachers | 18 (75.0) | 6 (25.0) | 13 (41.9) | 18 (58.1) | 28.20 | 0.000** |
| Students | 101 (58.7) | 66 (38.3) | 112 (55.2) | 91 (44.8) | 61.29 | 0.000** |

* = not significant at $p > 0.01$ ** = statistically significant at $p < 0.01$

4.7 Presence of Subject Specific Clubs and Lunch Provision in Schools

Existence of subject specific clubs in secondary schools shown in Table 8 indicate that most 49 (89.1%) of the teachers and about two thirds (61.6%) of the students indicated that subject specific clubs were existing in their schools. Subject specific clubs in schools enhances the process of teaching and learning for students to achieve good academic performance in Form II and IV national examinations. The differences

between those who agreed about the declined of presence of subject clubs was found to be statistically significant at $p \leq 0.01$.

The respondents were asked about the effects of not having lunch on the students' academic performance in the community and government built secondary schools. One hundred and ninety (50.7%) students and 39 (70.9%) of the teachers indicated that when students did not have lunch at school it led to poor class attendance and hence affecting their academic performance.

Table 8: Presence of subject specific clubs and lunch provision in schools (N=430)

| Variable | Yes n (%) | No n (%) | χ^2 | p-value |
|-------------------------------|--------------|-------------|----------|---------|
| Subject clubs presence | | | 39.59 | 0.000** |
| Teachers | 49 (89.1) | 6 (10.9) | | 0.001** |
| Students | 231(61.6) | 144 (38.4) | | |
| Effect of Lunch | | | 61.29 | 0.000** |
| Teachers | 39 (70.9) | 16 (29.1) | | 0.000** |
| Students | 190 (50.7) | 185 (49..3) | | 0.000** |

** = statistically significant at $p < 0.01$

4.8 Availability of Teachers and Syllabus Completion

Views on availability of qualified teachers and syllabi coverage are presented in Table 9. Of the 55 teachers, most 54 (98.1%) indicated that there were enough qualified teachers in their schools as shown by all teachers from the government built secondary schools and 23 (95.8%) from the community built secondary schools. Of the 375 students, 361 (96.3%) agreed that there were enough qualified teachers as indicated by all of the student respondents from the government built secondary schools, and 158 (91.9%) from the community built secondary schools. Differences between teachers and between

availability of qualified teachers in schools were found to be statistically significant at $p \leq 0.01$.

When asked if the qualified teachers covered the subjects' syllabi on time, 17 (54.8%) of the teachers from the government-built secondary schools, and 11 (45.8%) from the community built secondary schools indicated that teachers were able to cover the syllabi on time. Of the 375 students, 146 (71.9%) and 97 (56.4%) students from government built secondary schools and from the community built secondary schools, respectively showed that qualified teachers covered the subjects syllabi on time. The differences in views between students were found to be statistically significant at $p \leq 0.01$. According to Windham (1988), appropriate academic and professional education qualification of teachers have an influence on academic performance of students in the secondary schools.

Table 9: Available teachers and their effect on students' academic performance (N=430)

| Variable | Community-built sec-schools | | Government-built sec-schools | | χ^2 | p-value |
|--|-----------------------------|-------------|------------------------------|-------------|----------|---------|
| | Teachers (n=24) | | Teachers (n=31) | | | |
| | Students (n=172) | | Students (n=203) | | | |
| | Yes n (%) | No n (%) | Yes n (%) | No n (%) | | |
| Cover syllabus on time | | | | | | |
| Teachers | 11(45.8) | 13(54.2) | 17(54.8) | 14(45.2) | 111.18 | 0.025* |
| Students | 97(56.4) | 75(43.6) | 146(71.9) | 57(28.1) | 88.65 | 0.000** |
| Affect positively on academic performance | | | | | | |
| Teachers | 5(20.8) | 19(79.2) | 0(0) | 31(100) | 44.92 | 0.000** |
| Students | 40(23.3) | 132(76.7) | 144(70.9) | 59(29.1) | 160.6 | 0.000** |
| Affect negatively on academic performance | | | | | | |
| Teachers | 23(95.8) | 1(4.2)) | 31(100) | 0(0) | 18.31 | 0.000** |
| Students | 158(91.1) | 14(8.1) | 117(57.6) | 86(42.4) | 75.7 | 0.000** |

** = statistically significant at $p < 0.01$

* = not significant at $p > 0.01$

4.9 Sources of Funds and Students' Academic Performance

Views on sources of funds and its effect shown in Table 10 indicated that 22 (71.0%) of the teachers from government-built secondary schools agreed that the major sources of funds was from government only, while nine (29%) said were community, government and donors. Of the 24 teachers from the community-built secondary schools 11 (45.8%) indicated that major sources of funds were community, government and donors. Of the 375 students 134 (77.9%), and 110 (54.2%) from community and government built secondary schools, respectively, showed that most funds were from both community and government while a few 18 (10.5%) students from community built secondary schools said that the major sources of funds were from the communities only and two (1%) of the students from the government-built secondary schools also had the same views.

This study found that in both community and government built secondary schools the views on contributed funds between students and teachers were found to be statistically significant at $p \leq 0.01$. Most of the respondents (students, teachers) agreed that there were financial problems in their schools as 16 (66.7%) and 22 (71.0%) of the teachers from the community and government-built secondary schools, respectively. Of the 172 and 203 students, 134 (77.9%), 107 (52.7%) students from the community and government-built secondary schools, respectively said the same. Previously, the government was the sole source of funds for running schools, and the introduction of contributions from the communities resulted in problems of not getting funds on time and sometimes communities failing to contribute their share.

**Table 10: Source of funds and their impact on student's academic performance
(N=430)**

| Source of funds | Community-built sec-schools | | Government-built sec-schools | | χ^2 | p-value |
|---|-----------------------------------|-------------|-----------------------------------|-------------|----------|---------|
| | Teachers(n=24) Students(n=172) | | Teachers(n=31) Students(n=203) | | | |
| | Yes n (%) | No N (%) | Yes n (%) | No n (%) | | |
| From community | | | | | | |
| Teachers | 4(16.7) | 20(83.3) | 2(6.5) | 29(93.5) | 25.14 | 0.000** |
| Students | 18(10.5) | 154(89.5) | 2(1.0) | 201(99) | 179.4 | 0.000** |
| From government | | | | | | |
| Teachers | 7(29.2) | 17(70.8) | 22(71.0) | 9(29.0) | 37.84 | 0.000** |
| Students | 48(27.9) | 74(72.1) | 146(71.9) | 57(28.1) | 43.44 | 0.000** |
| From Government and community | | | | | | |
| Teachers | 11(45.8) | 13(54.2) | 9(29.0) | 22(71.0) | 25.14 | 0.000** |
| Students | 134(77.9) | 38(22.1) | 110(54.2) | 93(45.8) | 40.49 | 0.000** |
| Are there financial problems in your school? | | | | | | |
| Teachers | 16(66.7) | 8(36.3) | 22(71.0) | 9(29.0) | 5.14 | 0.000** |
| Students | 134(77.9) | 16(9.3) | 107(52.7) | 93(45.8) | 62.57 | 0.000** |

** = statistically significant at $p < 0.01$

4.10 Distance of Schools from Homes/Dormitories and Learning Centres

The study assessed on how the distance to school from home, dormitories/hostels and other learning centre influenced students' academic performance in the community and government built secondary schools. The views on the influence of distance to schools presented in Table 11 indicate that students failed reporting early to schools as shown by 89 (51.7%) and 17 (79.2%) of the students and teachers from the community built secondary schools, respectively. Facilities like dormitories and hostels found in government built secondary schools made students report early in their schools as agreed by 22 (71%) and 180 (88.7%) of the teachers and students from government built secondary schools, respectively. A similar trend was shown in views for attendance in all periods as of the 24 and 31 teachers, 16 (66.7%), and 16 (51.6%) teachers from the

community and government built secondary schools, respectively. Similarly, 100 (58.1%), and 192 (94.6%) student respondents who were from the community and government built secondary schools, respectively indicated that longer distances from schools affected students attendance in all periods and the differences on views between students and teachers was found to be statistically significant at $p \leq 0.01$. The importance of learning centres and distance to the centres are also reported by Walklin (1994).

When asked whether the students in their schools were able to access internet services in town so that to improve their academic performance. Of the 55 teachers 14 (58.3%) and 20 (64.5%) teachers from community built and government built secondary schools said that students were unable to access internet services in town. A similar trend was revealed by students indicating that they were unable to access internet services in town as said by 107 (62.2%) and 116 (57.1%) students from the community and government built secondary schools, respectively. The views between students and teachers were statistically significant at $p \leq 0.01$.

Study respondents were also asked whether students were able to access library services for learning purposes in Mbeya town. Most students from community built secondary schools were unable to access library services in town as shown by 14 (58.3%) and 89 (51.7%) of teachers and students, respectively. Since many community built secondary schools have students attending schools from home, when they go home the students are given other assignments by their parents and guardians hence limiting their access to library services in town. Contrary to the government built secondary schools, their students chances of visiting libraries in town after class hours as of the 31 teachers, 26 (83.9%) and of the 203 students, 170 (83.7%) from government built secondary schools

reported so, respectively. The difference in views was found to be statistically significant at $p \leq 0.01$.

Table 11: Distance of schools from homes/hostels/learning centres and its effect on teaching (N=430)

| Variable | Community-built sec-schools | | Government-built sec-schools | | χ^2 | p-value |
|---|-----------------------------|---------------------------|------------------------------|----------------|----------|---------|
| | Teachers=24, Students=172 | Teachers=31, Students=203 | Agree n (%) | Disagree n (%) | | |
| Report at school early | | | | | | |
| Teachers | 5(20.8) | 17(79.2) | 22(71.0) | 9(29.0) | 42.78 | 0.000** |
| Students | 63(36.6) | 89(51.7) | 180(88.7) | 23(11.3) | 19.83 | 0.021* |
| Attend all class periods | | | | | | |
| Teachers | 8(33.3) | 16(66.7) | 14(45.2) | 16(51.6) | 5.06 | 0.002** |
| Students | 72(41.9) | 100(58.1) | 11(5.4) | 192(94.6) | 23.08 | 0.000** |
| Able to access internet in town | | | | | | |
| Teachers | 8(33.3) | 14(58.3) | 11(35.5) | 20 (64.5) | 10.60 | 0.001** |
| Students | 27(15.7) | 107(62.2) | 67(30.0) | 116(57.1) | 39.54 | 0.000** |
| Students access library services | | | | | | |
| Teachers | 10(41.7) | 14(58.3) | 26(83.9) | 5(16.7) | 116.7 | 0.000** |
| Students | 65(37.8) | 89(51.7) | 170(83.7) | 28(13.8) | 107.0 | 0.000** |

** = statistically significant at $p < 0.01$

* = not significant at $p > 0.01$

4.11 Comparing Academic Performance between Schools

The study also collected information on the academic performance of students in the community and government built secondary schools for a period of three years as most community built secondary schools had students in Form IV from 2006. Students' grades in the community and government built secondary were collected from the Form II and IV national examinations results of 2006, 2007 and 2008 (Table 12-19).

Table 12: Form II national examinations results of the community built secondary schools in 2006 - 2008

| | | Examination results | | | | | |
|--------|--------------------|---------------------|------------|------------|------------|------------|--------------|
| School | Year | A | B | C | D | F | Total |
| Uyole | 2006 | 0 | 36 | 91 | 61 | 44 | 232 |
| Iganzo | 2006 | 1 | 28 | 86 | 46 | 28 | 189 |
| Samora | 2006 | 1 | 35 | 101 | 55 | 14 | 206 |
| | Total | 2 | 99 | 278 | 162 | 86 | 627 |
| Uyole | 2007 | 0 | 28 | 102 | 166 | 18 | 314 |
| Iganzo | 2007 | 1 | 41 | 94 | 156 | 24 | 316 |
| Samora | 2007 | 0 | 23 | 103 | 228 | 16 | 370 |
| | Total | 1 | 92 | 299 | 540 | 58 | 990 |
| Uyole | 2008 | 0 | 7 | 52 | 70 | 48 | 177 |
| Iganzo | 2008 | 0 | 5 | 32 | 70 | 70 | 177 |
| Samora | 2008 | 0 | 14 | 80 | 60 | 34 | 188 |
| | Total | 0 | 26 | 164 | 200 | 152 | 542 |
| | Grand Total | 3 | 217 | 741 | 902 | 296 | 2 159 |

Of the 2 159 students in the community built secondary schools from 2006 to 2008 who sat for the Form II national examinations, three (0.1%) students scored grade A and 296 (13.7%) scored grade F (Table 12,13). Further, data revealed that 902 (41.8%), 741 (34.3%) and 217 (10.1%) of the students scored grade D, C, and B, respectively. Therefore, data revealed that less than half of the students in the surveyed community built secondary schools, 902 (41.8%) scored grade D, while only three students (0.1%) scored grade A from 2006 to 2008. Also, data in Table 12 show that in 2008 no student scored grade A, while in 2007 of the 990 students who sat for the Form II national examinations, only one (0.1%) student scored grade A. In 2006 of the 627 students, two (0.3%) students scored grade A (Table 12, 13).

Table 13: Form II overall grades of examinations results of the community built secondary schools in 2006 – 2008

| Year | Examination results (N = 2159) | | | | | Total |
|--------------|--------------------------------|-------------------|------------------|------------------|------------------|--------------|
| | A | B | C | D | F | |
| | n (%) | n (%) | n (%) | n (%) | n (%) | |
| 2006 | 2 (0.3) | 99 (15.3) | 278 (42.9) | 162 (25) | 86 (13.3) | 627 |
| 2007 | 1(0.1) | 92 (8.9) | 299 (28.8) | 540 (52.1) | 58 (5.6) | 990 |
| 2008 | 0 (00) | 26 (4.6) | 164 (29.2) | 200 (35.7) | 152 (27.1) | 542 |
| Total | 3(0.1) | 217 (10.1) | 741(34.3) | 902(41.8) | 296(13.7) | 2 159 |

Of the 990 students in the community built secondary schools who sat for Form II national examinations in 2007 half 540 (52.1%) scored grade D, whereas from 2006 to 2008, of the 627 students, 278 (42.9%) scored grade C and 200 (35.7%) of the 542 students scored grade D (Table13). Therefore, total overall grade of Form II examinations results of the community built secondary schools for the 902 (41.8%) was grade D. This suggested that students' performance in the community-built secondary schools in the Form II national examinations from 2006 to 2008 was poor. In order to make comparative analysis, students' academic performances in the Form II national examinations in government built secondary schools from 2006 to 2008 are presented in Table 14.

Data in Table 14 reveals that from 2006 to 2008, of the 1 657 students in the government built secondary schools who sat for the Form II national examinations, seven (0.4%) scored grade A, while, 346 (20.7%), 691(41.3%) scored grades B and C, respectively. Further, data reveals that of the 1 657 students, 465 (27.8%) scored grade D and only 148 (8.8%) scored grade F. Therefore, data reveals that less than half of the students in the surveyed government built secondary schools, 691 (41.3%) scored grade C and few, seven (0.4%) scored grade A. Six students of the 289 students were from Iyunga secondary

school (Table 14,15). When data in Table 13 and 15 is compared, it reveals that less than half of the students in the surveyed community built secondary schools, 902 (41.8%) scored grade D in the Form II national examinations from 2006 to 2008, while in the government built secondary schools, 465 (27.8%) scored grade D (Table14, 15). This suggested that students' academic performance in the community built secondary schools was weak compared to that in the government-built secondary schools.

Table 14: Form II examinations results of the government built secondary schools in 2006 - 2008

| | | Examination results (N = 1657) | | | | | |
|--------------------|--------------|--------------------------------|------------|------------|------------|------------|--------------|
| School | Year | A | B | C | D | F | Total |
| Mbeya | 2006 | 1 | 60 | 132 | 83 | 47 | 323 |
| Iyunga | 2006 | 6 | 100 | 123 | 37 | 23 | 289 |
| | TOTAL | 7 | 160 | 255 | 120 | 70 | 612 |
| Mbeya | 2007 | 0 | 46 | 118 | 134 | 3 | 301 |
| Iyunga | 2007 | 0 | 70 | 129 | 55 | 6 | 260 |
| | TOTAL | 0 | 116 | 247 | 189 | 9 | 561 |
| Mbeya | 2008 | 0 | 23 | 91 | 104 | 47 | 265 |
| Iyunga | 2008 | 0 | 47 | 98 | 52 | 22 | 219 |
| | TOTAL | 0 | 70 | 189 | 156 | 69 | 484 |
| GRAND TOTAL | | 7 | 346 | 691 | 465 | 148 | 1 657 |

Further, only three students (0.1%) in the community built secondary schools scored grade A, while seven (0.4%) students in the government built secondary had the same grade from 2006 to 2008. It is improper to state precisely that the overall academic performance was good. In addition, while 296 (13.7%) students in the community built secondary schools performed poorly scoring grade F, only 148 (8.8%) students in the government built performed scored that grade. Even here good academic performance was not in the majority in both schools, indicating that the differences in performance are insignificant, only at five per cent.

Table 15: Form II overall grades of examinations results in the government built secondary schools from 2006 to 2008

| Year | A | B | C | D | F | TOTAL |
|--------------|---------------|------------------|------------------|------------------|-----------------|--------------|
| 2006 | 7(1.1) | 160(25.8) | 255 (41.6) | 120(19.3) | 70(11.3) | 612 |
| 2007 | 0(00) | 116(20.4) | 247(43.4) | 189(33.2) | 09(1.6) | 561 |
| 2008 | 0(00) | 70(14.2) | 189(38.5) | 156(31.6) | 69(14) | 484 |
| Total | 7(0.4) | 346(20.7) | 691(41.3) | 465(27.8) | 148(8.8) | 1 657 |

Therefore, on the basis of the Form II national examinations results from 2006 to 2008 in the community and government built secondary schools, we can say that they were weak in the former and satisfactory in the latter. This entailed that being a government built or community built secondary school did not lead to good academic performance. Although, the number of students who sat for the Form II national examinations from 2006 to 2008 differed in the two schools, the government-built secondary schools had fair results compared to those in the community built secondary schools (Table 12, 15).

Students' academic performance was also compared on the basis of the Form IV national examinations results from 2006 to 2008 as shown in Table 16 and 17. Data in Table 16 below reveals that of the 1 542 students who sat for the examinations in the surveyed community built secondary schools, 152 (9.9%) were awarded division I and 56 (3.6%) scored division 0. Meanwhile, 274 (17.8%), 396 (25.7%) of the students were awarded division II and III, respectively. Furthermore, in the community built secondary schools data reveals that 664 (43.1%) students were awarded division IV in the Form IV national examinations results from 2006 to 2008.

When data was calculated annually, it shows that in 2006 of the 289 students in the community built secondary schools, 94 (32.5%) were awarded division III, while in 2007 of the 722 students, 161 (22.3%) were awarded division III. Also, of the 531 students in

2008, 141 (26.6%) students were awarded division III in the Form IV national examinations results (Table 16).

Table 16: Overall Form IV national examinations results in the community built secondary schools from 2006 to 2008

| School | Year | Examination results | | | | | Total |
|--------------------|--------------|---------------------|-------------------|------------------|-------------------|-----------------|--------------|
| | | DIV I n (%) | DIV II n (%) | DIV III n (%) | DIV IV n (%) | DIV 0 n (%) | |
| Uyole | 2006 | 2 (2.7) | 14 (18.7) | 24 (32) | 33 (44) | 2 (2.7) | 75 |
| Iganzo | 2006 | 6 (7.1) | 17(20.0) | 19 (12.3) | 39 (45.9) | 4 (4.7) | 85 |
| Samora | 2006 | 17 (13.2) | 53(41.1) | 51(39.5) | 7 (5.4) | 1(0.8) | 129 |
| | Total | 25 (8.6) | 84 (29.1) | 94(32.5) | 79 (27.3) | 7 (2.4) | 289 |
| Uyole | 2007 | 15 (6.8) | 33 (15.0) | 63 (28.6) | 103 (46.8) | 6 (2.7) | 220 |
| Iganzo | 2007 | 12 (6.1) | 41 (20.8) | 6 (3.0) | 132 (67) | 6 (3.0) | 197 |
| Samora | 2007 | 8 (15.7) | 50 (16.4) | 92 (30.2) | 107 (35.1) | 8 (2.6) | 305 |
| | Total | 75 (10.3) | 124 (17.2) | 161(22.3) | 342 (47.3) | 20 (2.8) | 722 |
| Uyole | 2008 | 12 (6.7) | 28 (15.6) | 45(25) | 82 (45.6) | 13 (7.2) | 180 |
| Iganzo | 2008 | 17 (10.6) | 26 (16.1) | 40 (24.8) | 72 (44.7) | 6 (3.7) | 161 |
| Samora | 2008 | 23 (12.1) | 12 (6.3) | 56 (29.5) | 89 (46.8) | 10 (5.3) | 190 |
| | Total | 52 (9.8) | 66 (12.4) | 141(26.6) | 243 (45.8) | 29 (5.5) | 531 |
| Grand Total | | 152 (9.9) | 274 (17.8) | 96 (25.7) | 64 (43.1) | 56 (3.6) | 1 542 |

Data in Table 16 show the overall Form IV national examinations results in the surveyed community built secondary schools of Uyole, Iganzo and Samora. Of the 289 students who sat for the Form IV national examination in 2006, 25 (8.6%) got division I. Similarly, of the 722 students who sat the same examination in 2007, 75 (10.3%) got division I, while in 2008, of the 531 students, 52 (9.8%) earned division I. This data implied that there was no progress in the way students earned division I for the three years that were examined. Also, the rate of students failing in the national examinations was increasing such as 7 (2.4%), 20 (2.8%), 29 (5.5%) for the 289,722, 531 students in the year 2006, 2007 and 2008 who got division 0, respectively (Table 16).

Within the same category of schools, of the 289 students who sat for the Form IV national examinations in 2006, 84 (29.1%) scored division II. Meanwhile of the 722 students, 124 (17.2%) earned division II in 2007, while in 2008, of the 531 students, 66 (12.4%) got the same division in the surveyed community built secondary schools. On the other side, in the surveyed community built secondary schools of Uyole, Iganzo and Samora, of the 289 students who sat for the Form IV national examinations in 2006, 94 (32.5%) scored division III, likewise in 2007, of the 722 students, 161 (22.3%) got division III and in 2008, 141 (26.6%) students of the 531 earned the same division in the Form IV national examinations (Table 16).

Further, data in Table 16 show that, of the 289 students in the community built secondary schools who sat for the Form IV national examinations in 2006, 79 (27.3%) got division IV, while in 2007 of the 722 students, 342 (47.3%) earned division IV in the same examinations. Similarly, of the 531 students who did the 2008 Form IV national examinations, 243 (45.8%) earned division IV.

Also, data in Table 16 reveal that, of the 289 students who sat for the Form IV national examinations in 2006, seven (2.4%) were awarded division 0, whereas in 2007, of the 722 students, 20 (2.8%) got division 0. In 2008 of the 531 students who sat for the Form IV national examinations, 29 (5.5%) were awarded division 0. Thus, data in Table 16 reveals that students' academic performances in the community-built secondary schools in 2008 were worse than the preceding two years. Furthermore, data reveal that the overall performance showed that less than half of the students, 664 (43.1%) of the 1 542 students were awarded division IV in the community-built secondary schools (Table 16).

There was poor performance in the community-built secondary schools as few, 152 (9.9%) and 274 (17.8%) of 1 542 students, got division I and II, respectively (Table 16). However, general assessment of good students' academic performance by ordinary community members was determined by results in divisions I to III awarded to students, which of the 1 542 students, 822 (53.3%) scored divisions I to III. Since less than half of students in the surveyed community-built secondary schools were awarded division IV that is 243 (45.8%), the students' academic performance was regarded as good for the studied period.

Data in Table 17 show the Form IV national examinations results for the surveyed government-built secondary schools of Iyunga and Mbeya from 2006 to 2008. Of the 430 students who sat for the Form IV national examinations in 2006, 120 (27.9%) got division I. Similarly, of the 540 students, 160 (29.6%) earned the same division in 2007, while in 2008 of the 548 students, 80 (14.6%) achieved division I. Further, data in Table 17 show that, of the 430 students who performed the Form IV national examinations in 2006, 78 (18.1%) were awarded division II, likewise in 2007, of the 540 students in the surveyed government built secondary schools, 104 (19.3%) got division II. In the 2008 Form IV national examinations, of the 548 students who sat for the examinations, 98 (17.9%) scored division II.

Table 17: Overall Form IV examinations results of the government built secondary schools in 2006 – 2008

| School | Year | Examination results | | | | | TOTAL |
|--------------------|--------------|---------------------|------------------|------------------|------------------|----------------|--------------|
| | | DIV I n (%) | DIV II n (%) | DIV III n (%) | DIV IV n (%) | DIV n (%) | |
| Mbeya | 2006 | 86(40) | 34(15.8) | 49(22.8) | 42(19.5) | 4 (1.9) | 215 |
| Iyunga | 2006 | 34(15.8) | 44(20.5) | 62(28.8) | 74(34.4) | 1 (0.5) | 215 |
| | Total | 120(27.9) | 78(18.1) | 111(25.8) | 116(27.0) | 5(1.2) | 430 |
| Mbeya | 2007 | 66(22.2) | 60(20.2) | 75(25.3) | 86(29.0) | 10(3.3) | 297 |
| Iyunga | 2007 | 94(38.7) | 44(18.1) | 50(20.6) | 51(21.0) | 4(1.6) | 243 |
| | Total | 160(29.6) | 104(19.3) | 125(23.1) | 137(25.4) | 14(2.6) | 540 |
| Mbeya | 2008 | 40(14.0) | 51(17.9) | 75(26.3) | 108(37.9) | 11(3.9) | 285 |
| Iyunga | 2008 | 40(15.2) | 47(17.9) | 64(24.3) | 101(38.4) | 11(4.2) | 263 |
| | Total | 80(14.6) | 98(17.9) | 139(25.4) | 209(38.1) | 22(4.0) | 548 |
| Grand Total | | 360(23.4) | 280(18.4) | 375(24.7) | 462(30.4) | 41(2.7) | 1 518 |

Of the 430 students in the surveyed government built secondary schools, 111 (25.8%) got division III in 2006, while of the 540 students, 125 (23.1%) were awarded the same division in 2007. Similarly, of the 548 students who sat for the Form IV national examinations in 2008, 139 (25.4%) earned division III in the same schools.

Also, the data in Table 17 reveal that, of the 430 students who sat for the Form IV national examinations in 2006, 116 (27.0%) earned division IV, while in 2007 of the 540 students, 137 (25.4%) were awarded the same division. Likewise, of the 548 students who sat for the same examinations, 209 (38.1%) got division IV in 2008 in the surveyed government built secondary schools of Iyunga and Mbeya. Further, of the 430 students who sat for the Form IV national examinations in 2006, 5 (1.2%) got division 0, and of the 540 students who performed the same examinations in 2007, 14 (2.6%) earned the same division. Also, of the 548 students in 2008 Form IV national examinations, 22 (4.0%) were awarded division 0. Therefore, few students 41 (2.7%) in the surveyed

government built secondary schools failed in the Form IV national examinations from 2006 to 2008 (Table 17).

Data in Table 17 show that of the 1 518 students in the surveyed government built secondary schools of Iyunga and Mbeya who sat for the Form IV national examinations from 2006 to 2008, more than half of them, 1 015 (66.9%) earned between division I and III, while only 503 (33.1%) students got between division IV and 0. Thus, the students' academic performance was regarded to be better in the surveyed government built secondary schools than those in the surveyed community built secondary schools of Uyole, Iganzo and Samora. Most likely, more students in the government built secondary schools entered Form V.

Table 18 and 19 indicates the combined results of the surveyed schools for Form II and Form IV in the national examinations results from 2006 to 2008.

Table 18: Combined overall Form II national examinations results from 2006 to 2008 among the community and government built secondary schools

| Category | Year | Examination results | | | | | Total |
|-------------------------|--------------|---------------------|------------------|------------------|------------------|------------------|--------------|
| | | A | B | C | D | F | |
| | | n (%) | n (%) | n (%) | n (%) | n (%) | |
| Community-built | | | | | | | |
| | 2006 | 2(0.3) | 99(15.3) | 278(42.9) | 162(25) | 86(13.3) | 627 |
| | 2007 | 1(0.1) | 92(8.9) | 299(28.8) | 540(52.1) | 58(5.6) | 990 |
| | 2008 | 0(0) | 26(4.6) | 164(29.2) | 200(35.7) | 152(27.1) | 542 |
| | Total | 3(0.1) | 217(10.1) | 741(34.3) | 902(41.8) | 296(13.7) | 2 159 |
| Government-built | | | | | | | |
| | 2006 | 7(1.1) | 160(25.8) | 255(41.6) | 120(19.3) | 70(11.3) | 612 |
| | 2007 | 0(0) | 116(20.4) | 247(43.4) | 189(33.3) | 09(1.6) | 561 |
| | 2008 | 0(0) | 70(14.2) | 189(41.3) | 156(31.7) | 69(14) | 484 |
| | Total | 7(0.4) | 346(20.7) | 691(41.7) | 465(27.8) | 148(8.8) | 1 657 |

Data in Table 18 was based on grades A, B, C, D and F as the table above indicates. The table reveals that grades A, B, C and D were different between community built secondary schools and the government built secondary schools. From 2006 to 2008 there were three (0.1%) A's, 217 (10.1%) B's, 741 (34.3%) C's and 902 (41.8%) D's in the surveyed community built secondary schools of Uyole, Iganzo and Samora, while there were seven (0.4%) A's, 346 (20.7%) B's, 691 (41.7%) C's and 465 (27.8%) D's in the surveyed government built secondary schools of Iyunga and Mbeya (Table 18). Therefore, the surveyed government built secondary schools had better students' academic performance than community built secondary schools in Form II national examinations for the studied period.

Of the 2 159 students in the surveyed community built secondary schools, who sat for the Form II national examinations from 2006 to 2008, 961 (44.5%) earned between grades A and C. While of the 1 657 students who sat for the same examinations in the government built secondary schools, 1 044 (63.0%) got between grades A and C in the

same period of time. This meant that there was good students' academic performance in the government built secondary schools than in the community built secondary schools. Grades D and F are regarded as failure, because grade D is same as division IV, while grade F is same as division 0. In terms of the students' academic performance, the community built secondary schools indicated poor performance than the government built secondary schools, as 902 (41.8%) of the 2 159 students scored D, while for the government built secondary schools, 465 (27.8%) earned D (Table 18). The reasons for poor students' academic performance in the surveyed community built secondary schools was partly due to shortages of teaching and learning materials, teachers and low motivation of teachers.

Table 19: Combined overall Form IV national examinations results from 2006 to 2008 among the community- and government built secondary schools

| Category | Year | Examination results | | | | | Total |
|-------------------------|--------------|---------------------|------------------|-------------------|------------------|-----------------|--------------|
| | | Div. I n (%) | Div. II n (%) | Div. III n (%) | Div. IV n (%) | Div. 0 n (%) | |
| Community-built | | | | | | | |
| | 2006 | 25(8.6) | 84(29.1) | 94(32.5) | 79(27.3) | 7(2.4) | 289 |
| | 2007 | 75(10.3) | 124(17.2) | 161(22.3) | 342(47.3) | 20(2.8) | 722 |
| | 2008 | 52(9.8) | 66(12.4) | 141(26.6) | 243(45.8) | 29(5.5) | 531 |
| | Total | 152(9.9) | 274(17.8) | 396(25.7) | 664(43.1) | 56(3.6) | 1 542 |
| Government-built | | | | | | | |
| | 2006 | 120(27.9) | 78(18.1) | 111(25.8) | 116(27.0) | 5(1.2) | 430 |
| | 2007 | 160(29.6) | 104(19.8) | 125(23.1) | 137(25.4) | 14(2.6) | 540 |
| | 2008 | 80(14.6) | 98(17.9) | 139(25.4) | 209(38.1) | 22(4.0) | 548 |
| | Total | 360(23.4) | 280(18.4) | 375(24.7) | 462(30.4) | 41(2.7) | 1 518 |

Table 19 indicates disparities among division I to III in both community and government built secondary schools as for the period of 2006 to 2008 Form IV national examinations. Of the 1 542 students who sat for the Form IV national examinations, 152 (9.9%) scored division I in the community built secondary schools, while in the government built secondary schools, of the 1 518 students who did the same

examinations, 360 (23.4%) got division I. This implied that in the period from 2006 to 2008, 274 (17.8%) students scored division II and 280 (18.4%) students scored the same division in the community and government built secondary schools, respectively (Table 19). Also, of the 1 542 students in the community built secondary schools who sat for the Form IV national examinations from 2006 to 2008, 396 (25.7%) earned division III, while of the 1 518 students in the government built secondary schools, 375 (24.7%) scored division III. Generally, these scores were the same in the same category of schools (Table 19).

But, when the number of students scoring division I, II and III were added and compared to those who were awarded division IV and 0, it was vivid that in the government-built secondary schools the students' academic performance was better compared to the community built secondary schools. This meant that the governments built secondary schools were not well provided with the required staff and teaching and learning materials as many people think.

4.12 Respondents Perceptions about Community-Built Secondary Schools

Of the 450 respondents, 348 (77.3%) said that the aim of establishing community built secondary schools was good but the major problem was how to implement it. The main aim was to increase enrollment of pupils who completed PSLE successfully and access to secondary education for many young Tanzanians by 2025. But, of the 450 respondents, few 102 (22.7%) said that establishment of community built secondary schools in Mbeya municipality was a political motive, hence not well done. Of the ten education administrators interviewed in Mbeya municipality, seven (70%) indicated that the objectives of establishing community-built secondary schools was good but the

major problem is how to run them. They said that most of them did not have adequate education facilities such as classrooms, laboratories, staff houses, toilets and hostels. Community built secondary schools had shortages of teachers who were less motivated. Of the ten education administrators, few three (30%) said that the establishment of community-built secondary schools did not consider the human, financial and physical resources availability. One of respondent from the Regional Education Office (REO) said that:

Despite of several shortcomings of the community-built secondary schools, there are a lot of merits to society such as increased number of student's enrollment to secondary education from 21% in early 1990s to about 80% in 2007 in Mbeya municipality (Mbeya REO, 2007).

Through focus group discussions some people in Mbeya municipality had pessimistic perceptions toward the community built secondary schools on students' academic performance. Those who were asked indicated that community built secondary schools had poor teaching and learning facilities such as shortages of teachers especially qualified ones. Others was poor or lack of infrastructure like classrooms, laboratories, hostels/dormitories, toilets, staffrooms, water supply, electricity supply, and teachers' houses. They thought that these will lower students' academic performance in most of community built secondary schools in contrast to government built secondary schools in Mbeya municipality.

4.13 Hypotheses testing

4.13.1 Relationship between the availability of school inputs and students' academic performance in the community-built secondary schools.

H₀₁: There is no statistical significant difference between the availability of school inputs and students' academic performance in the community-built secondary schools.

The study found that there was a strong positive relationship ($R=0.788$) between the availability of school inputs and students' academic performance in the community-built secondary schools (Table 20). The value of R-square indicates that the overall performance of the community-built secondary school was influenced by the availability of inputs by 64 percent. Study findings showed that the availability of desks ($p\leq 0.008$), laboratories ($p\leq 0.010$), library ($p\leq 0.014$) and reference books ($p\leq 0.000$) were the main school inputs which influenced students' academic performance in the community-built secondary schools.

The order of influence showed that availability of desks led with a β -value of 0.360, which had a positive sign meant that an increase of 1 unit of desks in the community-built school increased the students' academic performance by 36 percent. Also, the availability of library with a β -value of 0.080 had a positive sign meaning that an increase of 1 unit of library in the community-built school increased the students' academic performance by eight percent. The order of influence also, showed that availability of reference books with a β -value of 0.074 which had a positive sign meant that an increase of 1 unit of reference books in the community-built school increased the students' academic performance by about seven percent. And the availability of laboratories with a β -value of 0.009 which had a positive sign meant that an increase of 1 unit of laboratories in the community-built school increased the students' academic performance by 1 percent.

Table 20: Regression model to test for influence of availability of school inputs on the students' academic performance in the community-built secondary schools.

| Model | R | R Square | Adjusted R Square | F | p-Value |
|--------------|----------|-----------------|--------------------------|----------|----------------|
| 1 | 0.788 | 0.640 | 0.581 | 15.285 | 0.000 |

| Variables | Unstandardized Coefficients | | Standardized Coefficients | | |
|----------------------|------------------------------------|-------------------|----------------------------------|----------|----------------|
| | B | Std. Error | Beta | t | p-value |
| (Constant) | -0.932 | 0.373 | | -2.502 | 0.013 |
| Desks | 0.348 | 0.130 | 0.360 | 2.679 | 0.008 |
| Chairs | 0.003 | 0.191 | 0.003 | 0.014 | 0.089 |
| Tables | -0.106 | 0.183 | -0.106 | -0.580 | 0.063 |
| Classrooms | 0.131 | 0.077 | 0.129 | 1.710 | 0.089 |
| Laboratories | 0.013 | 0.121 | 0.009 | 0.110 | 0.010 |
| Library | 0.165 | 0.164 | 0.080 | 1.010 | 0.014 |
| Dormitories | 0.094 | 0.311 | 0.040 | 0.303 | 0.062 |
| Hostels | -0.114 | 0.349 | -0.045 | -0.328 | 0.104 |
| Toilets | 0.150 | 0.093 | 0.111 | 1.605 | 0.110 |
| Textbooks | 0.104 | 0.233 | 0.074 | 0.447 | 0.055 |
| Reference books | 0.110 | 0.184 | 0.074 | 0.601 | 0.000 |
| Teachers' guides | 0.346 | 0.177 | 0.253 | 1.952 | 0.053 |
| Chemicals | 0.015 | 0.270 | 0.010 | 0.057 | 0.954 |
| Laboratory apparatus | 0.205 | 0.300 | 0.131 | 0.683 | 0.495 |
| Visual aids | -0.208 | 0.245 | -0.136 | -0.851 | 0.396 |
| Supplementary books | 0.349 | 0.237 | 0.225 | 1.472 | 0.143 |
| Journals | 0.550 | 0.231 | 0.275 | 2.378 | 0.018 |
| Magazines | -0.528 | 0.436 | -0.255 | -1.210 | 0.228 |

These study results conforms to those of Wiggins (1998), who stated that some factors which can lead to good performance in secondary schools include the availability, relevance and sufficient teaching materials. Again, Chonjo (1994) identified that insufficient teaching materials (as inputs) were factors that led to poor performance in secondary schools in Tanzania. Teaching and learning processes base on reflection, experience, and instructions upon the availability of teaching and learning materials

(Johnson *et al.*, 2004). Further, Altbach (1982) pointed out that, there was a problem of textbooks in developing countries' schools where in many cases students either lacked textbooks or were forced to share a few available textbooks. The overall calculated F-value (15.285) was found to be statistically significant at $p \leq 0.01$, meaning that the null hypothesis which stated that there was no statistical significant relationship between the availability of school inputs and students' academic performance in the community-built secondary schools was rejected (Table 20).

4.13.2 Relationship between the availability of school inputs and students' academic performance in the government-built secondary schools.

H₀₂: There is no statistical significant difference between the availability of school inputs and students' academic performance in the government-built secondary schools

The study found that there was a strong positive relationship ($R=0.80$) between the availability of school inputs and students' academic performance in the government-built secondary schools (Table 21). The value of R-square indicates that the overall performance of the government-built secondary school was influenced by the availability of inputs by 62.1 percent. Study findings showed that the availability of desks ($p \leq 0.009$), visual aids ($p \leq 0.009$), library ($p \leq 0.001$) and teacher's guides ($p \leq 0.001$) were the main school inputs which influence students' academic performance in the government-built secondary schools.

Table 21: Regression model to test for influence of availability of school inputs on the students' academic performance in the government-built secondary schools.

| Model | R | R Square | Adjusted R Square | F | p-Value |
|-------|-------|----------|-------------------|-------|---------|
| 1 | 0.800 | 0.621 | 0.481 | 4.023 | 0.000 |

| Variables | Unstandardized Coefficients | | Standardized Coefficients | | |
|----------------------|-----------------------------|------------|---------------------------|--------|---------|
| | B | Std. Error | Beta | t | p-value |
| (Constant) | -0.148 | 0.562 | | -0.264 | 0.793 |
| Desks | 0.822 | 0.457 | 0.880 | 1.801 | 0.009 |
| Chairs | 0.885 | 0.538 | 0.914 | 1.646 | 0.107 |
| Tables | 0.509 | 0.431 | 0.499 | 1.183 | 0.043 |
| Classrooms | 0.299 | 0.307 | 0.303 | 0.973 | 0.036 |
| Laboratories | 0.004 | 0.363 | 0.004 | 0.011 | 0.091 |
| Library | 0.088 | 0.334 | 0.485 | 0.264 | 0.001 |
| Dormitories | 0.069 | 0.453 | 0.046 | .152 | 0.880 |
| Hostels | 0.254 | 0.401 | 0.176 | 0.634 | 0.029 |
| Toilets | 0.512 | 0.210 | 0.440 | 2.432 | 0.019 |
| Textbooks | 0.309 | 0.570 | 0.302 | .542 | 0.591 |
| Reference books | 0.335 | 0.647 | 0.310 | 0.517 | 0.608 |
| Teachers' guides | 0.577 | 0.475 | 0.561 | 1.216 | 0.001 |
| Chemicals | 0.269 | 0.800 | 0.241 | 0.336 | 0.039 |
| Laboratory apparatus | 0.201 | 0.875 | 0.183 | 0.230 | 0.019 |
| Visual aids | 0.545 | 0.859 | 0.549 | 0.634 | 0.009 |
| Supplementary books | 0.541 | 0.828 | 0.479 | 0.653 | 0.017 |
| Journals | 0.056 | 0.213 | 0.052 | 0.265 | 0.092 |
| Magazines | 0.284 | 0.447 | 0.233 | 0.635 | 0.029 |

The order of influence showed that availability of desks led with a β -value of 0.880, which had a positive sign meaning that an increase of 1 unit of desks in the government-built secondary schools increased the students' academic performance by 88 percent. The availability of teacher's guides with a β -value of 0.561 had a positive sign meaning that an increase of 1 unit of teacher's guides in the government-built school increased the

students' academic performance by 56.1 percent. Also, the availability of visual aids with a β -value of 0.549 had a positive sign meaning that an increase of 1 unit of visual aids in the government-built secondary schools increased the students' academic performance by 54.9 percent. And the availability of libraries with a β -value of 0.485 which had a positive sign meaning that an increase of 1 unit of libraries in the government-built secondary school increased the students' academic performance by 48.5 percent. The overall calculated F-value (4.023) was found to be statistically significant at $p \leq 0.01$, meaning that the null hypothesis which states that there was no statistical significant relationship between the availability of school inputs and students' academic performance in the government -built secondary schools was rejected (Table 21).

4.13.3 Relationship between the availability of school inputs and students' academic performance in the community and government-built secondary schools.

H₀₃: There is no statistical significant difference between the availability of school inputs and students' academic performance in the community and government-built secondary schools.

The study results indicated that availability of school inputs accounted for 54.2 percent and there was a strong positive relationship ($R=0.736$) of the students' academic performance in the community and government-built secondary schools (Table 22). The regression model showed that desks ($p \leq 0.000$), toilets ($p \leq 0.001$), libraries ($p \leq 0.002$) and reference books ($p \leq 0.008$) were the main school inputs that influenced the students' academic performance in both the community and government-built secondary schools.

Table 22: Regression model to test for influence of availability of school inputs on the students' academic performance in community and government-built secondary schools.

| Model | R | R Square | Adjusted R Square | F | p-Value |
|-------|-------|----------|-------------------|--------|---------|
| 1 | 0.736 | 0.542 | 0.521 | 25.865 | 0.000 |

| Variables | Unstandardized Coefficients | | Standardized Coefficients | | |
|----------------------|-----------------------------|------------|---------------------------|--------|---------|
| | B | Std. Error | Beta | t | p-value |
| (Constant) | -0.621 | 0.285 | | -2.178 | 0.030 |
| Desks | 0.380 | 0.096 | 0.378 | 3.945 | 0.000 |
| Chairs | -0.052 | 0.128 | -0.051 | -0.409 | 0.683 |
| Tables | -0.062 | 0.129 | -0.059 | -0.479 | 0.632 |
| Classrooms | 0.114 | 0.066 | 0.108 | 1.732 | 0.084 |
| Laboratories | -0.088 | 0.094 | -0.074 | -0.930 | 0.353 |
| Library | 0.009 | 0.086 | 0.297 | 0.111 | 0.002 |
| Dormitories | -0.016 | 0.196 | -0.007 | -0.084 | 0.033 |
| Hostels | 0.177 | 0.200 | 0.069 | 0.883 | 0.378 |
| Toilets | 0.240 | 0.070 | 0.183 | 3.455 | 0.001 |
| Textbooks | -0.071 | 0.149 | -0.058 | -0.473 | 0.636 |
| Reference books | 0.013 | 0.142 | 0.250 | 0.091 | 0.008 |
| Teachers' guides | 0.317 | 0.139 | 0.057 | 2.288 | 0.023 |
| Chemicals | 0.117 | 0.201 | 0.091 | 0.581 | 0.062 |
| Laboratory apparatus | 0.017 | 0.217 | 0.013 | 0.079 | 0.037 |
| Visual aids | 0.171 | 0.192 | 0.134 | 0.892 | 0.373 |
| Supplementary books | 0.239 | 0.191 | 0.184 | 1.250 | 0.212 |
| Journals | 0.112 | 0.080 | 0.070 | 1.406 | 0.160 |
| Magazines | -0.042 | 0.224 | -0.020 | -0.188 | 0.851 |

The order of influence showed that availability of desks led with a β -value of 0.378, which had a positive sign meaning that an increase of 1 unit of desks in the community and government-built secondary schools increased the students' academic performance by 37.8 percent. Also, the availability of libraries with a β -value of 0.297 had a positive sign meaning that an increase of 1 unit of library in the community-and government-built

secondary schools increased the students' academic performance by 29.7 percent. The order of influence too showed that availability of reference books with a β -value of 0.250 which had a positive sign meaning that an increase of 1 unit of reference books in both the community-and government-built secondary schools increased the students' academic performance by 25 percent (Table 22). Furthermore, the availability of toilets with a β -value of 0.183 which had a positive sign meaning that an increase of 1 unit of toilets in the community- and government-built secondary schools increased the students' academic performance by 18.3 percent. The overall calculated F-value (25.865) was found to be statistically significant at $p \leq 0.01$, meaning that the null hypothesis which states that there was no statistical significant difference between the availability of school inputs and students' academic performance in the community-and government-built secondary schools was rejected (Table 22).

4.13.4 Relationship between teaching-learning process and students' academic performance in community-built secondary schools.

H₀₄: There is no statistical significant difference between teaching-learning process and students' academic performance in the community-built secondary schools.

The study results indicated that influence of teaching-learning process accounted for 79 percent ($R^2=0.790$) of the students' academic performance in the community-built secondary schools. The regression model showed that the use of subjects clubs ($p \leq 0.006$), provision of tests ($p \leq 0.004$) and language of instruction ($p \leq 0.002$) were the main teaching-learning processes that influenced the students' academic performance in the community-built secondary schools (Table 23).

The order of influence showed that use of subjects clubs had a β -value of 0.119, which had a positive sign meaning that an increase of 1 unit of subjects clubs in the community-built school increased the students' academic performance by 11.9 percent. Also, the provision of tests with a β -value of 0.099 had a positive sign meaning that an increase of 1 unit of provision of tests in the community-built secondary schools increased the students' academic performance by about ten percent. The order of influence also, showed that languages of instructions with a β -value of 0.080 had a positive sign meaning that an increase of 1 unit of in the use of language of instruction in the community-built secondary schools increased the students' academic performance by about eight percent.

However provision of home works was found to have negative and significant at $p \leq 0.01$. These results indicated that for every unit of increase in the provision of home works to students in the community-built secondary schools decreased their academic performance by five percent. The overall calculated F-value (0.996) was found to be statistically significant at $p \leq 0.01$, meaning that the null hypothesis which stated that there was no statistical significant difference between the teaching-learning process and students' academic performance in the community-built secondary schools was rejected (Table 23).

Table 23: Regression model to test for the influence of teaching-learning process on the students' academic performance in the community-built secondary schools

| Model | R | R Square | Adjusted R Square | F | p-Value |
|-------|-------|----------|-------------------|-------|---------|
| 1 | 0.541 | 0.790 | 0.650 | 0.996 | 0.001 |

| Variables | Unstandardized Coefficients | | Standardized Coefficients | | |
|--------------------------|-----------------------------|------------|---------------------------|--------|---------|
| | B | Std. Error | Beta | t | p-value |
| (Constant) | 2.375 | 0.903 | | 2.630 | 0.009 |
| Use of subjects clubs | 0.233 | 0.140 | 0.119 | 1.671 | 0.006 |
| Giving out tests | 0.362 | 0.491 | 0.099 | 0.737 | 0.004 |
| Giving out home works | -0.177 | 0.278 | -0.050 | -0.637 | 0.325 |
| Languages of instruction | 0.128 | 0.116 | 0.080 | 1.100 | 0.002 |

This shows that students' academic performance in the community-built secondary schools is being influenced by the poor use of appropriate language of instruction. These results conform to the Tanzania secondary education curriculum, the medium of instruction in secondary schools is English and examinations are written in English with exception of Kiswahili (URT, 1995). Study results showed that most teachers in the community-and government-built secondary schools mixed English and Kiswahili languages when teaching in the classroom. According to Windham (1988), appropriate academic and professional education qualification of teachers have an influence on the academic performance of students in the secondary schools.

4.13.5 Relationship between teaching-learning process and students' academic performance in the government-built secondary schools.

H₀₅: There is no statistical significant difference between teaching-learning process and students' academic performance in the government-built secondary schools.

The study found that there was a positive relationship ($R=0.688$) between the influence of teaching-learning processes and students' academic performance in the government-built secondary schools (Table 24). The value of R-square indicates that the overall performance of the government-built secondary school was influenced by teaching-learning process by 65.5 percent. Study findings showed that the language of instructions ($p\leq 0.008$) and provision of tests ($p\leq 0.005$) were the main teaching-learning processes which influenced students' academic performance in the government-built secondary schools.

Table 24: Regression model to test for the influence of teaching-learning process on the students' academic performance in the government-built secondary schools

| Model | R | R Square | Adjusted R Square | F | p-Value |
|-------|-------|----------|-------------------|-------|---------|
| 1 | 0.688 | 0.655 | 0.338 | 2.104 | 0.008 |

| Variables | Unstandardized Coefficients | | Standardized Coefficients | | |
|--------------------------|-----------------------------|------------|---------------------------|--------|---------|
| | B | Std. Error | Beta | t | p-value |
| (Constant) | 1.920 | 0.795 | | 2.414 | 0.017 |
| Use of subjects clubs | -0.259 | 0.100 | -0.171 | -2.602 | 0.010 |
| Giving out tests | 0.008 | 0.456 | 0.141 | 0.018 | 0.005 |
| Giving out home works | 0.141 | 0.271 | 0.041 | 0.520 | 0.603 |
| Language of instructions | 0.067 | 0.097 | 0.125 | 0.695 | 0.008 |

The order of influence showed that provision of tests led with a β -value of 0.141, which had a positive sign meaning that an increase of 1 unit of provision of tests in the government -built school increased the students' academic performance by 14.1 percent. Classroom assessment helps teachers to obtain useful feedback on what, how much, and how well their students are learning and use the information to refocus their

teaching/learning to help teachers/students make their teaching/learning more efficient and more effective (Angelo and Cross, 1998).

However, the uses of subjects clubs were found to have a negative impact and were statistically significant at $p \leq 0.01$. These results indicated that in every unit increase in uses of subjects clubs decreased the students' academic performance by 17 percent. The language for instructions with a β -value of 0.125 with a positive sign meaning that an increase of 1 unit of language for instructions in the government-built secondary schools increased the students' academic performance by 12.5 percent. The overall calculated F-value (2.104) was found to be statistically significant at $p \leq 0.01$, meaning that the null hypothesis which states that there was no statistical significant relationship between the influence of teaching-learning processes and students' academic performance in the government-built secondary schools was rejected (Table 24).

4.13.6 Relationship between teaching-learning process and students' academic performance in the community and government-built secondary schools.

H₀₆: There is no statistical significant difference between teaching-learning processes and students' academic performance in the community and government-built secondary schools.

The results indicated that the influence of teaching-learning process accounted for 55.2 percent of the students' academic performance in the community and government-built secondary schools. Study findings showed that the use of subjects clubs ($p \leq 0.008$), provision of tests ($p \leq 0.006$) and language of instruction ($p \leq 0.005$) were the main

teaching-learning processes that influenced the students' academic performance in the community-and government-built secondary schools (Table 25).

The order of influence showed that use of subjects clubs had a β -value of 0.155, which had a positive sign meaning that an increase of 1 unit in use of subjects clubs in the community-and government-built secondary schools increased the students' academic performance by 15.5 percent. The provision of tests with a β -value of 0.127 had a positive sign meaning that an increase of 1 unit of provision of tests in the community and government-built secondary schools increased the students' academic performance by 12.7 percent. The order of influence also showed that language of instruction with a β -value of 0.114 had a positive sign meaning that an increase of 1 unit of language of instruction in the community-and government-built secondary schools increased the students' academic performance by 11.4 percent.

Table 25: Regression model to test the influence of teaching-learning processes on the students' academic performance in the community and government-built secondary schools.

| Model | R | R Square | Adjusted R Square | F | p-Value |
|-------|-------|----------|-------------------|-------|---------|
| 1 | 0.457 | 0.552 | 0.616 | 2.735 | 0.009 |

| Variables | Unstandardized Coefficients | | Standardized Coefficients | | |
|--------------------------|-----------------------------|------------|---------------------------|--------|---------|
| | B | Std. Error | Beta | t | p-value |
| (Constant) | 2.173 | 0.596 | | 3.645 | 0.000 |
| Use of subjects clubs | 0.263 | 0.081 | 0.155 | 3.238 | 0.008 |
| Giving out tests | 0.159 | 0.330 | 0.127 | 0.482 | 0.006 |
| Giving out home works | -0.017 | 0.192 | -0.005 | -0.087 | 0.930 |
| Language of instructions | 0.022 | 0.074 | 0.114 | 0.301 | 0.005 |

However, provision of home works was found to have a negative β -value and significant at $p \leq 0.01$. These results indicated that in every unit of an increase in the provision of home works decreased the students' academic performance by 0.5 percent. The study results showed that most teachers in the community-and government-built secondary schools mixed English and Kiswahili languages when teaching. The overall calculated F-value (0.996) was found to be statistically significant at $p \leq 0.01$, meaning that the null hypothesis which stated that there was no statistical significant difference between the teaching-learning process and students' academic performance in the community and government-built secondary schools was rejected (Table 25).

The results conform to the Tanzania secondary education curriculum, the medium of instruction in secondary schools is English and examinations are written in English with exception of Kiswahili (URT, 1995). Thus, the students' academic performance in the schools has been influenced by the poor use of appropriate instruction language. According to Windham (1988), appropriate academic and professional education qualification of teachers have an influence on academic performance of students in the secondary schools.

4.13.7 Relationship between teachers' better working conditions and students' academic performance in the community -built secondary schools.

H₀₇: There are no statistical significant differences between teachers' better working conditions and students' academic performance in the community-built secondary schools

This study found that there was a positive relationship ($R=0.675$) between teachers' better working conditions and students' academic performance in the community-built

secondary schools (Table 26). The value of R-square indicates that the overall performance of the community-built secondary school was influenced by the teachers' better working conditions by 88.2 percent. The regression model shows that school learning environment ($p \leq 0.000$) and teachers' houses ($p \leq 0.001$) were conditions that influenced the students' academic performance in the community-built secondary schools.

Table 26: Regression model to test for the influence of teaching-working conditions on the students' academic performance in the community-built secondary schools.

| Model | R | R Square | Adjusted R Square | F | p-Value |
|-------|-------|----------|-------------------|-------|---------|
| 1 | 0.675 | 0.882 | 0.777 | 2.601 | 0.003 |

| Variables | Unstandardized Coefficients | | Standardized Coefficients | | |
|---------------------------------------|-----------------------------|------------|---------------------------|--------|---------|
| | B | Std. Error | Beta | t | p-value |
| (Constant) | 1.944 | 0.522 | | 3.723 | 0.000 |
| School teaching- learning environment | 0.004 | 0.106 | 0.203 | 0.041 | 0.000 |
| Teachers' houses | 0.318 | 0.120 | 0.185 | 2.651 | 0.001 |
| Enough funds | -0.300 | 0.431 | -0.049 | -0.696 | 0.021 |

The order of influence showed that school learning environment with a β -value of 0.203, had a positive sign meaning that an increase of 1 unit of school learning environment in the community-built secondary schools increased the students' academic performance by 20.3 percent. The study results conform to Basque and Dore (1998), who said that learning and teaching environment ought to implement six functions: inform, communicate, collaborate, produce, scaffold, and manage, which include a whole range of components and activities within which learning happens.

The availability of teachers' houses had a β -value of 0.185 a positive sign meaning that an increase of 1 unit of teachers' houses in the community-built secondary schools increased the students' academic performance by 18.5 percent (Table 26). The Education and Training Policy of Tanzania has ordered that owners and managers of secondary schools should ensure that there are standard infrastructure, facilities, equipment and instructional materials necessary for effective and optimum teaching and learning (URT, 1995). The overall calculated F-value (2.601) was found to be statistically significant at $p \leq 0.01$, meaning that the null hypothesis which states that there was no statistical significant difference between the teachers' better working conditions and students' academic performance in the community -built secondary schools was rejected (Table 26).

4.13.8 Relationship between teachers' better working conditions and students' academic performance in the government-built secondary schools.

H₀₈: There are no statistical significant differences between teachers' better working conditions and students' academic performance in the government-built secondary schools.

The study found that there was a positive relationship ($R=0.614$) between teachers' better working conditions and students' academic performance in the government-built secondary schools (Table 27). The value of R-square indicates that the overall performance of the government-built secondary school was influenced by the teachers' better working conditions by 73.7 percent. The study findings showed that availability of teachers' houses ($p \leq 0.000$) and school teaching-learning environment ($p \leq 0.004$) were the teaching-working conditions that influenced the students' academic performance in the government-built secondary schools.

Table 27: Regression model to test for the influence of teaching-working conditions on the students' academic performance in the government-built secondary schools.

| Model | R | R Square | Adjusted R Square | F | p-Value |
|-------|-------|----------|-------------------|--------|---------|
| 1 | 0.614 | 0.737 | 0.397 | 46.330 | 0.000 |

| Variables | Unstandardized Coefficients | | Standardized Coefficients | | |
|---------------------------------------|-----------------------------|------------|---------------------------|--------|---------|
| | B | Std. Error | Beta | t | p-value |
| (Constant) | 2.730 | 0.399 | | 6.839 | 0.000 |
| School teaching- learning environment | 0.230 | 0.080 | 0.154 | 2.876 | 0.004 |
| Teachers' houses | 0.875 | 0.087 | 0.551 | 10.104 | 0.000 |
| Enough funds | 0.312 | 0.279 | 0.060 | 1.120 | 0.264 |

The order of influence showed that availability of teachers' houses with a β -value of 0.551, which had a positive sign meant that an increase of 1 unit of teachers' houses in the government-built secondary schools increased the students' academic performance by 55.1 percent. The school teaching-learning environment with a β -value of 0.154 had a positive sign meaning that an increase of 1 unit of teachers' houses in the government-built secondary schools increased the students' academic performance by 15.4 percent (Table 27). The overall calculated F-value (46.330) was found to be statistically significant at $p \leq 0.01$, meaning that the null hypothesis which stated that there was no statistical significant differences between the teachers' better working conditions and students' academic performance in the government-built secondary schools was rejected (Table 27).

4.13.9 Relationship between teachers' better working conditions and students' academic performance in the community-and government-built secondary schools.

H₀₉: There is no statistical significant difference between teachers' better working conditions and students' academic performance in the community and government-built secondary schools.

The results indicated that teaching-working condition accounted for only 55.5 percent of the students' academic performance in the community and government-built secondary schools. Study findings showed that school teaching-learning environment ($p \leq 0.006$), financial ($p \leq 0.005$) and the availability of teachers' houses ($p \leq 0.000$) were the main teaching-working conditions which mostly influenced the students' academic performance in the community and government-built secondary schools (Table 28).

Table 28: Regression model to test for the influence of teaching-working conditions on the students' academic performance in the community and government-built secondary schools.

| Model | R | R Square | Adjusted R Square | F | p-Value |
|-------|-------|----------|-------------------|-------|---------|
| 1 | 0.236 | 0.555 | 0.049 | 8.457 | 0.000 |

| Variables | Unstandardized Coefficients | | Standardized Coefficients | | |
|--------------------------------------|-----------------------------|------------|---------------------------|-------|---------|
| | B | Std. Error | Beta | t | p-value |
| (Constant) | 2.063 | 0.351 | | 5.881 | 0.000 |
| School teaching-learning environment | 0.171 | 0.071 | 0.114 | 2.414 | 0.006 |
| Teachers' houses | 0.311 | 0.077 | 0.190 | 4.009 | 0.000 |
| Enough funds | 0.175 | 0.268 | 0.111 | 0.652 | 0.005 |

The order of influence showed that availability of teachers' houses with a β -value of 0.190 had a positive sign meaning that an increase of 1 unit of teachers' houses in the community and government-built secondary schools increased the students' academic performance by 19 percent. Also, the school teaching-learning environment with a β -value of 0.114 had a positive sign meaning that an increase of 1 unit of school teaching-learning environment in the community-and government-built secondary schools increased the students' academic performance by 11.4 percent.

The order of influence showed that availability of funds to schools had a β -value of 0.111 which had a positive sign meaning that an increase of 1 unit of increased funds to the community-and government-built secondary schools increased the students' academic performance by 11.1 percent (Table 28). For instance, Mosha (2000) mentioned four things that are necessary to make a school effective: internal characteristics, supportive external environment, good teaching-learning environment and favourable school climate. The overall calculated F-value (8.457) was found to be statistically significant at $p \leq 0.01$, meaning that the null hypothesis which stated that there was no statistical significant differences between the teachers' better working conditions and students' academic performance in the community and government-built secondary schools was rejected (Table 28).

In conclusion we can say that based on regression models of the tested hypotheses availability of school inputs ($p \leq 0.000$), teaching-learning processes ($p \leq 0.009$) and teachers' better working conditions ($p \leq 0.000$) were statistically significant influenced students' academic performance in the community-and government-built secondary schools. Community-built secondary schools seemed to suffer more compared to

government-built secondary schools. Desks ($p \leq 0.000$) and school libraries ($p \leq 0.009$) were the most serious inputs in the influence on the students' academic. Moreover, it was found that lack of teachers' houses ($p \leq 0.000$) were working conditions which greatly influenced the students' academic performance in both community and government-built secondary schools. Others too were the use of subjects clubs ($p \leq 0.008$), provision of tests ($p \leq 0.006$) and inappropriate use of languages of instructions ($p \leq 0.005$). This study conforms to earlier studies which show that there is a positive the relationship between the availability of school inputs, teaching-learning processes and teachers' better working conditions with students' academic performance in Tanzania secondary schools.

CHAPTER FIVE

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Overview

The main objective of this study was to investigate the factors influencing academic performance of students in the community-and government-built secondary schools. Specifically, the study assessed the adequacy of school inputs, examined the existing teaching-learning process, compared to the students' academic performance in the community-and government-built secondary schools as well as identified people's perceptions about the community-built secondary schools. This chapter presents the summary, conclusion and recommendations of the study based on the findings of the main objective and specific objectives of the study.

In the community-built secondary schools, there are more teachers with diplomas than graduates. In the government-built secondary schools there was equal number of teachers with diplomas and those with degrees. Students and teachers in community-built secondary schools claimed that the teaching and learning materials were inadequate. Perhaps the government-built secondary schools are being allocated with more enough funds to buy teaching and learning materials as compared to community-built secondary schools. This was eventually reflected in the poor examinations results of students in most of the community-built secondary schools. Respondents indicated that the learning environment affected the students' academic performance, especially in the community-built secondary schools. For example, they pointed out of the prevalence of inadequate desks, chairs, tables, classrooms, laboratories, library, dormitories, and toilets to match with the number of students or the subjects taught.

The study results showed that government-built secondary schools had enough exercises given to students compared to community-built secondary schools. Also, respondents indicated that the English language was rarely used in the schools as a medium of instruction in teaching and learning process.

Most of the respondents agreed that there were financial problems in their schools. Previously, the government was the sole source of funds for running schools. But the introduction of cost sharing resulted in problems of getting enough funds from the communities. The respondents indicated that long distances students walk from home to school affected students' attendance, access to internet and library services in town for improving their academic performance. Most students from the community-built secondary schools were unable to access internets and library services in town compared to the government-built secondary schools.

The fact is that most of the community-built secondary schools are built far away from the town. The community-built secondary schools indicated more poor academic performance than the government-built secondary schools in the Form II and IV national examinations from 2006 to 2008. This by implication meant that it was likely that the surveyed government-built secondary schools were well furnished with the required staff together with teaching and learning materials. The respondents' perceptions about the community-built secondary schools indicated that these schools had poor teaching and learning facilities such as shortages of teachers, classrooms, laboratories, toilets, textbooks, teachers' houses and dormitories which appeared to affect the students' academic performance.

5.2 Conclusions

The following are conclusions based on the specific objectives of the study and findings;-

For the objective number one which assessed the adequacy of school inputs in the schools.

In the community-and government-built secondary schools there were insufficient teaching and learning materials. In the studied schools, the number of students did not match with the existing teaching and learning facilities in both the community-and government-built secondary schools. The school learning environment in most of the community and government-built secondary schools was not conducive, due to lack of adequate or absence of laboratories, libraries, hostels, dormitories, teachers' houses. Also, there were not enough classrooms and qualified teachers. All these factors appeared to negatively affect the academic performance of the students.

For the objective number two which examined the teaching-learning process in the schools, the study found that most teachers and students mixed English and Kiswahili in talking or teaching. Teachers gave few exercises in the different subjects and most teachers did not cover the syllabi on time, a situation which led to poor academic performance of the students. Sources of funds in schools were unreliable and not enough to run various teaching and learning activities in the community-and government-built secondary schools. Most of the community-built secondary schools were far from town centre as compared to government-built secondary schools. This hinders these students and teachers from acquiring reading and teaching materials from the learning centers such as libraries and internet services. Also, few students failed to attend all periods on time.

For the objectives number three and four which evaluated and compared students' academic performance in the Form II and IV national examinations, the study findings

indicated that there was poor students' academic performance in the community-built secondary schools as compared to those in the government-built secondary schools in the Form II and IV national examinations. This was because of the aforementioned factors, although, few students in the community-built secondary schools had somehow good performance.

The study found that in surveyed government-built secondary schools, students had better academic performance in the Form II national examinations compared to the community-built secondary schools for the studied period. But, the trend show that the students' academic performance within the community-built secondary schools is in good progress. This means that when these schools will be well furnished with enough and appropriate teachers as well as teaching-learning materials, the students' academic performance will likely be the same as that of government-built secondary schools or even exceed.

For the objective number five which explored the people's perceptions on the community-built secondary schools, most of the respondents had negative perceptions about the community-built secondary schools teaching and learning environment which they said adversely affected the students' academic performance. Due to poor establishment, planning and management of these schools, led people to have negative perceptions about them, although the aim was good.

5.3 Recommendations

Given the aforementioned study findings, the following are recommended;

1. For the objective number one which assessed the adequacy of school inputs in the schools, the government should increase and improve the teaching and learning materials in the community and government built secondary schools to enhance

efficient teaching and learning. Also, the government should provide dormitories, hostels, library, classrooms, laboratories and internet services in the community- and government-built secondary schools. Where there is no electricity installation of solar power should be the alternative.

2. For the objective number two which examined the teaching and learning process in the community- and government-built secondary schools, the government should ensure that there is proper supervision of the secondary education curriculum in both schools to enhance students' academic performance. Suitable and qualified heads of schools should be recruited.
3. For the objectives number three and four which evaluated and compared the students' academic performance for studied period, the government should provide enough funds to both schools (through communities; contributions, NGOs) to enhance students' better academic performance. Also, the government should increase teachers in the community- and government-built secondary schools and motivate them. Regular seminars for teachers for all subjects should also be given a priority for improved performance.
4. For the objectives number five which explored the peoples' perceptions about the community-built secondary schools, the government should introduce the schedule for community awareness about the schools for the country's development.

REFERENCES

- Aksoy, T. and Link, C. R. (2000). A Panel Analysis of Student Mathematics Achievement in the US in the 1990s: Does Increasing the Amount of Time in Learning Activities Affect Math Achievement? *Economics of Education Review* 19(3): 261-277.
- Altbach, P. (1982). Key Issues of Textbook Provision in the Third World Prospects. *Quarterly Review of Education* 13(7): 21-25.
- Angelo, T. A. and Cross, K.P. (1998). *Classroom Assessment Techniques. A Handbook for College Teachers*, Jossey-Bass Publishers –San Francisco. 377pp.
- Babbie, E.R. (1990). *Survey Research Methods: 2nd Edition*. Wadsworth Publishing Company Inc. Belmont, California. 395pp.
- Basque, J. and Dores, S. (1998). Le concept d'environnement d'apprentissage informatise. *Journal of Distance Education* 13(7): 192 - 201.
[http://llcade.icaap.org/vol_13.html] site visited on 1/5/2008.
- Blatchford, P., Russell, A., Bassett, P., Brown, P. and Martin, C. (2007). *The effect of class size on the teaching of pupils aged 7-11 years*. School Effectiveness and Improvement. 147-172pp.
- Bloom, B. (1982). *Human Characteristics and School Learning*. Mcgraw, New York.U.S.A.261pp.

Bloom, B. (1974). Time and Learning. *Journal of American Psychologist* 29(4): 682-688.

Boma, A. (1980). Factors Affecting Performance in Tanzania schools. Dissertation for Award of M.A Degree at University of Dar es salaam, Tanzania. 158pp.

Bolton, J. K. (1988). Larger is Sometimes Better: *Approaches to Large Classes*. A paper presented at the Convention of Teachers of English to Speakers of other Languages. Chicago, Illinois, March 1988.

Bourice, S. (1986). How Small is Better? Relationship between class sizes, Teaching Practice and Students Achievement. *American Educational Research Journal* 4(6): 558-571.

Bozzomo, L. E. (1978). Does Class size Matter? *The National Elementary Principal* 57(2): 163-171.

Britton, K. and Tesser A. (1991). Effects of Time-Management Practices on College Grades. *Journal of Education Psychology* 83(3): 405-410.

Classroom assessment techniques [<http://celt.iastate.edu/teaching/cat.html>] site visited on 4/9/2009.

Chonjo, P.N. (1994). The Quality of Education in Tanzania Schools: Assessment of Physical Facilities and Teaching Learning Materials. *Utafiti* 1(1): 36-46.

Community Secondary: How long is their Journey to Quality Education?

[http://www.tenmet.org/public_html_Ndabise%20SEDP.pdf] site visited on 30/07/2009.

Cohen, L. and Manion, L. (2000). *Research Methods in Education*. London U.K. Rutledge. 57pp.

Creswell, J. W. (2003). *Research Design: Quantitative, Qualitative, and Mixed Methods Approaches*. SAGE Thousand Oaks. USA. 168pp

Delors, J. (1998). *Educational for the twenty first century; Issues and Prospects*. Washington, UNESCO. 256pp.

Education (2003). [<http://en.wikipedia.org/wiki/Education>] site visited on 3/3/2009

Eicher, J. (1984). *Educational Costering and Financing in Developing Countries focus on Sub –Saharan Africa*. Washington, D.C World Bank. 151pp.

Farrant, J. S. (1980). *Principles and Practices of Education*; Pearson Education Limited, Edinburgh Gate, Harlow, Essex CM20 2JE, England. 153pp.

Fernandez, R. and Rogerson, R. (2003). Equity and Resources: Analysis of Education Finance Systems. *Journal of Political Economy* 111(4): 858-970.

Formulation and Implementation of Educational Policies in Nigeria. [<http://webcache-google-user-content.com/search>] site visited on 30/7/2009.

Fraenkel, J. R. and Wallen, N. E. (2000). *How to Design and Evaluate Research in Education* (4th ed.), SAGE Thousand Oaks, New York, U.S.A. 264pp.

Gay, L. R. (1996). *Educational research: Competencies for analysis and application*. Upper Saddle River, NJ: Prentice Hall, Inc. 175pp.

Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report* 8(4): 597-606.

Glewwe, P. and Jacoby, H. (1994). Student Achievement and Schooling Choice in Low-Income Countries. The Case of Ghana. *Journal of Human Resources* 29(3): 843-964.

Grissmer, D. (1999). Class size effects: Assessing the evidence, its policy implications, and future research agenda. *Educational Evaluation and Policy Analysis* 2(5): 231-248.

Healy, M. and Perry, C. (2000). Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm. *Qualitative Market Research* 3(3): 118-126.

- Hattie, J. (2005). The paradox of reducing class size and improving learning outcomes, *International Journal of Educational Research* 43(6): 387-425.
- Hopkin, A. G. (1990). *Review in school organization* 10 (20): 121-135.
- Hornby, A. S. (2006). 7th Edition Oxford Advanced Learner Dictionary of Current English, Oxford University Press, London. U.K. 287pp.
- Hoy, C., Bayne, J. C. and Wood, M. (2000). *Improving quality in Education*. London Falmer Press, England. 388 pp.
- Holmes, M. and Croll, P. (1989). Time spent on homework and academic achievement, *Journal of Educational Research* 31(1): 36-45.
- Ishumi, A., Cooksey, B. and Galabawa, J. (1995). Survey of Living and Working Conditions of Primary and Secondary Teachers in Tanzania. Dar es Salaam, Tanzania. 122pp.
- Idienumah, M. A. (1978). An Analysis of Efficiency Disparities in Secondary Education Resource Utilization in Bendel State. Thesis for Award of PhD Degree at University of Benin, Benin.154pp.
- Joppe, M. (2000). The Research Process.
[<http://www.ryerson.ca/~mjoppe/rp.htm>] site visited on 1/5/2009.

- Johnson, B. D., Parker, D.O., Lunsford, M.W. and Henderson, L.J. (2004). Dimensions of Learning for Life. 3rd Ed. Mc Graw Hill, Custom Publishing, New York. U.S.A. 316pp.
- Kathuri, N. J. and Pals, A. (1993). Introduction to Education Research, Kenya: Egerton University Education Media Centre.172pp.
- Keith, T. Z. (1982). Time spent on homework and high school grades: A large-sample path analysis. *Journal of Education Psychology* 74(2): 248-253.
- Kneichevich, S. (1975). *Administration of Public Education*. London 3rd (Ed) Harper Raw Publisher. 136pp.
- Kothari, C. R. (2000). *Research Methodology, Methods and Techniques*, New Delhi, Wiley S. astern Limited, India. 274pp.
- Kuhlthau, C. (1993). 'Implementing a Process Approach to Information Skills: A Study Identifying Indicators of Success in Library Media Programs'. *School Library Media Quarterly* 22(1): 124-148l.
- Lam, D. (1999). Generating extreme inequality: schooling, earnings and intergenerational transmission of human capital in South Africa and Brazil. Report No. 99-439. Ann. Arbor, Michigan: Population studies centre, University of Michigan.11pp.
- Lugayila, C. P. N. (2002). Assessment on the District Rural Development Programme (DRDP) Initiatives to Improve Quality in Primary Education: A case of Kahama District. Dissertation for Award of M.A (ED) Degree at University of Dar es salaam, Dar es salaam, Tanzania, 159pp.

Loertscher, D. V. and Woolls, B. (1999). *Information Literacy: A Review of the Research, a Guide for Practitioners and Researchers*, Hi Willow Research and Publishing. 148pp.

Malekela, G. A. (1983). *Access to Secondary Education in Sub-Saharan Africa: The case of Tanzania*. Thesis for Award of PhD Degree at University of Chicago, U.S.A. 246pp.

Maliyamkono, T. L. (1982). *Higher Education and Development in Eastern Africa*. Heinemann, London. 136pp.

Mbeya region (2002). [http://en.wikipedia.org/wiki/Mbeya_Region] site visited on 16/02/2009.

Mbeya district socio-economic profile (2002).

[<http://www.tzonline.org/pdf/Mbeya.pdf>] site visited on 30/07/2009.

Mbeya Regional Education Office (2009). *Regional Education Development Annual Report*. Nuru Yetu. Mbeya, Tanzania. 28pp.

Mugenda, O. M. and Mugenda, G. D. (1999). *Research Methods: Qualitative and Quantitative Approach*, Nairobi: Acts Press, Kenya. 143pp

- Mlozi, M. R. S. and Kizito, K. M. (2007). Secondary School Education in Tanzania: How students classify their schools. *Journal of Agricultural Economics and Development* 4(2): 127-137.
- Ministry of Education and Culture (2000). Education and Training Policy. The Adult Education Press, Dar es salaam. 117pp.
- Mosha, H. J. (2004). New Direction in Teacher Education for Quality Improvement in Africa Papers in Education and Development. 45-68pp.
- Mosha, H. J. (2000). What is an effective school, UDSM unpublished writings.78-94pp.
- Mosha, H. J. (2000). Conceptualizing Quality of Education. In: *Quality of Education in Tanzania: Issues and Experiences*. (Edited by Galabawa, J.C. Senkoro, F.E.M. and Lwaitama, A.F.L). The Dar es salaam Institute of Kiswahili Research. 126pp.
- Mushi, G. K. (2000). Quality of Education and the National Policy management context in Tanzania. Institute of Kiswahili, Dar es Salaam. 235pp.
- Mushashu, B. (2000). The Issues of Quality of Public Secondary Schools: *What ought to be done?* University of Dar es Salaam, Faculty of Education. 195-202pp.
- Omari, I. M. (2002). Education in Tanzania since Independence. Papers in Education and Development No.22. pp 1-4.
- Ozga, J. (2003). *Measuring and Managing Performance in Education*, Pearson Education Limited, Edinburgh Gate, Harlow, Essex CM20 2JE, England. 164pp.

- Ojoawo, A. O. (1989). Effects of Differential Distribution of Resources on Secondary School Performance in WASC Examination in Oyo State Secondary Schools (1984-1987). Thesis for Award of PhD Degree at University of Ibadan, Nigeria. 234pp.
- Oberg, D. (2001). Demonstrating that School Libraries Improve Student Achievement. *Access* 1(3): 15–17.
- Rizzo, A. (1987). Stake holders in Public sector education: An alternative approach. *American Review of Public Administration* 4(2): 87 – 92.
- Russel, B. H. (1995). Questionnaire and Survey Research. In: *Russel Benard H Research Methods in Cultural Anthropology*. London, Altmira. 264pp.
- Robinson, G. E. (1990). Synthesis of Research on Effects of Class size. *Educational Leadership* 7(4): 80-90.
- Sayi, L. F. (1993). School administration Vis-à-vis School physical facilities in government and private secondary schools in Mwanza municipality. Dissertation for Award of M.A (ED) Degree at University of Dar es salaam, Dar es salaam, Tanzania. 147pp.
- Scott, W. R. (2003). *Organizations, rational, natural and open systems*, (5ed) Upper Saddle River, Prentice-Hall Inc. 143pp.

Smith, J. (1999). *Life planning: Anticipating future life goals and managing personal development*. Thousand Oaks, CA. Sage Publications, Inc. 139pp.

Survey Sampling (2007). [<http://www.evaluationwiki.org/index.php>] site visited on 28/05/2010.

Spector, J. M. (2000). System dynamics and Interactive learning environments: *Lessons learned and implications for the future*, *Simulations and Gaming* 5(5):31-39.

UNESCO (May, 2005). Education for All. Global Monitoring Report. [<http://portal.unesco.org/education/en/ev>. UNESCO 2005] site visited on 1/5/2008.

UNESCO (October, 2008). Education: International Commitments. Education for All. [<http://portal.unesco.org/education/en/ev.php>] site visited on 1/5/2008

United Republic of Tanzania (1995). Education and Training Policy. Ministry of Education and Culture. Dar es Salaam, NPC. 117pp.

United Republic of Tanzania (1999). Basic Statistics in Education. 1994-1998 National Data. Ministry of Education and Culture. Dar es salaam. 246pp.

United Republic of Tanzania (2002). Mbeya Region Socio-Economic Profile. Planning Commission, Dar es salaam, NPC. 132pp.

- United Republic of Tanzania (2004). Secondary Education Development Plan 2004-2009: Final Document. Dar es Salaam, Ministry of Education and Vocational Training. 142pp.
- Walker, T. and Siebert, A. (1980). *Student Success: How to Succeed in College and Still Have Time for Your Friends*. Fort Worth, Tx: Holt Rinehart & Winston. 299pp.
- Walklin, L. (2001). *Teaching and Learning in Further and Adult Education*. Stanley Thornes Publishers Limited, Ellenborough House, Wellington Street, Cheltenham GL50 1YD England. 347pp.
- Wiggins, G. (1998). *Educative Assessment-Designing Assessments to Inform and Improve Student Performance*, published by Jossey-Bass. A Willey Imprint 989 Market Street, San Francisco, U.S.A. 256pp.
- Windham, D. (1988). Effectiveness Indicators in the Economic Analysis of Educational Activities. *Special issues of the International Journal of Education Administration* 5(7): 12-18.
- Williams, D. and Wavell, C. (2001). *The Impact of the School Library Resource Centre on Learning*. Library and Information Commission Research Report 112. [<http://www.resource.gov.uk/information/research/respubs2001.asp>] site visited on 15/12/2008.
- Woessmann, L. (2003). Schooling, resources, educational institutions and student performance. The international evidence. *Oxford Bulletin of Economics and Statics* 2(4): 117-170.

APPENDICES

Appendix 1: Teachers Questionnaires

General information

1. Name of school.....
2. Name of respondent.....
3. Age of respondent.....year
4. Sex of respondent; TICK ONE
 - Female ()
 - Male ()
5. Level of education of respondent; TICK ONE
 - Secondary education () which form attained
 - Diploma in education ()
 - Bachelor degree ()
 - Master degree ()
 - Other, specify:

Detailed information

Please tick one appropriate answer in the box given

1. Is your school a government built secondary school? 1. Yes () 2. No ()
2. Is your school a community built secondary school? 1. Yes () 2. No ()
3. Is your school a government built boarding secondary school? 1. Yes () 2. No ()
4. Is your school a community built boarding secondary school? 1. Yes () 2. No ()
5. Is your school a government built day secondary? 1. Yes () 2. No ()
6. Is your school a community built day secondary? 1. Yes () 2. No ()
7. What is the composition of students in your school?
 - i. Girls only ()
 - ii. Boys only ()
 - iii. Both girls and boys ()
8. Does the composition of students have an effect in your school academic performance?
 1. Yes () 2. No ()
9. What is the effect of student's composition on academic performance in your school?
 - i. Positive ()
 - ii. Negative ()

ii. Moderate ()

10. Who usually performs academically well in your school?

i. Girls ()

ii. Boys ()

iii. None ()

11. If your school is a boarding government built secondary school where do students come from

i. This region ()

ii. Outside the region ()

iii. Others, specify _____

12. If the school is a community builds boarding secondary school where do student s come from?

i. Within a region ()

ii. Within the municipality ()

iii. Other, specify _____

13. If your school is a day community built secondary school, where do students come from?

i. Within a region ()

ii. Within the municipality ()

iii. Other, specify _____

14. If your school is a day government built school, where do students come from?

i. Within a region ()

ii. Within the municipality ()

iii. Other, specify _____

15. Does the composition of students who come from outside the municipality have an effect on students' academic performance in your school?

1- Yes () 2- No ()

16. Does the composition of the student who comes from within the municipality have an effect on students' academic performance in your school?

1- Yes () 2- No ()

17. How far is your school from home? _____ km

18. How far is your school from municipal centre? _____ km

19. If your school is day secondary school, what means of transport do you use to and from school? _____

20. Does taking lunch for students affect academic performance in your school?

1- Yes () 2- No ()

21. How does lunch taking affect student's academic performance in your school if they do not take lunch?

- i. Lead to poor class attendance
- ii. Concentration is lowered
- iii. Other, Specify: _____

22. Do the students in your school come early in morning according school time table?

1- Yes () 2- No ()

23. Do most students attend all period in your school?

1- Yes () 2- No ()

24. In your school are students able to access the following in town?

| Service | Yes | No | I don't know |
|----------|-----|----|--------------|
| Internet | | | |
| Library | | | |

25. Does the size of class in your school affect the student's academic performance?

1- Yes () 2- No ()

26. In your school the size of the class is considered:

- i. Congested
- ii. Not congested
- iii. Moderate

27. What is the number of students in your school? _____

28. How many students are there in your school? _____

29. How many classrooms does your school have? _____

30. How many streams are there for in each class? _____

31. Are you able to control size of class in your school? 1. Yes () 2.No ()

32. How do you control size of class in your school?

- i. Provide many exercises when teaching
- ii. Provide few exercises when teaching
- iii. Give subject notes only

33. Do you have morning session in your school?

1- Yes () 2- No ()

34. Do you have evening session in your school?

1- Yes () 2- No ()

35. Do students gets reward for better performance in academic in your school?

1- Yes () 2- No ()

36. Are students able to influence the manner in which teaching and learning is performed in your school?

1- Yes () 2- No ()

37. Do teacher like to get student's ideas for improving their jobs?

1- Yes () 2- No ()

38. Do students work cooperatively in tackling different academic tasks?

1- Yes () 2- No ()

Give comment on the following in your school;

| | Mathematics | | Physics | | Chemistry | | Biology | | Geography | |
|---|-------------|----|---------|----|-----------|----|---------|----|-----------|----|
| | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No |
| 39. There are enough reading materials. | | | | | | | | | | |
| 40. There are enough teaching materials. | | | | | | | | | | |
| 41. There are enough teaching aids. | | | | | | | | | | |
| 42. There enough exercise provided. | | | | | | | | | | |
| 43. Students are involved in designing, collecting and making some teaching aids. | | | | | | | | | | |

44. Do the number of the of the available students match with the existing facilities?

1- Yes () 2- No ()

45. How do you classify your school learning environment?

- i. Conducive
- ii. Not conducive
- iii. I don't know

46. Do you think that school learning environment affects the academic performance of student?

1- Yes () 2- No ()

47. How do you feel to be a teacher in this school?

i. Good ()

ii. Not good ()

iii. Badly ()

48. Are your relatives satisfied for you to be in this school?

1- Yes () 2- No ()

49. Do you think that your school has the following?

| ITEMS | Adequate | About Adequate | Not Adequate |
|--------------|----------|----------------|--------------|
| Desks | | | |
| Chairs | | | |
| Tables | | | |
| Classrooms | | | |
| Laboratories | | | |
| Library | | | |
| Dormitories | | | |
| Hostels | | | |
| Toilets | | | |

50. In your school do you also have the following and are they sufficient or not?

| ITEMS | Sufficient | About Sufficient | Not Sufficient |
|----------------------|------------|------------------|----------------|
| Textbooks | | | |
| Reference books | | | |
| Teachers' guide | | | |
| Chemicals | | | |
| Laboratory apparatus | | | |
| Visual ideas | | | |
| Supplementary books | | | |
| Journals | | | |
| Magazine | | | |
| News paper | | | |

51. What is the condition of the following in your school?

| ITEMS | Up-to-date | About up-to-date | Not up-to-date |
|----------------------|-------------------|-------------------------|-----------------------|
| Textbooks | | | |
| Reference books | | | |
| Teachers' guide | | | |
| Library | | | |
| Laboratory | | | |
| Laboratory apparatus | | | |
| Visual ideas | | | |
| Supplementary books | | | |
| Chemicals | | | |
| classrooms | | | |
| Journals | | | |
| Magazine | | | |
| News paper | | | |

52. In your school do you have each of the following qualification?

| Teachers with | Yes | Number | No |
|----------------------|------------|---------------|-----------|
| Master degree | | | |
| Bachelor degree | | | |
| Diploma | | | |
| Certificate | | | |
| Form six levers | | | |

53. Do you think that the numbers of teachers in your school with the following are?

| Teachers with | Satisfactory | Not satisfactory |
|----------------------|---------------------|-------------------------|
| Master degree | | |
| Bachelor degree | | |
| Diploma | | |
| Certificate | | |
| Form six levers | | |

54. From whom do you think students learn more in your school?

| Teachers with | Learn less | Learn more |
|-----------------|------------|------------|
| Master degree | | |
| Bachelor degree | | |
| Diploma | | |
| Certificate | | |
| Form six levers | | |

55. Does the number of qualified teachers surpass the unqualified teachers in your school?

1- Yes () 2- No ()

56. Do qualified teachers in your school cover the subject's syllabus on time?

1- Yes () 2- No ()

57. In your school enough qualified teachers in the following subjects?

| Subjects | Yes | Number | No |
|-------------|-----|--------|----|
| Mathematics | | | |
| English | | | |
| Kiswahili | | | |
| Geography | | | |
| Physics | | | |
| Chemistry | | | |
| Biology | | | |
| Agriculture | | | |
| History | | | |
| Civics | | | |

58. How many teachers do you have in your school for the following departments (give their number);

| Subjects | Number |
|-------------|--------|
| Mathematics | |
| English | |
| Kiswahili | |
| Geography | |
| Physics | |
| Chemistry | |
| Biology | |
| Agriculture | |
| History | |
| Civics | |

59. In your school does the number of teacher enough to the number of students?

1- Yes () 2- No ()

60. Does the number of teachers in your school negatively affect the academic performance of students?

1- Yes () 2- No ()

61. Does the number of teacher in your school positively affect the academic performance of students?

1- Yes () 2- No ()

62. Are there teachers' houses in your school?

1- Yes () 2- No ()

63. Does the availability of teachers' houses in your school affect student academic performance?

1- Yes () 2- No ()

64. How does the availability of teachers' houses affect students' academic performance in your school?

- i. Efficiency teaching ()
- ii. Effective teaching ()
- iii. Other, specify; _____

65. The number of teachers in school according to sex is;

| Sex | Number |
|--------|--------|
| Female | |
| Male | |

66. From whom do you understand when they teach?

| | Yes | No |
|--------|-----|----|
| Female | | |
| Male | | |
| Any | | |

67. Which factors contributes toward understanding certain kind of teacher?

| | Yes | No |
|-------------|-----|----|
| Language | | |
| Knowledge | | |
| Skills | | |
| Personality | | |

68. What is the age of most teachers in your school?

- i. Below 35 years ()
- ii. Between 35 and 45 ()
- iii. Above 45 ()

69. Who is the owner of your school?

- i. Community ()
- ii. Government ()
- iii. Both ()

70. Does the owner of your school responsible for developing the following?

| | Yes | No |
|----------------------|-----|----|
| Classrooms | | |
| Laboratories | | |
| Library | | |
| Desks | | |
| Chairs | | |
| Tables | | |
| Books | | |
| Dormitories | | |
| Hostels | | |
| Laboratory apparatus | | |
| Chemicals | | |
| Visual ideas | | |
| Teachers | | |
| Staff houses | | |

71. In your school does the owner of school contribute to academic performance of student?

1- Yes () 2- No ()

72. What is the major source of funding your school?

- i. Community ()
- ii. Government ()
- iii. Others, specify; _____

73. Are there any financial problems in your school?

1- Yes () 2- No ()

74. Do you think that the source of funds in school has an effect on the following?

| | Yes | No |
|----------------------|-----|----|
| Classrooms | | |
| Laboratories | | |
| Library | | |
| Desks | | |
| Chairs | | |
| Tables | | |
| Books | | |
| Dormitories | | |
| Hostels | | |
| Laboratory apparatus | | |
| Chemicals | | |
| Visual ideas | | |
| Teachers | | |
| Staff houses | | |

75. Do you think that the source of funds in your have effect on school academic performance?

1- Yes () 2- No ()

76. Which language(s) is/ are used during classroom instructions?

- i. Kiswahili
- ii. English
- iii. English & Kiswahili

77. Do you have subjects clubs in your school?

1- Yes () 2- No ()

78. If the answer is Yes in question 75 above, which club are you member of?

| | Yes | No |
|-----------------|-----|----|
| Natural science | | |
| Social science | | |
| Applied science | | |
| Neither club | | |

79. Which subject club is very active in your school?

| | Yes | No | I don't know |
|-----------------|-----|----|--------------|
| Natural science | | | |
| Social science | | | |
| Applied science | | | |
| Neither club | | | |

80. Are there any emphasizes on subjects clubs given to you by the social management in your school?

1- Yes () 2- No ()

81. Do you have discussion groups in your school?

1- Yes () 2- No ()

82. If yes in question 81 above, do you have debate competition in your school between;

83. Do you conduct debate in your school?

1- Yes () 2- No ()

84. If yes in question 83 above do you have debate competition in your school?

| | Yes | No |
|--------------------|-----|----|
| Class Vs class | | |
| Classes Vs classes | | |
| School Vs school | | |

85. During classroom instructions which method is most used in school?

| | Yes | No |
|---------------|-----|----|
| Lecture | | |
| Discussion | | |
| Group works | | |
| Demonstration | | |
| Study tours | | |

86. Comment on your school's timetable per week on following aspects:

| | Enough | About enough | Not enough |
|------------------------|--------|--------------|------------|
| Classroom time | | | |
| Study preparation time | | | |
| Discussion time | | | |
| Group work time | | | |
| Playing time | | | |

87. In your school how many tests are given in week for the following subjects?

| Subjects | Number of tests |
|-------------|-----------------|
| Mathematics | |
| English | |
| Kiswahili | |
| Geography | |
| Physics | |
| Chemistry | |
| Biology | |
| History | |
| Civics | |

88. Do you think they are enough?

1- Yes () 2- No ()

89. In your school how many homework's are provided for the following subjects in a week?

| Subjects | Number homework's |
|-------------|-------------------|
| Mathematics | |
| English | |
| Kiswahili | |
| Geography | |
| Physics | |
| Chemistry | |
| Biology | |
| History | |
| Civics | |

90. Do you think they are enough?

1- Yes () 2- No ()

91. In your school does the knowledge and skills acquired in the classroom be able to solve problems?

1- Yes () 2- No ()

92. In your schools do you think the following influence academic performance of students?

| | Yes | No |
|---|-----|----|
| Number of qualified teachers | | |
| Availability of teaching and learning materials | | |
| School learning environment | | |
| Type of school | | |
| Composition of students | | |
| Size class | | |
| Gender of teacher staff | | |
| Availability of library and books | | |
| Ownership of school | | |
| Source of school funds | | |
| Distance from home/town centre to school | | |
| Number of teachers | | |

THANK YOU FOR YOUR COOPERATION

Appendix 2: Students Questionnaires

General information

- 1 Name of school.....
2. Name of respondent.....
- 3 .Age of respondent.....year
4. Sex of respondent; TICK ONE
 - Female ()
 - Male ()
5. Level of education of respondent; TICK ONE
 - Secondary education () which form attained

Detailed information

Please tick one appropriate answer in the box given

6. Is your school a government built secondary school?
 1. Yes () 2. No ()
7. Is your school a community built secondary school?
 1. Yes () 2. No ()
8. Is your school a government built boarding secondary school?
 1. Yes () 2. No ()
- 9 Is your school a community built boarding secondary school?
 1. Yes () 2. No ()
10. Is your school a government built day secondary?
 1. Yes () 2. No ()
11. Is your school a community built day secondary?
 1. Yes () 2. No ()
12. What is the composition of students in your school?
 - i. Girls only ()
 - ii. Boys only ()
 - iii. Both girls and boys ()
13. Does the composition of students have an effect in your school academic performance?
 1. Yes () 2. No ()
14. What is the effect of student's composition on academic performance in your school?
 - i. Positive ()
 - ii. Negative ()
 - ii. Moderate ()

15. Who usually performs academically well in your school?
- iv. Girls ()
 - v. Boys ()
 - vi. None ()
16. If your school is a boarding government built secondary school where do students come from
- iv. This region ()
 - v. Outside the region ()
 - vi. Others, specify _____
17. If the school is a community builds boarding secondary school where do student s come from?
- iv. Within a region ()
 - v. Within the municipality ()
 - vi. Other, specify _____
18. If your school is a day community built secondary school, where do students come from?
- iv. Within a region ()
 - v. Within the municipality ()
 - vi. Other, specify _____
19. If your school is a day government built school, where do students come from?
- iv. Within a region ()
 - v. Within the municipality ()
 - vi. Other, specify _____
20. Does the composition of students who come from outside the municipality have an effect on students' academic performance in your school?
- 1- Yes () 2- No ()
21. Does the composition of the student who comes from within the municipality have an effect on students' academic performance in your school?
- 1- Yes () 2- No ()
22. How far is your school from home? _____km
23. How far is your school from municipal centre? _____km
24. If your school is day secondary school, what means of transport do you use to and from school? _____
25. Does taking lunch for student affect academic performance in your school?
- 1- Yes () 2- No ()

26. How does lunch taking affect student's academic performance in your school if they do not take lunch?

- iv. Lead to poor class attendance
- v. Concentration is lowered
- vi. Other, Specify: _____

27. Do the students in your school come early according school time table?

1- Yes () 2- No ()

28. Do most students attend all period in your school?

1- Yes () 2- No ()

29. In your school students able to access the following in town?

| Service | Yes | No | I don't know |
|----------|-----|----|--------------|
| Internet | | | |
| Library | | | |

30. Does the size of class in your school affect the student's academic performance?

1- Yes () 2- No ()

31. In your school the size of the class is considered:

- iv. Congested
- v. Not congested
- vi. Moderate

32. What is the number of student in your school? _____

33. How many students are there in your school? _____

34. How many classrooms does your school have? _____

35. How many streams are there for in each classes? _____

36. Do you have morning session in your school?

1- Yes () 2- No ()

37. Do you have evening session in your school?

1- Yes () 2- No ()

38. Do students gets reward for better performance in academic in your school?

1- Yes () 2- No ()

39. Are students able to influence the manner in which teaching and learning is performed in your school?

1- Yes () 2- No ()

40. Do teacher like to get student's ideas for improving their jobs?

1- Yes () 2- No ()

41. Do students work cooperatively in tackling different academic tasks?

1- Yes () 2- No ()

Give comment on the following in your school;

| | Mathematics | | Physics | | Chemistry | | Biology | | Geography | |
|---|-------------|----|---------|----|-----------|----|---------|----|-----------|----|
| | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No |
| 42. There are enough reading materials. | | | | | | | | | | |
| 43. There are enough teaching materials. | | | | | | | | | | |
| 44. There are enough teaching aids. | | | | | | | | | | |
| 45. There are enough exercise provided. | | | | | | | | | | |
| 46. Students are involved in designing, collecting and making some teaching aids. | | | | | | | | | | |

47. Do the number of the of the available students match with the existing facilities?

1- Yes () 2- No ()

48. How do you classify your school learning environment?

- iv. Conducive
- v. Not conducive
- vi. I don't know

49. Do you think that school learning environment affects the academic performance of student?

1- Yes () 2- No ()

50. How do you feel to be a student in the school?

iv. Good ()

v. Not good ()

vi. Badly ()

51. Are your parents satisfied for you to be in this school?

1- Yes () 2- No ()

52. Do you think that your school has the following?

| ITEMS | Adequate | About Adequate | Not Adequate |
|--------------|----------|----------------|--------------|
| Desks | | | |
| Chairs | | | |
| Tables | | | |
| Classrooms | | | |
| Laboratories | | | |
| Library | | | |
| Dormitories | | | |
| Hostels | | | |
| Toilets | | | |

53. In your school do you also have the following and are they sufficient or not?

| ITEMS | Sufficient | About Sufficient | Not Sufficient |
|----------------------|------------|------------------|----------------|
| Textbooks | | | |
| Reference books | | | |
| Teachers' guide | | | |
| Chemicals | | | |
| Laboratory apparatus | | | |
| Visual ideas | | | |
| Supplementary books | | | |
| Journals | | | |
| Magazine | | | |
| News paper | | | |

54. What is the condition of the following in your school?

| ITEMS | Up-to-date | About up-to-date | Not up-to-date |
|-----------|------------|------------------|----------------|
| Textbooks | | | |

| | | | |
|----------------------|--|--|--|
| Reference books | | | |
| Teachers' guide | | | |
| Library | | | |
| Laboratory | | | |
| Laboratory apparatus | | | |
| Visual ideas | | | |
| Supplementary books | | | |
| Chemicals | | | |
| classrooms | | | |
| Journals | | | |
| Magazine | | | |
| News paper | | | |

55. In your school do you have each of the following qualification?

| Teachers with | Yes | Number | No |
|-----------------|-----|--------|----|
| Master degree | | | |
| Bachelor degree | | | |
| Diploma | | | |
| Certificate | | | |
| Form six levers | | | |

56. Do you think that the numbers of teachers in your school with the following are?

| Teachers with | Satisfactory | Not satisfactory |
|-----------------|--------------|------------------|
| Master degree | | |
| Bachelor degree | | |
| Diploma | | |
| Certificate | | |
| Form six levers | | |

57. From whom do you learn more?

| Teachers with | Learn less | Learn more |
|-----------------|------------|------------|
| Master degree | | |
| Bachelor degree | | |
| Diploma | | |
| Certificate | | |
| Form six levers | | |

58. Does the number of qualified teachers surpass the unqualified teachers in your school?

1- Yes () 2- No ()

59. Do qualified teachers in your school cover the subject's syllabus on time?

1- Yes () 2- No ()

60. In your school enough qualified teachers in the following subjects?

| Subjects | Yes | Number | No |
|-------------|-----|--------|----|
| Mathematics | | | |
| English | | | |
| Kiswahili | | | |
| Geography | | | |
| Physics | | | |
| Chemistry | | | |
| Biology | | | |
| Agriculture | | | |
| History | | | |
| Civics | | | |

61. How many teachers do you have in your school for the following departments (give their number);

| Subjects | Number |
|-------------|--------|
| Mathematics | |
| English | |
| Kiswahili | |
| Geography | |
| Physics | |
| Chemistry | |
| Biology | |
| Agriculture | |
| History | |
| Civics | |

62. In your school does the number of teachers enough to the number of students?

1- Yes () 2- No ()

63. Does the number of teachers in your school negatively affect the academic performance of students?

1- Yes () 2- No ()

64. Does the number of teachers in your school positively affect the academic performance of students?

1- Yes () 2- No ()

65. Are there teachers' houses in your school?

1- Yes () 2- No ()

66. Does the availability of teachers' houses in your school affect student academic performance?

1- Yes () 2- No ()

67. How does the availability of teachers' houses affect students' academic performance in your school?

iv. Efficiency teaching ()

v. Effective teaching ()

vi. Other, specify; _____

68. The number of teachers in school according to sex is;

| Sex | Number |
|--------|--------|
| Female | |
| Male | |

69. From whom do you understand when they teach?

| | Yes | No |
|--------|-----|----|
| Female | | |
| Male | | |
| Any | | |

70. Which factors contribute toward understanding certain kind of teacher?

| | Yes | No |
|-------------|-----|----|
| Language | | |
| Knowledge | | |
| Skills | | |
| Personality | | |

71. What is the age of most teachers in your school?

- 5 Below 35 years ()
- 6 Between 35 and 45 ()
- 7 Above 45 ()

72. Who is the owner of your school?

- iv. Community ()
- v. Government ()
- vi. Both ()

73. Does the owner of your school responsible for developing the following?

| | Yes | No |
|----------------------|-----|----|
| Classrooms | | |
| Laboratories | | |
| Library | | |
| Desks | | |
| Chairs | | |
| Tables | | |
| Books | | |
| Dormitories | | |
| Hostels | | |
| Laboratory apparatus | | |
| Chemicals | | |
| Visual ideas | | |
| Teachers | | |
| Staff houses | | |

74. In your school does the owner of school contribute to academic performance of students?

1- Yes () 2- No ()

75. What are the major sources of funds in your school?

iv. Community ()

v. Government ()

vi. Others, specify; _____

76. Are there any financial problems in your school?

1- Yes () 2- No ()

77. Do you think that the sources of funds in school has an effect on the following?

| | Yes | No |
|----------------------|-----|----|
| Classrooms | | |
| Laboratories | | |
| Library | | |
| Desks | | |
| Chairs | | |
| Tables | | |
| Books | | |
| Dormitories | | |
| Hostels | | |
| Laboratory apparatus | | |
| Chemicals | | |
| Visual ideas | | |
| Teachers | | |
| Staff houses | | |

78. Do you think that the sources of funds in your have effect on school academic performance?

1- Yes () 2- No ()

79. Which language(s) is/ are used during classroom instructions?

- iv. Kiswahili
- v. English
- vi. English & Kiswahili

80. Do you have subjects clubs in your school?

1- Yes () 2- No ()

81. If the answer is Yes in question 80 above, which club are you member of?

| | Yes | No |
|-----------------|-----|----|
| Natural science | | |
| Social science | | |
| Applied science | | |
| Neither club | | |

82. Which subject club is very active in your school?

| | Yes | No | I don't know |
|-----------------|-----|----|--------------|
| Natural science | | | |
| Social science | | | |
| Applied science | | | |
| Neither club | | | |

83. Are there any emphasizes on subjects clubs given to you by the social management in your school?

1- Yes () 2- No ()

84. Do you have discussion groups in your school?

1- Yes () 2- No ()

85. Do you conduct debate in your school?

1- Yes () 2- No ()

86. If yes in question 85 above do you have debate competition in your school?

| | Yes | No |
|--------------------|-----|----|
| Class Vs class | | |
| Classes Vs classes | | |
| School Vs school | | |

87. During classroom instruction which method is most used in school?

| | Yes | No |
|---------------|-----|----|
| Lecture | | |
| Discussion | | |
| Group works | | |
| Demonstration | | |
| Study tours | | |

88. Comment on your school's timetable per week on following aspects:

| | Enough | About enough | Not enough |
|------------------------|--------|--------------|------------|
| Classroom time | | | |
| Study preparation time | | | |
| Discussion time | | | |
| Group work time | | | |
| Playing time | | | |

89. In your school how many tests are given in week for the following subjects?

| Subjects | Number of tests |
|-------------|-----------------|
| Mathematics | |
| English | |
| Kiswahili | |
| Geography | |
| Physics | |
| Chemistry | |
| Biology | |
| History | |
| Civics | |

90. Do you think they are enough?

1- Yes () 2- No ()

91. In your school how many homework's are provided for the following subjects in a week?

| Subjects | Number homework's |
|-------------|-------------------|
| Mathematics | |
| English | |
| Kiswahili | |
| Geography | |
| Physics | |
| Chemistry | |
| Biology | |
| History | |
| Civics | |

92. Do you think they are enough?

1- Yes () 2- No ()

93. In your school do the knowledge and skills acquire in the classroom be able to solve problems?

1- Yes () 2- No ()

94. In your schools do you think the following influence academic performance of students?

| | Yes | No |
|---|-----|----|
| Number qualified teachers | | |
| Availability of teaching and learning materials | | |
| School learning environment | | |
| Type of school | | |
| Composition of students | | |
| Size class | | |
| Gender of teacher stuff | | |
| Availability of library and books | | |
| Ownership of school | | |
| Source of school funds | | |
| Distance from home/town centre to school | | |
| Number of teachers | | |

THANK YOU FOR YOUR COOPERATION

Appendix 5: Checklist for Key Informants

1. How many community built secondary schools are there in Mbeya municipality?
2. How many government built secondary schools are there in Mbeya municipality?
3. What is the academic performance of community built secondary schools in Mbeya municipality?
4. What is academic performance of government built secondary schools in Mbeya municipality?
5. What problems do community built secondary schools face in Mbeya municipality?
6. What problems do government built secondary schools in Mbeya municipality?
7. What problems do community secondary schools face in respect to students' academic performance in Mbeya municipality?
8. What problems do government built secondary schools face in respect to students' academic performance in Mbeya municipality?
9. How does your office solve problems that government built secondary schools face in respect to students' academic performance in Mbeya municipality?
10. How does your office solve the problems that government built secondary schools face in respect to students' academic performance in Mbeya municipality?
11. What comments do you give for improving students' academic performance in community built secondary schools in Mbeya municipality?
12. What comments do you give for improving students' academic performance in government built secondary schools in Mbeya municipality?
13. Do you think that students' academic performance of community built secondary schools is poor compared to government secondary schools in Mbeya municipality?
Explain why.
14. Who are the proprietors of the community built secondary schools in Mbeya municipality?
15. What are the sources of funds in community built secondary schools in Mbeya municipality?
16. What are the sources of funds in government built secondary schools in Mbeya municipality?
17. Are sources of funds in community built secondary schools affect students' academic performance in Mbeya municipality?
18. Are sources of funds in government built secondary schools affect students' academic performance in Mbeya municipality?

19. Do you face problems with the following aspects in your school?

| | Yes | No |
|------------------------------------|-----|----|
| Teaching materials | | |
| School learning environment | | |
| Number of qualified teachers | | |
| Size of class | | |
| Sources of fund | | |
| Number of teachers | | |
| Library and books | | |
| Composition of students | | |
| Distance from homes/town to school | | |
| Gender of teaching staff | | |
| Ownership of school | | |

If the answer is yes for the question no. 19, how do you solve the problems in your school?

THANK YOU FOR YOUR COOPERATION