ASSESSING THE DEMAND FOR THE ESTABLISHMENT OF TECHNICAL AND VOCATIONAL INSTITUTIONS IN SUBA DISTRICT

BY

HEADMOND JAMES K'OBILL

A RESEARCH THESIS SUBMITTED TO THE SCHOOL OF EDUCATION IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF PHILOSOHY DEGREE IN TECHNOLOGY EDUCATION, UNIVERSITY OF ELDORET, KENYA.

NOVEMBER, 2015

DECLARATION

Declaration by the candidate

This thesis is my original work and has not been presented for a degree in any other university, except for references to other authors' work which have been duly cited. In accordance, no part of this thesis may be reproduced without prior permission of the author and/or that of University of Eldoret

Signed……Date……

HEADMOND JAMES K'OBILL

REG. NO.: EDU/PGT/1O23/09

Declaration by supervisors

This thesis has been submitted with my approval as the university academic supervisor to the student.

1. Signed……..…….Date……

DR. WANAMI SIMON

Senior Electronics Lecturer- University of Eldoret

Technology Education Department

P.O.BOX 1125 -30100 Eldoret-Kenya

2. Signed----------Date----------

DR. DIMO HERBERT

Senior Technology Lecturer- University of Eldoret

Technology Education Department

P.O.BOX 1125 -30100 Eldoret- Kenya

DEDICATION

Special dedication to my late First Born daughter Janeleah Angelah Headmond (long live her memories) who would help boot my computer at times of this work. Cordial Dedication goes to my son Armstrong Boanerges Hasan Malkiat and his brothers Abelard Palandre Vidal and Andrew Kioi Dugger for having accorded me mental consolation at times of stress. Finally, a special dedication to my wife Phane Headmond, also master student University of Nairobi and a stalwart of ensuing knowledge.

ACKNOWLEDGEMENTS

Profoundly I acknowledge my supervisors Dr. Wanami and Dr. Dimo: at times of consultations they discharged their full strength as a stalwart and prop without which lack of thoroughness efficiency would have sufficed in this endeavour. Dr. Wanami has been catchment from which quality knowledge would be outsourced and disseminated.

Dr. Kitainge(head of technology department) whose outstanding role varied from general coordination to research intelligence upon which his dexterous impartment of statistical and analytical approaches were borrowed.

Dr. Okemwa (Head of Technology Department at the genesis) who professionally and administratively became fatherly against radial challenges offering oppositions to Research Technical Path. His support has been of great value and virtue.

All departmental lecturers have been handy throughout the time span of this Research Process.

Ministry of Education and its administrators offered me relevant data which saw the successful side of this research.

ABSTRACT

Technical and Vocational Education is deemed central towards the effort to attain and foster sustainable academic development in Suba District. Technical education and training has to take cognizance of the changing trends in technology in order to ensure relevance of the training to the country's current and future manpower needs. The purpose of this study was to assess the demand for the establishment of technical and vocational institutions places in Suba District. The school drop outs lack appropriate technical skills to enable them provide or be provided with employment posing unemployment. The study was conducted in Suba district in the Homa Bay County of Kenya. The specific research objectives were to determine the transition rate by pupils from secondary schools to join Technical Institutions elsewhere; to establish the accessibility variables to Technical education in the District; to determine the school expansion trends and to predict technical school spaces that will be required; to determine factors which have contributed to lack of technical institutions. The study employed descriptive survey design. The target population consisted of local educationists in the district such as Heads of primary and secondary schools in Suba district, while sample size for the study consisted of thirty percent of all Head teachers of primary schools, Principals of secondary schools and the Officers in the District Education Office. Proportionate stratified sampling technique was used to select the fifty Head teachers of primary schools and eleven principals of secondary schools from the District. Purposive sampling was used to select Officers at the District Education Office to participate in the study. The data was collected by use of questionnaires, interview schedule and document analysis. The study was based on John Rawls Theory of Social Justice which argues that a society is well ordered when its members know and agree to the same principles of social justice. Descriptive statistic such as means, frequencies, and percentages were used in data analysis. The study is presented in tables, charts, and graphs. The study findings are expected to benefit educational planners, policy makers and stakeholders to see the need of establishment of Technical institutions.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

GOK	-	Government of Kenya
ROK	-	Republic of Kenya
FPE	-	Free Primary Education
KESSP	-	Kenya Education Sector Support Programme
FDSE	-	Free Day Secondary Education
ECDE	-	Early Childhood Development and Education
GER	-	Gross Enrolment Ratio
EFA	-	Education for All
MDG	-	Millennium Development Goal
UPE	-	Universal Primary Education
UNESCO	-	United Nation Education Scientific and Cultural Organization
UN	-	United Nation

GDP	-	Gross Domestic Product
CRC	-	Convention on the Right of the Child
COPE	-	Complimentary Opportunity in Basic Education
CPE	-	Certificate of Primary Education
NER	-	Net Enrolment Rate

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter deals with the background of the study, statement of the problem, purpose and objectives of the study, research questions, significance and justification of the study, scope and limitation, underlying assumptions theoretical framework and definition of terms.

1.2 Background of the problem

Since independence in 1963, the government of Kenya has had a commitment to expand Education system to enable greater access to and by the population .This has been in response to a number of concerns. Among them are the desire to combat ignorance, diseases and poverty, and the belief that every Kenyan child has the right to the basic welfare provision that includes education (Nyamute, 2006). Immediately after independence in December 1963, the Ministry of Education appointed an Education Commission to survey the existing educational resources and to advise the government on the foundation and implementation of national policies of education (Sifuna and Karugu 1988)

The Kenya African National Union (KANU), manifesto had among other things, promised the provision of Universal Primary Education (UPE) and also noted the important role that education would play in meeting other socio- economic goals of the new Nation. This is in accordance to the concept of Adam Smith who emphasized the importance of investing in human skills (Psacharapoulos 1985). Shultz and Denison showed that education contributed directly to the growth of national income by improving skills and productive capacities of labour force (Psacharapoulos 1985).

By 1973 Primary pupils in Marsabit, Isiolo, Samburu, Turkana, Wajir, Tana River and Lamu Districts were enjoying free education. The Government also continued developing primary boarding Schools of which there were 86 in 1973 in those areas and to which the government added 14 more in its 1979-83 plan period .A national school feeding scheme was also launched (Eshiwani 1993).

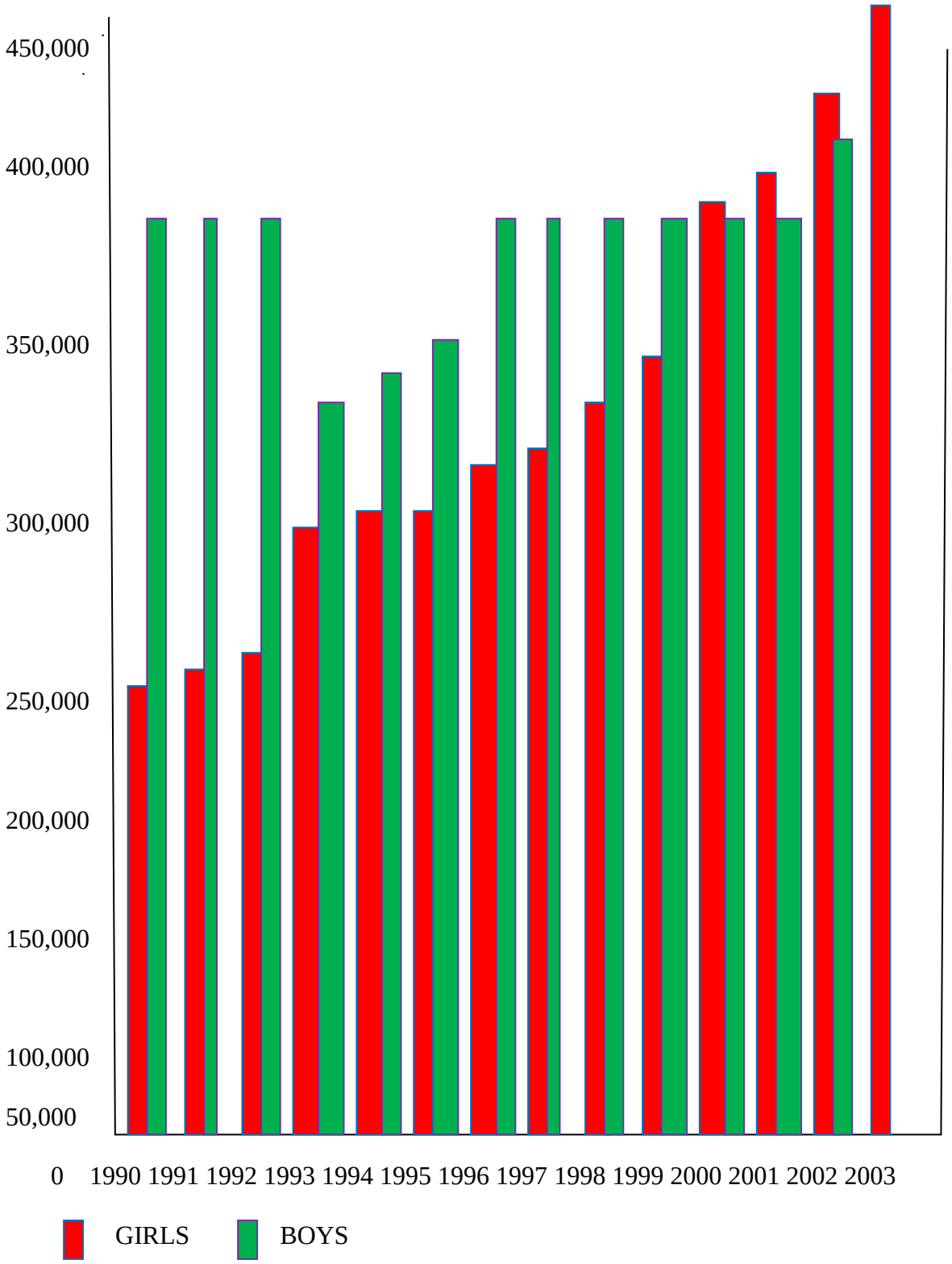
The idea behind all these moves was to encourage more parents to retain their children in school by reducing difficulties. In 1971 those districts recorded the highest percentage increases in primary school enrolment .The increase was more than 30 times the overall increase which was only 3.5 percent. Another Presidential Decree of December 1973, which made education free for the first four years of primary education throughout the country instantly, raised enrolments in primary school from 1.8 million in 1973 to 2.8 million in January 1974. By 1982, the enrolment amongst standard 1 school age children throughout the country rose to about 84 per cent (Bogonko 1992).

Technical education is particularly regarded as the most important point in the education system, which could help in solving the man power constraints of the nation (GOK1992). The expansion at this level of education is emphasized in Sessional paper No.10 of 1965, which noted that the immediate objectives in education are to expand Secondary level facilities rapidly as it is important in training of man power and the acceleration of Africanisation. The phenomenal expansion in Primary School enrolment later moved to Secondary Schools (Mutua and Namaswa, 1992).

The enrolment in secondary education rose from 30,000 students in 1963 to over 862,907 students in 2003 as shown in Table 1.1 (R.O.K 2005). This indicates that there is a need for

the expansion of tertiary Institutions to accommodate high influx of students from secondary school in the country (Suba District).

Table 1.1: Enrolment in Secondary Schools: 1990-2003



Source: Republic of Kenya 2005

The number of public secondary education schools has also increased from 151 at independence to 3661 in 2005. Based on the 1999 census data a total of 2.8 million Boys and Girls aged between 14 and 17 years who should have been in Secondary school and tertiary institutions were not enrolled (R.O.K 2005). One of the factors constraining tertiary education and Secondary Education enrolments is that the growth in the number of Secondary schools has not matched that of Primary school.

Imbalance and Biased Distribution of tertiary Learning institutions in the country has resulted to the ardent need of such institutions in Suba District where currently there is none.

Republic of Kenya (2005) also indicates that there are 3661 public Secondary schools and 641 registered Private Secondary schools and, compared to 18,081 Public Primary schools. This imbalance is expected to worsen following implementation of Free Primary Education (FPE) and the projected increase in demand for secondary education.

Free Primary Education (FPE) has now taken 8 years by 2010, another 4 years means that if no additional learning institutions are put in place then more learners would be wasted. Suba district being one of the District with fewest learning institutions may adversely suffer.

Major reforms that the Education sector has undergone include;

- Launch and implementation of FPE in January 2003.
- Development of Sessional Paper No 1 of 2005, A Policy Framework for Education, Training and Research.
- Adoption of the sector wide approach (SWAP) to planning and financing of Education and Training.

- Development and implementation of Kenya Education Sector Support Programme (KESSP) which is an investment programme that allows different stakeholders to support the sector in the medium term.
- The introduction of Free Day Secondary Education (FDSE).

The Government in its policy aimed to ensure that all children, including girls, children in difficult circumstances have access to complete free and compulsory education by 2010 and to improve transition rate from primary to Secondary schools of 70 percent from the current rate of 47 percent and raising the quality and relevance of education (Republic of Kenya 2005). Also from that report, there has been a substantial increase in the number of students enrolled at various levels of education. In Early Childhood Development and Education (ECDE), enrolment grew from 483,148 children in 1982 to 894,295 children in 2003. The enrolment in ECDE increased from 1,672,336 to 1,691,093 children in 2007 but GER (59.3%) is still below acceptable levels (Economic Survey 2008). Enrolment in formal public primary school grew from 891533 pupils in 1963 to 7.2 million pupils in 2004. The latest report according to the Government indicates that enrolment rates have risen from 5.9 million pupils in 2002 to 8.2 million in 2008 in primary (Sunday Nation 14, 2008). Transition rates from primary school to secondary learning institutions have already risen from 45.8% in 2006 to 60 percent in 2007 and it is anticipated to rise to 70 % in 2008.The completion rate increased from 56.9 percent to 70.9 percent in 2006. Currently, the country has 18,063 public primary schools and 8,041 private primary schools enrolling 8.2 million pupils.

A major factor constraining secondary school enrolment is that the growth in number of secondary schools has not matched that of primary schools (GOK, First Medium

Term Plan: 2008-2012).There was 4,245 public secondary schools and about 2,240 private secondary schools as compared to 26,104 primary schools in the year 2007.

Table 1.2: Number of Educational Institutions (2003-2007)

Year / Schools	2003	2004	2005	2006	2007
Pre-primary	29,455	32,879	34,043	36,121	37,263
Primary public	17,697	17,804	17,807	17,946	18,063
Private	5,857	6,839	7,546	7,983	8,041
Total	23,554	24,643	25,353	25,929	26,164
Secondary public	3,583	3,552	3,621	3,646	4,245
Private	1,490	1,590	1,773	2,013	2,240
Total	5,073	5,142	5,394	5,659	6,485

Source: Economic Survey, 2008

Currently, the total enrolment in secondary schools stands at 1.18 million students as compared to 3.7 million children of secondary school going age. The GER increased from 32percent in 2006 to 37 per cent in 2007. The imbalance is expected to worsen following the successful implementation and strengthening of FPE as well as introduction of FDSE. The demand is already acute in urban areas particularly in urban slums where 60 per cent of the total urban population live (Economic Survey, 2008).In Suba district, there is 55 secondary schools and 177 primary schools. This shows that there is a mismatch between the two levels of Education in the district and hence the need to project the future demand for secondary places to guard against shortage of spaces.

The attainment of Educational For All [EFA] by 2020 and the commitment of the Government, in line with the right to education for all Kenyans, there is need to expand secondary schools in order to match them with primary schools. Investing in education is identified as one of the pillars of the Government's overall economic recovery strategy. For the country to achieve the desired economic growth targets and social developments, a high priority needs to be placed on increasing secondary schools places so as to provide the link to the training institutions.

1.3 Statement of the Problem

After secondary education very many pupils drop from school. The school drop outs lack appropriate technical skills to enable them provide or be provided with employment. The latest report from the Ministry of Education indicates that Kenya has 6,350 Secondary school [Sunday Nation, 14, 2008].

The Government in response has put in place measures to widen access and quality in secondary education with minimal or no regard to technical institutions, leading to imbalance enrolment. According to Sessional Paper No 1 of 2005, the government has aimed at integrating secondary education as part of basic education through provision of free tuition to students as well as provision to support to poor and disadvantaged students through bursaries. Due to these policies: Education for All (EFA), FPE and free tuition policies from the government, there is a need for Technical school places in Suba District. The Government and other stakeholders responsible in the provision of Technical education should be prepared to handle the large number of students from secondary school levels. As already pointed out in the background of the study, there is a wide disjoint between secondary schools and

tertiary institutions in SUBA district. The present study intends to assess the demand for the establishment of Technical school places by the year 2020 in Suba district.

1.4 Purpose of the Study

The purpose of the study is assessing the demand for the establishment of technical and vocational institutions in the year 2020 in Suba district.

The attainment of EFA by 2020 is a major goal of the Government. This is also in line with the Government commitment to international declarations, protocols and conventions as stipulated at the world conference on EFA (Jomtien-Thailand, 1990, and Dakar-Senegal, 2000) and by the MDGs (Republic of Kenya 2005), but Suba District has not been benefitting from these lines of government commitments.

1.5 Objectives of the Study

- To determine the transition rate by pupils from secondary schools to join Technical Institutions elsewhere.
- To establish the accessibility variables to Technical education in the District
- To determine the school expansion trends and to predict technical school spaces that will be required.
- To determine factors which have attributed to lack of technical institutions.

1.6 Research Questions

The study will attempt to answer the following research questions.

(a) How many students have ever accessed Technical Education after primary and secondary school levels?

(b) What factors hinder accessibility to Technical education in the district?

(c) What has been the expansion trend to technical education in the District?

(d) What are the reasons attributed to lack of technical schools in the district?

1.7. Justification of the Study

The introduction of FPE programme has increased the number of primary schools in the country from 14864 in 1990 to 19496 in 2003 representing a 31.2 percent increase. Enrolment also went up from 5.9 million in 2002 to 7.2 million in 2003 (GOK 2005). The rise in enrolment in 2003 was due to FPE, where one million more pupils joined primary schools. The demand of Technical school places in Suba District is justifiable because there is a high influx of pupils in primary and secondary schools who will eventually need places in Technical schools for technical skills to be self-reliance. Kenya has 21,500 Primary school and 6,350 secondary schools against very few Technical institutions and some places (Suba District) none.

Due to the free tuition policy in provision of secondary education, there is need for the government and other education stakeholders to be aware of the Technical school demands in 2020. During the Jomtien Conference (Thailand, 1990) and Dakar (Senegal) Conference, Kenya pledged to achieve EFA by 2020, a clear indication that Technical education should be one of the facilities to provide EFA. Further, the Government, in the long term intends to work towards integrating secondary Education as part of Basic Education (GOK, 2005). This plan ignores diversified nature of biased regions in the country like Suba District. In fact proper strategies should have been put in place to ensure the success of integration of Secondary Education with the vast need of technical education in Suba district. The Government also intends to provide support for the poor and

disadvantaged students through bursaries, an initiative that can be achieved if the structure of technical school is known and how many of them drop jobless and void of hands-on-skills. In the light of these policies the researcher intends to find it worth to assess the demand for Technical Education by 2020 so as to conform the district by the government vision of 2030 in terms of technology.

1.8 Significance of the Study.

The researcher hopes that the study should be beneficial in the following ways:

Help the Ministry of education in the introduction plans of Technical schools in 2020.

The results of the study should help the educational planners to know budgetary allocation to technical education by the year 2020

Help the Ministry of education in the expansion of secondary schools proportional to technical and tertiary demand.

The study should examine the imbalances within educational system. This is whereby primary and secondary school enrolment increased while tertiary school sector is not correspondingly expanded. This should help the educational planner in making decision on how best to improve the development of education.

The study should shed light on effectiveness and efficiency of FPE and free tuition policies in primary and secondary schools in accordance to technical needs in Suba District.

1.9 Scope and Limitation of the Study.

1.9.1 Scope of the study

The focus of the study is to project the demand for technical school places in 2020 in Suba district. The study uses primary school enrolment to forecast the enrolment of the students in the secondary school and in turn project the technical demand by the year 2020.The transition rate of the previous years was also determined and used to project the enrolment of students in secondary schools. A sample of 53 schools was drawn from the total number of 177 primary schools. At secondary level a sample of 16 drawn from 55 schools was used. The study also made use of the statistics in Suba district Educational Office to forecast the enrolment of students in secondary schools in the year 2020 so as to portray clear picture on the demand for Technical institutions. The study is conducted during the month of January 2012 and November 2012.Two categories of variables were investigated in the study; independent and dependent variables. The variables were selected on basis of literature review. Independent variables were: enrolment rate, wastage rate, transition rate and school establishment trends. These variables were investigated to determine how they are correlated to dependent variable; projection of technical institutions in 2020.

1.9 .2 Limitations

- There is inconsistency in the transition rates of students from primary to secondary schools over the years. The researcher determined transitions rate of the previous five years of primary and used to project enrolment of students in secondary school.
- There is limited literature on projecting technical school places which limited the review of literature.

- Inability to make accurate projection of the future. Forecasting is a difficult exercise and is likely to end as a process relying on ability of the educational planner to make intelligent guesses about the future of Suba district.
- Unwillingness and anger of respondents to reveal information that relate to total lack of technical schools. The researcher however assured them of the hope from such research process.

1.10 Assumptions of the Study

The study was based on the following assumptions

- All children in the district are enrolled in the schools within the district and if they join schools outside the district, those from other districts are equal to those who leave the district.
- All students enrolled complete the primary schools within the district.
- There is no cohort wastage rate in primary schools in SUBA district.
- Past enrolment trends will remain into the future.

1.11 Theoretical Framework.

The study was modelled on John Rawls (1971) theory of social justice. Rawls (1971) argues that first, society is well ordered when its members know and agree to the same principles of social justice and second, the basic institutions of society generally satisfy and are widely known to satisfy the principles. Rawls (1971) thus depicts justice as an issue of fairness focussing on the distribution of resources and permitting unequal distribution only to the extent that the weakest members of the society benefit from the inequity.

Further the theory points out that the term justice as fairness does not imply that justice and fairness are identical but the principles of justice are agreed to under fair conditions by individuals who are in a situation of equality. Justice as fairness also implies that the principles of justice equally apply to all individuals.

Rawls (1971) argues that the two principles of justice which would be agreed to by rationale and mutually disinterested individuals in the "original position" of equality are that, first, each individual should have equal right to as much liberty as is compatible with the right of others and second, any social or economic inequalities which occur between individuals should be designed to benefit every individual and should belong to position which are equally available to all individuals.

According to this theory the school is seen as a social institution in which its members, that is teachers, parents and children ought to know and agree to the principles of social justice. Fairness should also be seen in the distribution of educational resources across the board so that each school going child is exposed to the same kind of education regardless of his or her geographical or socio-economic background (Kiumi and Chiuri, 2004). The philosophy underlying fairness is to ensure equal access to educational opportunities without any kind of discrimination.

Rawls (1971) theory of justice is useful to this study as already seen that the government has continued to pledge its total support for education throughout the country. Kenya has showed further commitment after signing the Jomtien Declaration (1990) on Education and also the Dakar conference (2000), in which Kenya mapped her strategies towards UPE by 2020. The declaration of FPE Education was viewed as

a basic human right in line with 1948 declaration of the Bill of Rights by the United Nations to which Kenya is a signatory (Republic of Kenya, 1976). The declaration of FPE in January 2003 was in recognition of education as a basic right for all Kenyan children as articulated in the Children's Act (2001). The Ministry of Education in collaboration with other ministries and Development partners prepared KESSP 2005-2010, to operationalize the sessional paper of 2005. The KESSP was prepared to pursue the EFA and MDG's. This theory of justice was beneficial to this research since it argues for equal rights for all individuals and denies that injustice toward any particular group of individuals justifiable unless this injustice is necessary to prevent an even greater injustice [Rawls ,1971].When the theory is applied in education it refers to the degree of fairness in the distribution of educational resources so that each pupil is given equal access to education facilities. The theory of justice, therefore, guided this research in study the projection of secondary school places in 2020.

1.12 Operational Definition of Terms

Demand: The requirement or need of technical and vocational training institution places

Projection : To predict something with the help of information

Social demand : Total requirement for school places

Wastage: Refers to repetition and drop out from education system

Wasteful imbalance: The expansion of primary schools than the minimal expansion at the secondary school level

Enrolment : Pupils that enter a school in a particular year

Stakeholder : Individuals who are responsible in the day to day running of the school

Transition : Promotion from primary level of education to secondary level of education system

Cohort : Refers to a group of people with similar identifiable characteristic.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter gives a review of related literature of the study that was based on available literature drawn from various sources. The chapter gives a discussion on the purpose of education, justification for planning, students demand for education, enrolment, enrolment projection, school expansions and the summary of the chapter.

2.1 Purpose of Education

According to UNESCO (1961) the purpose of Education was to broaden understanding so that men may make the fullest use of their innate potential, whether spiritual, intellectual or physical. Education would therefore have value even if it contributed nothing to economic development. Eshiwani (1993) argues that the National objectives of education are summarized as follows: to prepare and equip the youth to be happy, to make them learn and accept the national values, to be useful, and actively work towards the maintenance and development of the society.

According to Aggarwal (1985), education functions was to enable the individual to survive and live a complete life. John Dewey argue that social aim in education is stressed to make individual socially efficient. This social efficiency must be achieved by the positive use of individual powers and capacities in social occupation. A number of thinkers, therefore, tended to view education as consumption rather than as a form of investment. Plato and Socrates held the view that the purpose of education is to shape the youth to be good citizens.

According to these early thinkers, education is an enjoyable experience and therefore an end in itself rather than a form of investment (Ayodo, Gatimo and Gravenir, 1991). From the 18th century, however, education began to be seen as an important means of increasing workers productive capacity. This shift of opinion was as a result of the works of Adam Smith, Heinrich Von Thunen and Afred Marsgal (Ayot and Briggs, 1992).

The millennium declaration in which world leaders unanimously adopted at their September, 2000, United Nations (UN) summit, represent a vision for improving the lives of the world's people. The UN agencies and other international organisations defined eight distinct millennium development goals (MDGs) and attached to them a series of quantifiable and time-bound targets and set of indicators for tracking progress. The second MDG is to give universal education and the third is that of promoting gender equity and empowering women (Collymore, 2005). This has enhanced the enrolment in primary schools. Investment in education is beneficial in a multiplicity of ways, both for individual and for society as a whole. To achieve this objective there must be adequate secondary school places in the country.

2.2 Justification for Planning

Educational planning involves the application of a rational and systematic analysis to the process of educational development with the aim of making education more effective and efficient in terms of responding to the needs and goals of the students and society as a whole (Namaswa 2000). Educational planning is an activity that a society cannot ignore. This is in view of the fact that rational decisions need to be made so that the scarce resources are used optimally in order to maximize returns

from education (Kiumi and Chiuri 2006). Coombs (1967) has, for instance, justified the need to plan education by positing that planning.

- *Enables society to rationally allocate scarce resources (both human and material) in education sector. This reduces chances of misallocating resources and Wastageboth of which are essential prerequisites for increasing returns from education.*
- *Ensure that resources set aside for education are equitably allocated to all social classes and geographical regions. This enhances balanced development in a nation.*
- *Helps to control the problem of educated unemployment which is endemic in developing countries since education is planned according to skills that are demanded by the labour market*
- *Gives society an opportunity to bring on board emerging trends in educational planning from other parts of the world.*
- *provides a coordinating link between long range and short-range goals*.

Since time immemorial, educational development has been influenced by socio-economic and political needs of society. Ancient Greek societies like the Spartans and Athenians, the Peruvian incas and Chinese, for instance, planned education in order to suit the aspirations of the state (chiuri & Kiumi 2001). The modern concept of educational planning can be traced back to the Soviet Union after the October 1917 Revolution. The major aim of the revolution is to create a classless society. To achieve this goal, education was carefully planned in order to cultivate socialist ideas among the citizens (Wailer, 1985). Immediately after World War II, politicians and planners realized that education had to be rationally planned in order to solve

problems affecting society. These problems ranged from poverty, illiteracy and impaired educational systems to political instabilities, low levels of industrialization and shortage of skilled human resources. Great Britain adopted a five-year development plan in which educational development was included (Weiler, 1985)

In 1950s, T.W. Shultz came up with the theory of investment in human Capital (Cohn, 1975). This theory changed attitudes towards education among planners, politicians and economists. Schultz is thesis advocated the view that investment in education is crucial for development.

For that reason, education began to draw more from the national budgets while planners in turn planned education in terms of student's intake and output so as to be in tune with the human needs of the nation. Rapid expansion of schools dominated the government's plans in the 1960's. This was necessitated by the need to modernize the economy and thus compete favourably with socialist nations and this increased the social demand for education (Waiver, 1985). The increase social demand for education will be as a result of population growth and the desire by parents to see their children go through the school system so as to enhance their social mobility (Kiumi and Chiuri 2006).

A number of studies from all parts of the world show that educational returns for an additional year of schooling are positive and ranged anywhere from 5% to 10% in developing countries. A 1994 survey shows that returns to education in Africa are higher than of other world regions (Psacharopoulos 1994). Levy (1996) found that improving access to secondary education facilities not only improved enrolment at the

secondary level but also served as an incentive for primary school completion in Ghana. If the transition from primary to secondary fall, it is likely that primary completion will decline as well and that dropout rates in the final year of primary education might not be easily reduced.

Education has been proved to provide protection against HIV infection (World Bank 1999). There is now convincing evidence that young people in Africa who complete basic education are at reduced risk of HIV / AIDS and this effect is even stronger for those who complete secondary education.

A longitudinal study in Uganda found a marked decline in HIV Prevalence rates in males and females aged 18-29 with secondary or higher level of education. But increases among those with lower educational level. Secondary education has a general preventive impact by providing children and youth with skills to critically process information. It equips them to make decisions concerning their own lives and to bring long term behavioural change (De Walgue 2004)

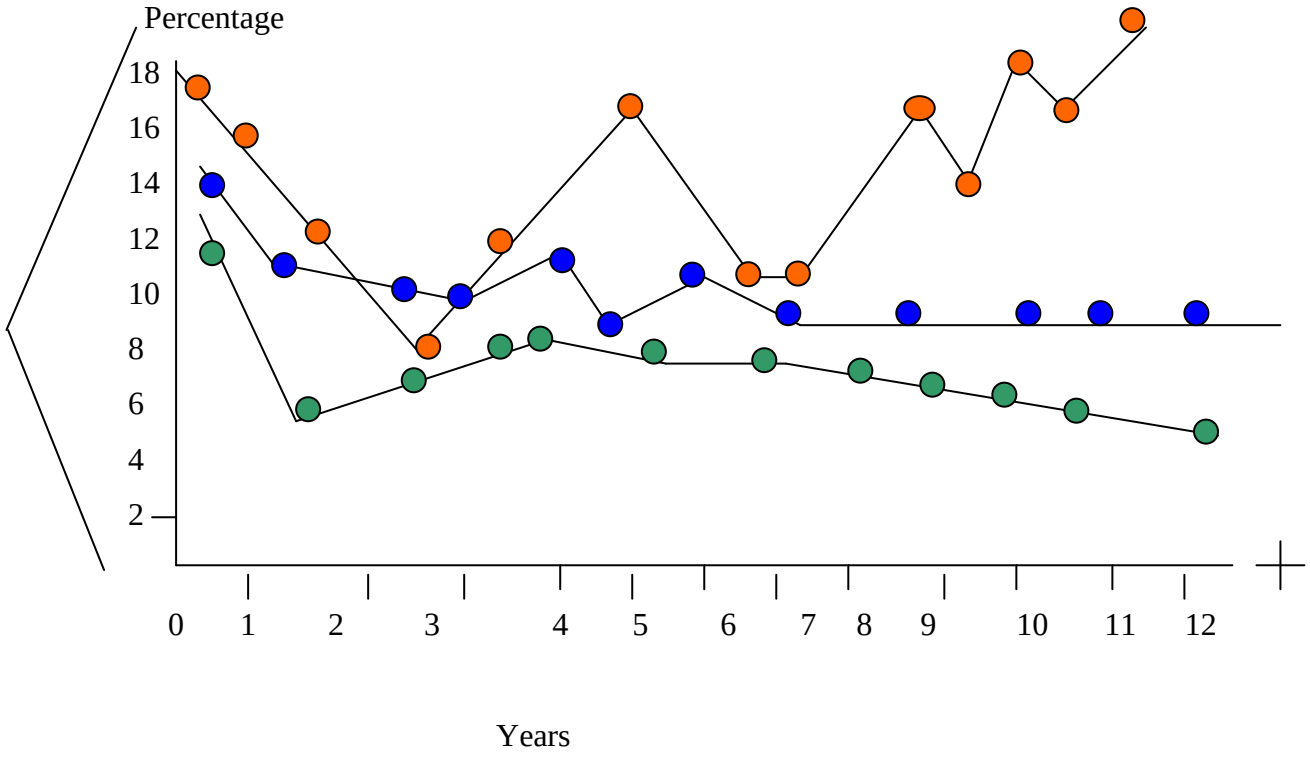


Figure 2.1: A line graph showing the rate of HIV/ AIDS infection against the people's level of Education

Source: De Walque (2004)

KEY

- Secondary Education
- No education
- Primary Education

Note: The data are from longitudinal study conducted over a 12 year period
Each round represent one year of data collection

Female education results in a number of beneficial health impacts for children. Better educated women are more likely, than their peers, to delay marriage and child bearing and to have fewer and healthier babies (Psacharopoulos, 1995). According to a World Bank (2000) estimate a 10 percent point increase in female primary education lowers the infant mortality rate by 4.1 deaths per 1000 live births and a similar rise in female secondary education is associated with another 5.6 fewer deaths per live births. Recent demographic and health surveys in 49 developing countries show the mortality rate of children under five is highest in households where mothers have no schooling and lowest where mothers have some secondary schooling or higher.

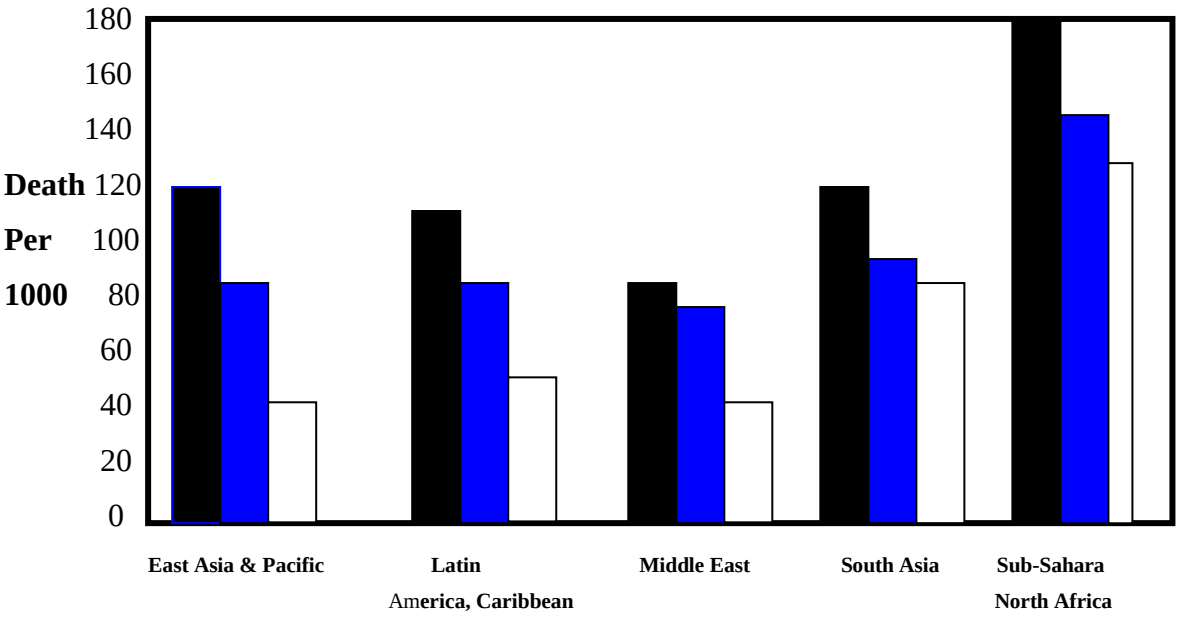


Figure 2.2: A line graph showing the rate of HIV/ AIDS infection against the people's level of Education

Source: May 2003

Returns to education are useful for policy making in a number of ways. For instance, social return to education give an indication of which sector of the education system the government should invest in.

Most of the returns to primary and secondary education are significantly different and therefore the policy makers are able to make more efficient allocation of social spending on education. The government's commitment to education is seen through its allocation of social spending on education. Between 1980 and 1997 the Ministry of Education allocated 56% to primary education, 17% to secondary education and 16% to university education. In 1998, education sector's share was 29% of the total budget. The motive behind investment in the education sector is the expected benefits. In 2006/7 fiscal year, the government spending on secondary education was 24% of the total public expenditure, which constituted 1.5% of Gross Domestic Product (GDP) (ROK 2007).

The gross total expenditure increased form Kshs. 109.8 billion in the year 2006/2007 to Kshs. 125.3 billion in 2007/2008 reflecting the government in the commitment to ensuring provision of adequate grants to schools under the free primary education programmes. Recurrent expenditure to secondary education increased 8 times from Kshs. 1.0 billion on 2006/2007 to Kshs. w7.8 billion in 2007/2008 to cater for newly introduced free secondary tuition (RoK, 2008).

Primary education development expenditure increased by 62.5 percent from Kshs. 6.4 million in the 2006/2007 to Kshs. 10.4 billion in 2007/2008. Secondary education

development expenditure increased by 12.9% from 170.0 million in the 2006/2007 to Kshs. 192.0 million in the year 2007/2008 (RoK, 2008).

2.3 Student's Demand for Education

Addis Ababa conference (1961) aimed of Universal Primary Education (UPE) as the need to accelerate the reorientation of education to the economic, social and cultural needs of each country and the needs to satisfy the people's fervent desire for education (Bogonko, 1961). The Thailand conference in 1990 sparked off a new impetus towards renewed commitment to education. It noted, "That to serve the basic needs for all requires more than a commitment to basic education as now exists. What is needed is an expanded vision that surpasses resource levels, institutional structures, curricular and conventional delivery systems, while building on the best in the practice" (World Bank on Education, 1990:20).

The Convention on the Rights of the Child (CRC), puts children's rights on the world's agenda. It was adopted during the United Nations general assembly in November 20, 1989 (Sifuna, Chege and Oanda, 2006). The convention promise children around the world the right to life, liberty, education and the health care. The United Nations member states have articulated the Millennium Development Goals (MDGs) that will enhance human dignity and equity through the various sectors including the education sector. During the millennium summit in the September 2000, world leaders restated their obligation to care for the entire world's people, especially the most vulnerable and in particular, the children of the world, to whom the future belongs. The millennium summit defined and adopted the MDGs to be achieved by 2020. The MDG's comprise eight (8) time bound goals aimed at eradicating extreme

poverty and hunger, achieving universal primary education, promoting gender equity and empowering women, improving environmental sustainability and development of global partnership for development. The first two goals are a direct concern to educationists.

These two goals challenge the world leaders and the government to facilitate the achievements of UPE, ensuring that girls and boys complete a full cycle of primary schooling in addition to eradicating gender disparity in primary and secondary education preferably by 2005 and at all levels by 2020. (Sifuna, Chege and Oanda, 2006). According to UNESCO (2008), globally around 70% of primary age children are enrolled in primary education globally, but the proportion is rising under Education for All (EFA) programs driven by UNESCO.

The expansion of secondary education represented an attempt to establish a balance between the perceived social needs, especially the need for higher-level manpower in the country and private demand by individuals for education at this level (Kazzim 1987).

Historically, the countries that have experienced the most rapid and sustainable increase in educational attainment as well as outstanding economic performance, have pursued balanced upgrading of the primary, secondary and tertiary levels of education. Goldin (1999) demonstrates the importance of the extension of secondary schools in United States between 1910 and 1940, a transformation that gave the United States a half century lead over European Countries. De Ferranti et al (2003) stresses the importance of a balanced upgrading of an education system after analyzing the example of Korea, Singapore Taiwan(China) and other East Asian

"Tigers", which make a stark contrast with the 'unbalanced' transitions observed in many Latin American Countries. Investing in secondary education can have a direct impact on the effort to reach MDG 2 (Achieving UPE). Increasing the provision and coverage of secondary education can boost completion rates in primary; this can increase motivation for graduation from primary schools. An analysis of global education trends by UNESCO shows that developing countries need 'some massive expansion of secondary education (UNESCO 2004), in order to meet the goal of UPE.

Increased primary education completion rates can boost demand for secondary education. The expansion of secondary education can also be a powerful incentive for students to complete and graduate from primary school. Secondary school education be linked only with higher education but currently, secondary schools have created externalities for primary schools in their catchment areas by pressurising for quality primary school graduates. The growing demand for secondary education according to World Bank (2005) is directly attributed to:

- *The efforts to achieve UPE and equity driven programs for female students and Minority groups.*
- *The increase in demand for new types of Knowledge, skills, attitudes, values and experiences originating from more pluralistic communities and the use of more sophisticated technologies in the work place.*
- *The decreased role of the government and the rural sector as the employer, and importance of the service providing sectors, whose employment structure is dominated by knowledgeable professionals.*
- *Increase in elected representative government and concomitant need for better educated citizen.*

- *The increasing private returns to secondary education as the labour market demands graduates with more sophisticated skills, knowledge and competence that can be acquired.*

According to Ministry of Education (1992), there was an increased demand for education by the students and the communities. Between 1993 and 1990, the number of secondary schools grew from 151 to 2678. There were 3661 public secondary schools and 641 registered private schools and today there are 21, 500 primary schools and 6350 secondary schools (Republic of Kenya). Some districts in Kenya have very few girls in secondary schools. The existing schools cannot accommodate all the girls who qualify for secondary school education. (Lunyagi, 2009). This has promoted gender disparity in Education. Most of the secondary schools have been forced to convert old buildings and stores to classrooms or dormitories to students

2.4 Enrolment.

At the time of independence, the shortage of skilled labour a major constraint to the government of Kenya in working toward achieving its development goals. To improve on this situation, the government has devoted the largest share of its budget in expanding education. For instance, the education sector share was 29% of the total budget in 1998 (Manda, Mwabu and Kimenyi 2002). In the early decades after independence, most of the expansion took place in primary and secondary education. But since 1980's the number of institutions of higher learning, both public and private, has expanded rapidly students enrolment in primary schools increased from 0.9 in 1963 to 5.9 in 1999 and 0.7 million and 0.03 million in secondary over the same period.

The expansion in primary school enrolment was partly fastened by FPE introduced in 1974, while increase in secondary school enrolment was due to the large number of schools that were built through self-help initiatives in response to high demand for education. The total enrolment for standard one to six, for example, increased from 1.8 million in 1993 to nearly 2.8 million in January 1994 (Sifuna, 1990).

According to Kazim (1987), the seven year primary education continued until 1984, when Kenya switched to eight year primary, four years secondary and four years university (8.4.4) education system. The eight years uninterrupted primary school system led to the expansion of primary education. The growth was 8% in primary schools. Between 1964 and 1988 growth was at the rate of 5.5 % per annum, from 980 ,849 pupils in 1964 to 1, 2009, 680 in 1968 (Bogonko 1992).

By 1983 expansion in enrolment had more than quadrupled from 891, 553 in 1963 to about 4.3 million in 1983 in 1983. The highest rate of expansion was witnessed since 1970 climaxing in 1974.

That trend was due, first, to the elimination of school fees in arid and semi-arid areas and extension of free remission for needy cases throughout the country and secondly to the provision of free education was extended to standard VII and then to standard VIII in 1985 when the 8.4.4 system was implemented (Bogonko 1992) . The growth in primary education in Kenya was due the government aim of achieving UPE by 1980 as had been agreed at the Addis Ababa conference in 1961.

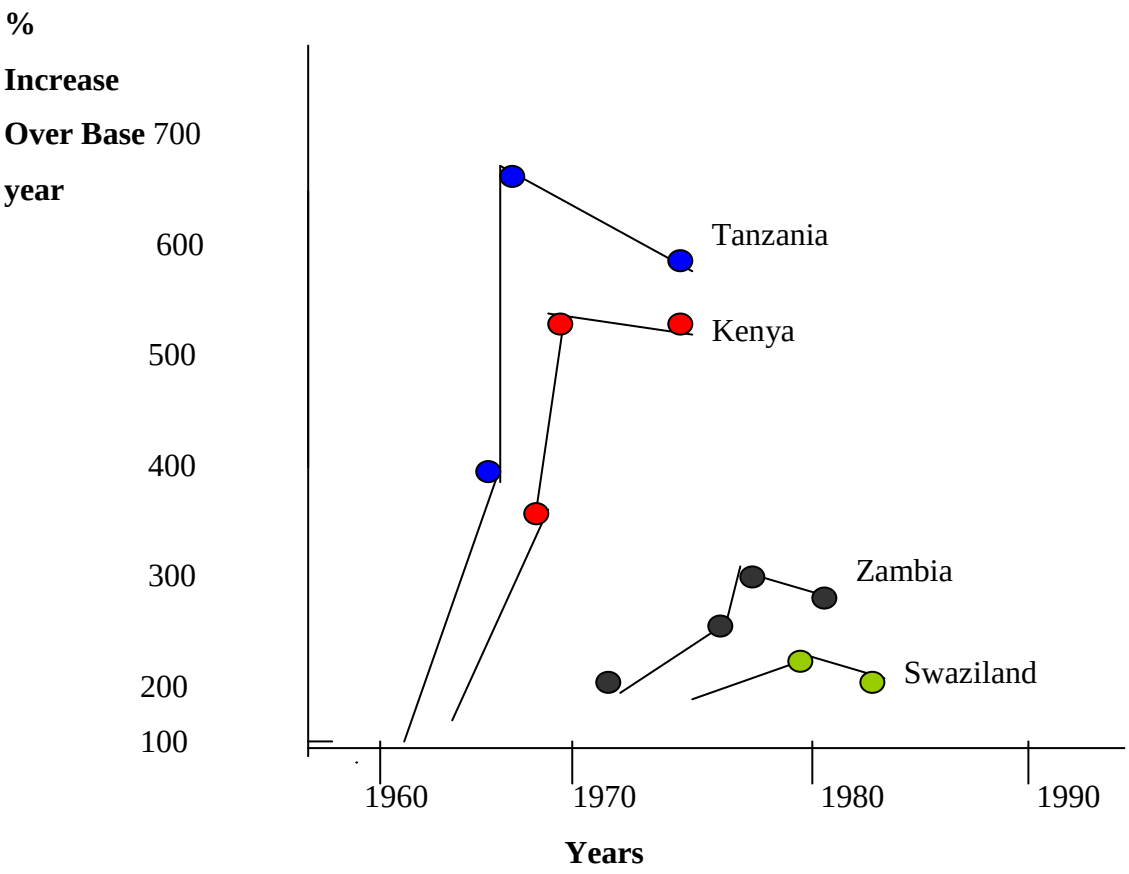


Figure 2.3: Trend in primary school enrolment in Eastern and southern Africa from independence to the mid-1980'

Source Ishumi [1994]

The immediate expansion of primary education was triggered by international bodies that had a significant impact on the collective thinking and rationalization of African governments (Ishumi, 1994)

Table 2.1 : Levels of primary school enrolment achieved by selected countries in Sub-Saharan region enrolment as % of all school age children

COUNTRY	EARLY TO MID-1980S	1989
BOTSWANA	83.2 (1981)	93
KENYA	85.0(1985)	93
LESOTHO	75.0(1980)	72
MALAWI	71.0(1983)	50
SWAZILAND	85.0(1986)	80
TANZANIA	98.0(1980)	64
UGANDA	56.0(1980)	67
ZAMBIA	88.5(1983)	80

Source World Bank (1992)

World Bank (1992) indicated that the among the selected countries in sub-Saharan region, Kenya had made great achievement in primary enrolment compared to other countries within the region.

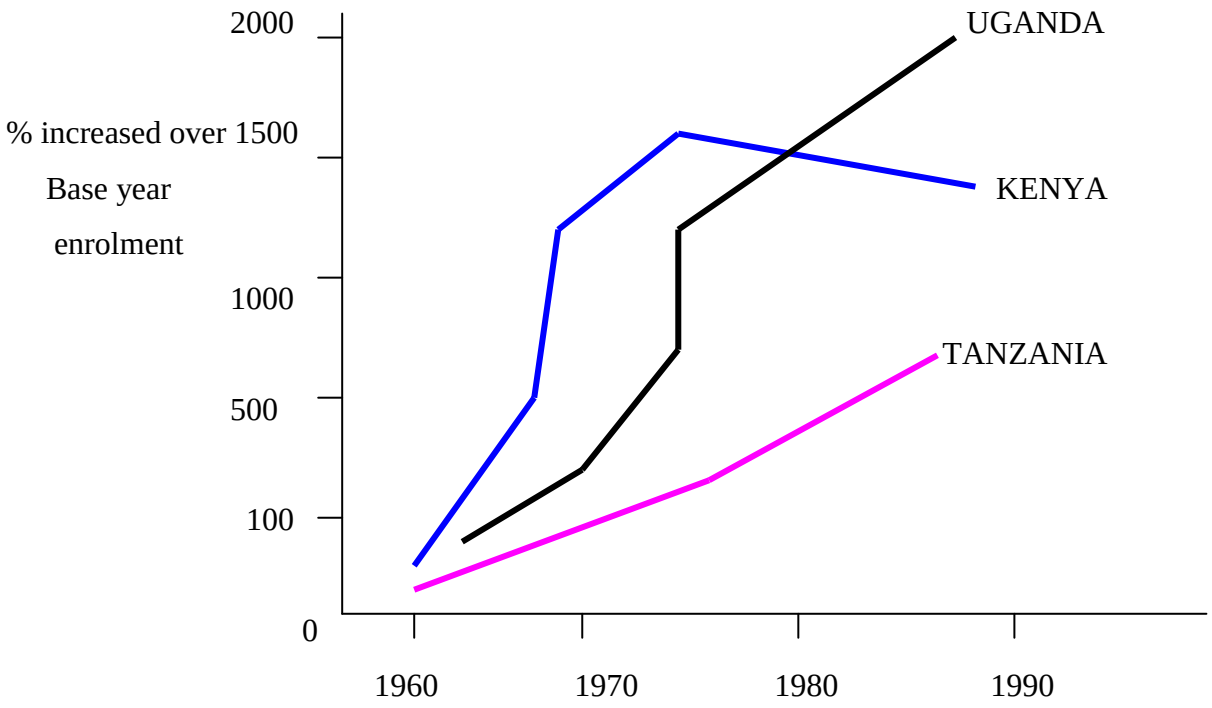


Figure 2.4: Trend in secondary school enrolment from 1960's to 1988 in East Africa Countries

***Source**: World Bank (1991)*

Of the three east African countries, Kenya is the only country that has seen a decline in enrolment in the last decade and half, despite having been the leader in the beginning of the 1990's. Uganda and Tanzania designed policies and special programmes for the sub-sectors that have largely been responsible for the steady increase in access. Uganda initiated a programme called Complementary Opportunity in Basic Education (COPE) (Rajani, 2003) which has seen an increase in enrolment because of Free Education Policy which allows for free of four children per family, a half of whom must be girls. COPE also caters for girls out of school and over-aged children.

The lack of middle and high level personnel explains the apparently universal policy for expansion of secondary education in East Africa Countries. Increase in enrolment, especially at the secondary level, was a result not only the government's effort alone but also a partnership, between the public and the private sector. In Kenya, 71% of secondary schools were financed and ran by private bodies, communities and national or international agencies in 1977, with only a few assisted by the government (Kenya, central Bureau of statistics). In 1983, a significant proportion of students (33%) were enrolled in schools that were unaided by the state, and 22% were institutions that were partially state- assisted (Lillis and Agot, 1988).

It is also noteworthy that, though the number of Form one places grew enormously, secondary school opportunities for individual primary school leavers actually decreased when expressed as a percentage. By 1970 Kenya had not been able to produce enough secondary school places for her certificate of primary Education (CPE) candidates, thus the competition for form one places were very great throughout the 1960's (Bugonko1992).

In the decade 1969-1979, provincial imbalances in secondary education opportunities persisted, with central province having a higher percentage (23%) of aided secondary schools than her population (15 %) of the total warranted. Homa Bay County was the most disadvantaged having 21% of Kenya's population but with only 14 percent of her secondary schools. Also, given that formed slightly more than 50 percent of Kenyan's population the inequality of opportunities for girls in secondary education

was particularly glaring. The proportion of girls in government maintained school is analyzed as it was 28% in 1971, 31% in 1976 and 34% in 1982 (Bogonko, 1992)

The government recognises the importance of ECDE as one of the important leavers for accelerating the attainment of EFA and MDGs. At early childhood Development and Education (ECDE), enrolment grew from 483,148 children in 1982 to 894, 295 children in 2003. Enrolment in 2006 increased from 1,672,336 to 1,691,093 children in 2007. The GER (59.3%) is still below acceptable levels. The number of ECD centres also increased marginally from 36,121 in 2006 to 37,263 in 2007 (RoK, 2008). Kenya had made remarkable progress in increasing access to primary education. Enrolment in formal public primary school grew from 891,533 pupils in 1963 to 7.3 million pupils in 2004. According to Economic Survey (2008) the NER increased from 86.5 percent in 2006 to 91.6 percent in 2007. Completion rates increased from 56.9 percent to 76.8 percent in 2006. Currently, the country has 18,063 public primary schools and 8,041 private primary schools enrolling 8.2 million pupils. There has been a significant increase in primary schools enrolment after the introduction of FPE in 2003. the results of the sharp rise in enrolment numbers exerted additional pressure on existing physical facilities. Furthermore, there is a limited number of primary schools serving those in ASAL areas.

In 2007, there were 4,245 public secondary schools and about 2,240 private secondary schools as compared to 26,104 primary schools. According to (ROK, 2008) the total enrolment in secondary schools stands at 1.18 million as compared to 3.7 million children of secondary schools going age. The GER increased from 32 percent in 2006

to 37 percent in 2007. The Ministry of Education had set a target transition rate of 70 percent of 80 percent from primary to secondary schools by 2009. this will increase from the current rate of 70 percent with enrolment doubling from 1.17 million students to about 2.8 millions students in 2012 and tripling to 3.51 million students by 2010 (RoK, 2008).

Table 2.2: Secondary schools by province 2005-2006

	2005			**2006**		
	PUBLIC	**PRIVATE**	**TOTAL**	**PUBLIC**	**PRIVATE**	**TOTAL**
Coast	144	42	**186**	145	43	**188**
Central	668	80	**748**	690	81	**771**
Rift valley	778	220	**998**	785	223	**1008**
Western	414	52	**466**	397	52	**449**
Nyanza	725	75	**800**	741	75	**816**
Eastern	664	194	**858**	691	196	**887**
North Eastern	25	15	**40**	28	15	**43**
Nairobi	48	47	**95**	48	47	**95**
Total	**3466**	**725**	**4191**	**3525**	**732**	**4257**

GOK, (2005)

Despite the growth in number of schools and enrolment, the increase in the supply of secondary school places has been too insufficient to improve participation rate.

Table 2.3: Primary to Secondary Transition Rates By Province 1995-2004.

province	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Coast	35.3	40.7	40.5	35.6	32.6	31.0	31.0	30.4	31.0	52.1
Central	52.8	51.2	51.9	52.2	46.3	48.6	46.9	57.3	58.5	59.6
Eastern	43.1	40.2	42.2	41.9	38.7	36.3	38.2	47.5	48.9	51.2
Nairobi	59.6	38.9	37.0	38.3	29.0	29.6	27.0	32.5	33.5	34.5
Rift valley	40.4	43.2	42.9	39.3	32.9	34.2	37.2	21.1	21.6	41.7
Western	45.1	48.8	48.2	54.9	53.2	49.4	51.0	52.6	53.7	55.8
Nyanza	43.5	46.6	43.7	46.4	39.4	42.2	50.0	35.4	36.1	47.3
North Eastern	39.4	67.4	47.9	48.5	43.2	46.4	528	42.9	43.8	44.9

Source: G.O.K (2005)

Although there was a high admission rate of 60% in 2007, the real transition rate (that's form one enrolment in 2007 as a % of standard 8 enrolments in previous year) was 46% in 2000. This figure indicates that despite the fact that 60% are admitted a number do not take up their places. Drop out due to high costs among other reasons. There is a demand created for secondary education due to the increase in enrolments in standard 8 following the implementation of FPE Programme starting in 2003. The number of children enrolled in primary level exceeds 7.8 million pupils with over 700,000 that were expected to complete standard 8 and progress to form one in January 2008.

Primary school enrolment grew by 7.9 percent from 7.6 million pupils in 2006 to 8.2 million pupils in 2007. Net enrolment rate increased from 86.5 percent in 2006 to 91.6 percent in 2007. The continued rise in NER indicates positive progress towards realising the millennium development goal. The number of Kenya Certificate of Primary Education candidates grew by 9.5 percent from 643,477 in 2006 to 704, 918 in 2008.

Table 2.4 Primary School Enrolment by Standard and Sex (2003 – 2007)

Year	**2003**		**2004**		**2005**		**2006**		**2007**	
Class	**Boys**	**Girls**	**Boys**	**Girls**	**Boys**	**Girls**	**Boys**	**Girls**	**Boys**	**Girls**
1	679.0	632.7	646.2	606.2	620	585.8	593.2	568.1	638.9	604.2
2	526.4	492.0	588.3	551.1	575.8	551.6	551.1	534.8	597.9	568.8
3	490.8	454.4	493.9	459.8	549.2	517.5	542.5	519.7	584.3	552.8
4	475.7	446.9	477.7	445.7	493.7	469.9	534.8	508.7	572.8	541.0
5	436.0	418.8	444.0	402.58	449.1	410.8	456.7	442.1	492.0	470.2
6	400.9	392.3	418.8	399.3	429.3	413.6	430.8	417.9	464.0	444.4
7	383.2	378.9	412.6	404.9	443.0	430.0	453.0	442.0	487.9	470.1
8	282.4	269.1	334.0	309.1	342.1	309.6	333.5	302.3	379.2	360.8
Total	***3674.4***	***3485.1***	***3815.5***	***3578.68***	***3902.2***	***3688.8***	***3895.6***	***3735.6***	***4217***	***4012.3***
Grand total	**7159.5**		**7394.18**		**7591**		**7631.2**		**8229.3**	

Economic survey 2008

Total enrolment in secondary schools increased by 14.6% from 1,030,080 students in 2006 o 1,180,267 students in 2007. Enrolment of boys and girls increased by 17.0 percent and 11.9 percent respectively in 2007. gross enrolment in secondary schools

increased from 32.2 percent to 36.8 percent during the period under view, with girls recording 33.3 percent and boys 40.4 percent. Admission to form one as percentage of total KCPE candidates increased by 60 percent in 2006 to 70 percent in 2007. the number of Kenya Certificate of Secondary Education candidates increased by 11.5 percent from 243,345 in 2006 to 276,239 in 2007 with girls constituting 45.7 percent. The student completion rate as at 2007 stood at 91.8 percent (RoK, 2008).

Table 2.5: Enrolment in Secondary School by Form and Sex (2003-2007)

Year	2003		2004		2005		2006		2007	
Form	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
I	142,887	134,935	146,645	127,057	139,469	124,384	161,588	137,873	170,650	143,045
II	111,279	101,500	124,585	114,053,	122,867	109,471	132,015	119,077	173,165	149,840
III	106,262	98,239	117,975	105,118	120,912	107,770	120,978	115,443	157,572	134,793
IV	102,322	85,089	101,301	89,416	110,909	98,367	131,491	111,615	137,304	113,899
Total	462,750	419,763	490,506	435,644	494,157	439,992439,992	546,072	484,008	638,691	541,577
Grand total	882,513		926,150		934,149		1,030,080		1,180,268	

Source: Republic of Kenya, 2007.

The policy decision to make secondary day schooling free for all public schools from January 2008 aimed at increasing enrolment at secondary school level from 1.03 million students in 2006 to over 1.3 million pupils in 2008. A minimum of 42, 306 addition Form one places were required by January 2008 (GOK, 2005) in order to attain the 80% transition rate targeted by the ministry of education in 2008. To attain the GOK targeted transition rate of 80%, it is expected that a total of about 600, 000 candidates would transit to secondary schools (GOK 2005).

Pupils graduating from primary school and wishing to join secondary schools should be given equal opportunities to enrol in a school of their choice. This is, however, not the case because secondary schools in the country are relatively few compared to the demand for secondary education In the ASAL areas there are even fewer secondary schools. Communities situated around the slums and poverty stricken areas have limited ability to raise adequate funds to put up secondary schools.

This has resulted in wide disparity in the number of secondary schools in high potential areas and those in low potential areas. Inadequate number of schools to cater for existing demand in several localities due to some hindrances including prohibitive construction costs, and stringent demand leading to delays in school registration processes. Few quality day schools exist in most localities, many lacking the essential facilities. The government policy of providing free tuition has caused unprecedented influx into existing day secondary schools (GOK 2007). The education system in the country continues to face challenges, particularly low participation rates, low transition from primary to secondary and from secondary to tertiary particularly universities , as well as gender and regional disparities. The quality of education also remains low (GOK, 2005).

2.5 Enrolment Projection

Forecasting future school enrolment involves two distinct stages. The purpose of such a forecast is to estimate the total educational costs, and hence the funding required. Due to compulsory schooling the forecasting of school enrolment figures present no particular difficulties as the number by children enrolled in a school age population. Enrolment rate depends on social demand (the desire for education expressed by pupils and parents and the policy established by the government (Ta-Ngoc chau 2003). Even the most authoritarian governments are obliged to take social demand into account when setting policy. Where the sole aim is to satisfy social demand, it is necessary to estimate how this demand will change in the future. Due to social demand the school enrolment rates become targets to be met. The enrolment is raise in order to achieve universal compulsory education within a given number of

years. The implementation of an education plan requires more than forecasting the overall numbers for a country.

It is also necessary to try to see how these numbers were distributed throughout the country (Ta-Ngoc to chau f2003). According to Metha (1997) enrolment can be projected using either mathematical or analytical methods require aggregate enrolment data of at least five years. Total enrolment can be projected by use of linear and non-linear equation methods, that is the extrapolation of the past into the future and making an assumption that the past enrolment trends will remain into the future. Demographic factors have an influenced enrolment especially in grade/class, and this grade forms a basis of subsequent years. Targets, assumptions and estimation of transition and entry should be feasible and based on each past trend. There are three methods of enrolment projection, these are: rate of growth, transition method and enrolment ration method.

2.5.1 Rate of Growth Method

This method requires enrolment data at two points of time and therefore the simplest technique of enrolment projections. It assumes constant rate increase over the projected period. Aggregate (total) enrolment at different levels of education can be projected using this method. However, it cannot be relied on to make grade-wise projections. The formula of rate growth is

$$r = \frac{1}{n}\frac{(E_n - E_o)\ x100}{E_o}$$

Where:

R Annual rate growth

E_n Enrolment in the current year

E_o Enrolment in the base year.

n Number of intermediary years.

2.5.2 Method of Least Squares.

This is another method of perfecting aggregate enrolment. This method is used to make future projection on the basis often past trend and is therefore applicable, when time series data is available. It is common to fit a straight line to the past observation. This straight-line method is popularly known as “line of the best fit” or “methods of least squares”.

It is a graphical method that calls for the drawing of a straight-line that touches a maximum of plotted points, the line popularly known as regression line is then extended so that future enrolment can be worked out.

2.5.3 Enrolment Ratio Method.

This method of enrolment captures demographic pressures and is based on enrolment ratio, which is calculated on the basis of past data and is extrapolated into the future by applying a suitable mathematical technique or a specific logic. It presupposes that population statistic and enrolment figures are available for reliability of results, net enrolment ratio as opposed to gross enrolment ratio should be used.

$$\mathbf{ER} = \frac{\mathbf{N}}{\mathbf{P.}}$$

ER - Enrolment ratio

N - Total enrolment at that level.

P - Population of the age group that corresponds to the level in question.

(Kiumi and chiuri, 2005)

The following steps are followed

Step I: Population projections are required to be worked out, if not readily available.

Step II: Calculate enrolment ratio for the last five years

Step III: Project enrolment ratios by method of least squares or any other suitable method by logic assumptions

Step IV: Obtain projected enrolment by taking the percentage of enrolment to be projected population

2.6 School Expansions.

The aim in primary education has been to promote literacy, numeracy and manipulation skills. Primary education is the fundamental basis for literacy and the acquisition of other basic skills as well as positive social attitudes and value which make life worthwhile in modern society (Bogonko 1992). The first post-colonial educational objectives and policies were defined in 1964. In line with these objectives there were numerous recommendations which had a profound influence on national thinking.

Many of them become part of government policies in the Development Plan of 1966-1970 and related to: UPE, Secondary and higher education for children with recognized abilities and fulfilment of Kenya's man power needs (GOK 1965).The goal of UPE was also articulated in other policy documents. In the KANU Manifesto of 1963, equal educational opportunities for all Kenyan children, irrespective of race

sex or creed, was strongly upheld. In Sessional Paper No. 10 of 1965 on "African Socialism and Its Application to Planning in Kenya," education was largely seen in economic terms, as a principal means of relieving the shortage of skilled man power and equalizing opportunities among all citizens (G.OK 1977)

The educational policies followed after independence were marked by quantitative expansion of schooling opportunities at all levels of educational system. This expansion was dictated by the educational economic, social and political imperatives of the transition from a colony to an independent society.

During the 2002 general election, the National Rainbow Coalition Party (NARC) made the provision of FPE as part of its election manifesto. Following its victory, it launched the FPE Program in January 2003, Tuition fees and other levies were abolished, with the government committing to meet the cost of basic teaching and learning materials. By 2007, the country had 18,063 public primary schools and 8,041 private schools enrolling 8.2 million pupils. There had been an increase in the number of primary schools from 1999 – 2007 and it does not match with the growth of secondary schools.

Table 2.6: Number of primary and secondary schools from 1999 – 2007

School	1999	2000	2001	2002	2003	2004	2005	2006	2007
Primary	17,623	18,617	18,901	19,124	23,554	24,643	25,827	25,929	26,104
Secondary	3,369	3,197	3,657	3,687	5,073	5,142	5,659	5,659	6,485

Source: Economic Survey, (2008)

At the launch of the FPE Program, the number of primary schools in the country had increased steadily from 14,864 in 1990 to 19496 in 2003 representing a 31.2% increase. Between 1999 and 2003, the number had increased by 10.6%, with an average annual increase of 3.33% (ROK 2007).

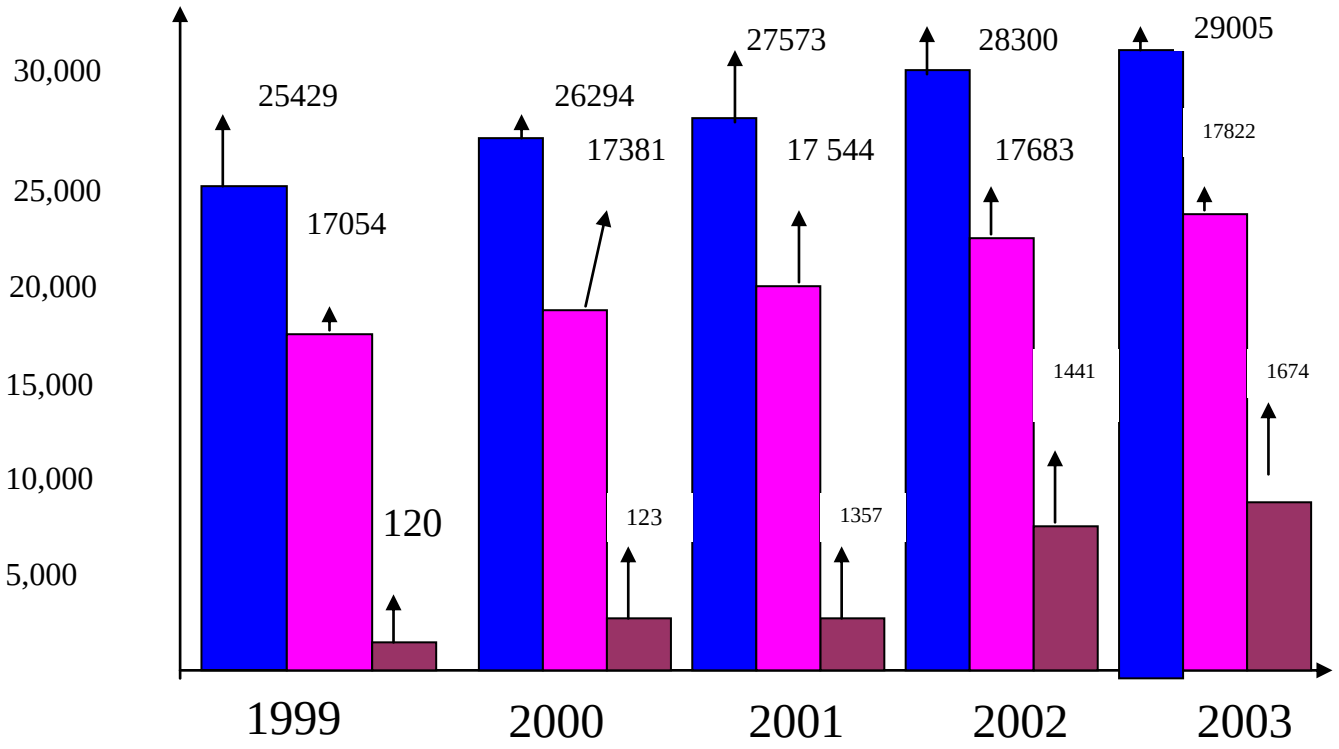


Figure 2. 5: Number of pre- primary and primary schools: 1999 – 2003

Source: MOEST (2003)

2.6.1: Secondary schools

With the attainment of independence in 1963, it became crystal clear that there were no enough professional administrative, technical and other skilled local people to man the new state. Secondary education was particularly regarded as the most important

point in the education system which could help in solving the manpower constraints of the nation.

Expansion at this level of education was therefore, especially emphasized in Sessional Paper NO. 10 of 1965, which noted that "the immediate objectives in education are to expand secondary level facilities rapidly as it will be important to the training of man power, the acceleration of Africanization that continued in education" (GOK 1965). Another aim of secondary education was to provide more places for over increasing number of primary school leavers as the quest for UPE gathered momentum to realize this dream. Form one stream in aided schools were to be increased from 57 in 1965 to 148 in 1967 and 253 in 1970 (Bogonko 1992).

Table 2.7: Expansion of secondary schools in Kenya from 1960-1970

Year	No.of Sch	% Growth	Year	No. of Sch	% Growth
1960	91	-	1966	400	19
1961	105	2	1967	542	36
1962	142	35	1968	601	11
1963	151	6	1969	694	15
1964	222	40	1970	783	13
1965	336	51	-	-	-

Source: Economic survey, 1966-1971

The education equitability to all areas, still remained by 1970, vast regional inequalities which actually challenged the seriousness of the education planners. By 1960, Nyanza and central provinces were each better provided with secondary schools than any other provinces.

According to Economic Survey (2008), in order to address inadequate physical facilities and secondary level to support the attainment of the desired transition rate of 75 percent by 2012, the sector intends to construct more schools and expand and rehabilitate existing ones. The newly developed schools mapping (geographical information system) undertaken by the Ministry of Education will assist in identifying the needy regions for these interventions.

Also, free day, secondary education (FDSE) aims at enhancing equity, access and improving transition from primary to secondary. To achieve this, the will continue to implement secondary schools expansion strategic which among other things recommends the expansion of secondary education by atleast 3 streams and increase size from 40 to 45 (RoK, 2008).

The secondary bursaries programmes will enhance access, equity and retention at secondary level. These bursaries targets vulnerable groups. These includes'; orphans, girls and children from poor families in slum areas, pockets of poverty in high potential areas and ASAL districts. The government has integrated ECDE into the basic education curriculum with a view to improving its management, increasing access to ECD and enhancing retention at lower primary level.

According to the Sessional Paper No. 1 of 2005, the government tends to provide grants to low-cost boarding primary schools to cater for operational costs at an estimate budget of Kshs. 4,000 per child annually. This programme was rolled out to boarding primary schools to be constructed in each constituency in ASAL districts to improve access and reduce regional disparities. Also, the government had been

providing grants to all public secondary schools in ASAL districts (as part of affirmative action to address equity) for development expenditures. These benefits the District of Msndera, Wajir, Ijara, Garissa, Moyale, Marsabit and Isiolo. The programme will target secondary schools in pockets of poverty within other districts (RoK, 2008). The policies will enhance the demand for secondary schools places and that is why it is necessary to project the demand of these places in the country. In Suba district, there is a disparity between the number of primary schools and secondary schools. There is high enrolment in primary schools which will eventually need places in secondary schools.

Table 1: Public Primary Schools enrolment per class (2009) in Suba district

Std	1	2	3	4	5	6	7	8	Total
Boys	4,297	4,271	4,100	4,049	3,731	3,615	3,764	2,342	30,169
Girls	4,133	4,038	3,764	4,073	4,016	3,813	3,966	2,277	30,080
Sub-total	8,431	8,311	7,867	8,126	7,752	7,434	7,737	4,627	60,249

Table 2.9: Private primary schools enrolment per class 2009 in Suba district

Std	1	2	3	4	5	6	7	8	Total
Boys	454	490	487	501	555	488	477	326	3777
Girls	477	466	452	488	578	482	455	312	3640
Sub-total	930	956	939	989	1063	970	932	638	7417

Table 2.10: Secondary School Enrolment 2009

Form	**Public**		**Private**		**Totals**	
	Boys	Girls	Boys	Girls	Boys	Girls
1	1754	690	375	310	2129	1000
2	1600	1480	315	240	1915	1720
3	1590	1494	270	225	1960	1709
4	1563	1375	225	150	1788	1525
Total	6507	6375	1185	925	7692	6964

Source: Economic Survey, (2008).

2.7 Summary

In Kenya, one of the factors constraining secondary education enrolment is that growth in the number of secondary schools do not match with primary schools. In 2003, there were 3661 secondary schools and 641 registered private secondary schools compared to 18,081 public primary schools (GOK 2008). There is a huge demand for secondary school education in Kenya due to this imbalance between the primary schools and secondary schools. The balance has worsened following the implementation of FPE and Free Tuition Fee in secondary education. Literature that has been reviewed in this chapter tended to emphasize on social demand for education which has increases enrolment rate in primary schools and the projected increases in the demand for secondary school education.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter discusses the procedures and methods that the researcher used in order to obtaining relevant data that were required for the study. Procedures that were used for data analysis are also examined. Beside, development of instruments and of reliability and validity are also covered.

3.2 Research Design

The researcher adopted a survey research design. Kothari (1985) states that the studies concerned with specific prediction with narration of facts and characteristics concerning individual or groups,. The researcher also aimed at obtaining complete and accurate findings. The design was appropriate for the study since the researcher intended to make a specific prediction concerning the technical institution places in the year 2020 in Suba.

3.3 The Study Area.

The study was carried out in Suba District, Homa Bay County of former Nyanza Province in the Republic of Kenya. Suba district borders Mbita District to the North, Ndhiwa and Homa Bay to the East and Nyatike District to the South. The choice of Suba district was influenced by the following reasons:

Being a peripheral region, the researcher feels its representativeness of many regions engulfing it outside the area of study; because of geographical spread and varied neighbouring districts, the researcher feels that the findings will be enriched; the choice of the district is also cost-effective in terms of time and finance.

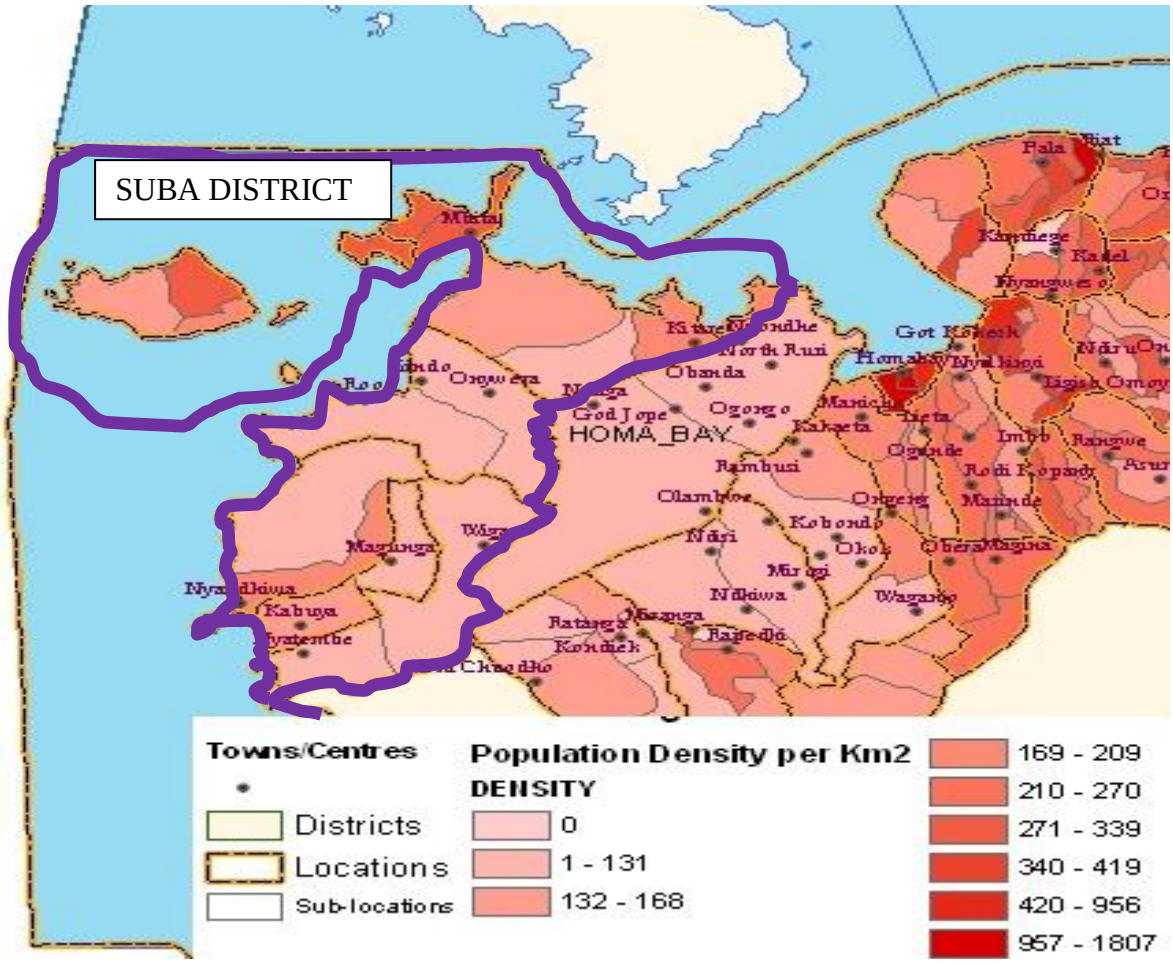
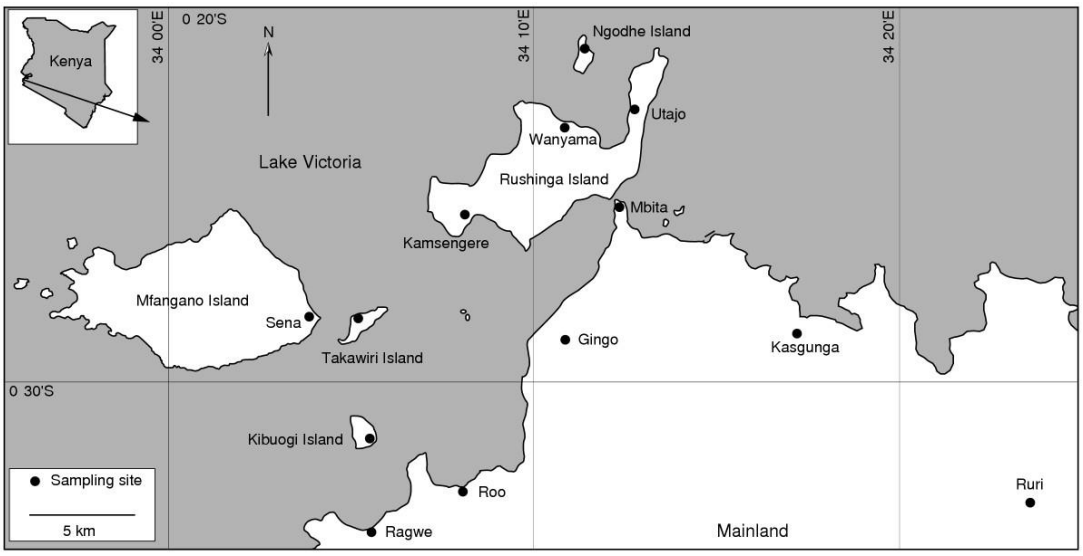


Fig. 3.1 Suba District Geographical structure (excluding the islands)



Suba District Geographical structure (the islands only)

3.4 Target Population

In this study, the target population will consist of all educattional stake holders such as head teachers of primary schools and secondary schools, in both private and public schools in the district alongside the ordinary residence and school dropots. Also the officers of the District Education office in the District will participate in the study.

3.5 Sampling

Proportionate stratified sampling technique was used to select 53 primary schools and 16 secondary schools from the two divisions namely: Kaksingri and Gwassi. The sample of 53 primary schools and 16 secondary schools representing 30% were drawn from 177 primary schools and 55 secondary schools respectively. The following tables 3.0 and 3.1 show the proportion of schools selected in each division.

Table 3.1: Proportion of primary schools selected by division

Divisions	No. of schools	Sample
Gwassi	102	31
Kaksingri	75	22

Table 3.2: Secondary schools selected by division

Divisions	No. of schools	Sample
Gwassi	31	9
Kaksingri	24	7

The head teachers and principals of the sampled schools participated in the study and also the officers at the District Education Office in the district.

3.6 Data Collection Method

Data was collected by use of questionnaires, interviews and documents analysis. The researcher designed a questionnaire with close – ended and open- ended items dealing with pupils' enrolment, Wastageand transition. These instruments were administered to the headteachers/deputy headteachers of primary schools and secondary school principals of the selected schools. The researcher sought permission from the Ministry of Education headquarters, the District Education Officer in Suba district as well as the Heads of the schools that participated in the study.

3.6.1 Questionnaire

The researcher designed questionnaires that were used to obtain relevant data from the Education Officers in charge of statistics, primary school head teachers and principals of secondary schools selected. Questionnaires with closed-ended and open-ended

items dealing with students' enrolment, Wastage rate, and transition rate from primary to secondary and secondary establishment trends were developed and eventually used to project the need for technical institutions in the district.

3.6.2 Interview Schedule

The researcher designed an interview schedule that was used to obtain data on pupil enrolment and Wastage in primary schools and school establishment trends in secondary school from the Education Officer in charge of statistics at District Education Office

3.6.3 Document Analysis

The researcher requested to be allowed to analyse written documents like school enrolment, transition rate, Wastage rate records and records on the number of secondary schools at the statistics office in the District Education Offices.

3.7 Validity of Instruments

Validity is the accuracy and meaningfulness of inferences, which are based on research results. It is the degree which results obtained from the analysis of data actually represent the phenomenon under study (Mugenda and Mugenda, 1999:99).Validity answers the question "are my findings true?"(Kerlinger 1973).To test the validity, the instruments were availed to selected experienced University of Eldoret researchers for assessment. These researchers guided the researcher accordingly in improving the research instruments before commencing data collection.

3.8 Reliability of the Instruments

Reliability of the instruments was determined through a pilot study. The researcher carried out a pilot study in Suba District. The questionnaire was pre-tested by administering it twice to Education Officers and two primary and secondary school Head teachers in the same district. The main purpose of the piloting was to ensure that the items elicited the kind of responses the researcher intended to obtain, that they were acceptable in content and adequately covered aspects of the unit which the researcher particularly wished to explore. Items were modified appropriately. Feedback obtained from the pilot District assisted the researcher in revising the questionnaire to ensure it covered the objectives of the study. The reliability coefficient was determined using Karl Pearson Product Moment Correlation Coefficient because the method is more accurate as it determines the stability of the instrument. A reliability index [alpha] of 0.762 obtained was considered high enough for the instrument to be used in the study.

3.9 Data Collection Procedure

After obtaining permission from the relevant authorities to conduct research on demand of technical school places in 2020, the researcher administered questionnaires to the staff at the District Education Office. The researcher also interviewed the relevant authorities concerning secondary schools development in the district, and also analysed relevant documents at District Education Office.

3.10 Data Analysis Techniques

Data collected through the questionnaire was coded and scored manually by the researcher .The researcher then used descriptive statistics which enabled data to be converted into percentages and averages. This was done in order to establish

transition rate per class which was then used in projecting enrolment in secondary schools in the year 2020 and in turn assess the demand for technical education in Suba district.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents a detailed analysis of respondents' background in terms of gender, age bracket, and work duration in the station and position held in the school. This chapter also presents a detailed analysis of data in respect with the objectives of the study and forecasts the number of students who will be in secondary schools in the year 2020. Four issues addressed include: enrolment rate of primary schools, Wastage rate, and transition rate from primary to secondary schools and determine secondary school establishment trends and use the same trend to assess the need for the establishment of technical schools.

4.2 Background Information of the Respondents

The researcher sought to find out the age, gender, number of years served in the current station and position currently held in the school. Information on gender was important because the researcher wanted to establish if there was an influence between gender and growth of schools in the district. The number of years served in the station helped the researcher to draw important conclusions about the expansion and enrolment in secondary schools. Data on the position held in the school helped to validate the findings.

4.2.1 Gender of Respondents

The researcher asked the respondents to indicate their gender. The Table 4.1 below presents the findings.

Table 4.1: Frequency distribution of respondents by gender

	Primary		Secondary	
Gender	Frequency	Percentage	Frequency	Percentage (%)
Male	46	86.8	12	75
Female	7	13.2	4	25
Total	53	100	16	100

A total of 53 respondents in primary schools participated in the study. The study established that majority (86.8%) of the respondents in the primary schools were males. The remaining (13.2%) were females. In the secondary school sector the study established that 75% of the respondents were males while 25% were females. The researcher thus concludes that management of education in Suba district is largely in the hands of male teachers.

4.2.2 Age of the Respondents

The study sought to establish the age brackets of the respondents. This information is vital in establishing if they will be in the education sector in the year 2020 and the future plans they have for expansion of schools. The Table 4.2 below presents the findings.

Table 4.2 Frequency Distribution of Respondents by age

	Primary		Secondary	
Age in years	Frequency	Percentage	Frequency	Percentage (%)
50 and above	2	3.8	0	0
40- 49	28	52.8	6	37.5
30- 39	22	41.5	7	43.8
20- 29	1	1.9	3	18.8
Total	53	100	16	100

The researcher established that majority (52.8%) of the respondents in the primary school sector were aged between 40- 49 years while the least percentage (1.9%) were aged between 20- 29 years. In the secondary school sector the highest percentage (43.8%) was aged between 30- 39 years. Interestingly it was noted that no secondary school manager was aged above 50 years. The researcher noted that in the year 2020, most of the serving school managers will still be in the education sector. It is also notable that the primary school managers were relatively older than their secondary school sector counterparts.

4.2.3: Work Duration of Respondents

The study sought to establish from the respondents the period they had been in the station. The findings are presented in Table 4.3 below.

Table 3.3: Frequency distribution of respondents by duration in the work station

	Primary		Secondary	
Period	Frequency	Percentage (%)	Frequency	Percentage (%)
Over 15 years	4	9.4	1	6.2
10- 14 years	12	22.6	2	12.5
5- 9 years	23	43.4	5	31.5
Below 5 years	13	24.5	8	50
Total	53	100	16	100

A total of 53 responded to the item in primary schools. Majority of the respondents (43.4%) said that they had been in the work station for a period of 5 – 9 years. Those who had the highest level of experience, which is 'over 15 years' was least represented (9.4%). The researcher thus concluded that the respondents were knowledgeable enough to give accurate data about the particular work stations. It was however notable that majority of the secondary school respondents had been in the work station for a shorter duration of less than 5 years.

4.2.4: Position Held in the Station

The researcher also inquired about the position held by the respondent in the station. The Table 4.4 below presents the findings.

Table 4.4: Frequency distribution of respondents by position held in the school

	Primary		**Secondary**	
Position	**Frequencies**	**Percentage (%)**	**Frequencies**	**Percentage (%)**
Principal/Head teacher	**18**	**34**	**3**	**18.8**
Deputy Principal/Head teacher	**35**	**66**	**13**	**81.2**
Total	**53**	**100**	**16**	**100**

Notable in this case is that majority of the respondents were either Deputy Principals or Deputy Head teachers. These were represented as 81.2% and 66% respectively. The principals and Head teachers were 18.8% and 34% respectively. The researcher concluded that this trend was as a result of the availability of the deputies in the schools as compared to their counterparts. It was also notable that the deputies were more approachable. The researcher however feels that the two groups were well equipped with the data that was required for the study.

4.3: Enrolment of pupils in 2006 to 2010

The researcher sought to find out the enrolment and retention of pupils in class 3, 4, 5, 6, and 7 in the year 2006 to 2010. The Table 4.5 below shows the pupils' enrolment and retention per class.

Table 4.5: Pupils' Enrolment and Retention per Class in 2006 to 2010

Year	Class3	Class 4	Class 5	Class 6	Class 7	Total
2006	3372	3385	3253	3166	3180	16356
Retention		98.8%	102.3%	99%	104%	101%
2007	3496	3423	3294	3307	3300	16820
Retention		101%	98%	101%	100%	100%
2008	3457	3612	3419	3389	3320	17198
Retention		102%	102%	100%	100%	101%
2009	3436	3554	3360	3343	3338	17031
Retention		99.9%	96.7%	93%	98.3%	97%
2010	3304	3385	3294	3389	3400	16772
Retention		97.7%	93.3%	98.7%	102%	98%
Total	17065	17359	16620	16594	16538	

From the Table 4.5 above, it is notable that there was a high enrolment in class 4 and 3 with the enrolment of 17,359 and 17,064 respectively. The least enrolment level was registered in standard 7 with an enrolment rate of 16,538 pupils. The researcher also observed that the high retention was in 2006, 2007 and 2008. The low retention was

in class 5 and 6 in 2007 and class 4 and 5 in 2010 with 93% and 93.3% respectively. In the quest for EFA, it is expected that these pupils will be in secondary schools in the year 2015 if all the other factors are held constant, and should be in tertiary institutions by the year 2020. It is also notable that there had been an increased enrolment and retention in primary schools which was attributable to the success of the FPE programme.

4.4.1: Wastage rate in Primary Schools.

Wastage refers to the number of pupils who join the first class but do not proceed to the last class in the same cohort. Such pupils either repeat some classes or they drop out of the education system. The researcher sought to find out the Wastage rate in primary schools in classes 3 to 7 from 2006 to 2010. The Table 4.6 below presents the number of pupils who were not promoted to the next class and the Wastage rate in the five years that were investigated.

Table 4.6: Pupils' Actual Wastage rate

Year	Class 3	Class 4	Class 5	Class 6	Class 7	Total	Average Wastage rate (%)
2006	**457**	**478**	**420**	**477**	**460**	**2292**	**13.0**
2007	**473**	**480**	**438**	**452**	**440**	**2283**	**12.75**
2008	**467**	**493**	**428**	**503**	**505**	**2396**	**12.75**
2009	**378**	**478**	**338**	**503**	**510**	**2207**	**15.25**
2010	**422**	**450**	**427**	**500**	**500**	**2299**	**15.25**
Total	**2197**	**2379**	**2051**	**2435**	**2415**	**11477**	

From the Table 4.6 above, classes 3, 4 and 5 registered a Wastage rate of 13%, 12.75% and 12.75% respectively. Although, there is a high Wastage rate generally in all the classes, classes 6 and 7 registered the highest Wastage rates of 15.25% and 15.25% respectively. The high Wastage rate in the two classes is attributable to the age of the pupils which contributes to the drop outs. Another contributing factor regards the schools' quest for better performance amongst standard 8 pupils; some children are forced to repeat class 6 or 7 as the schools sieve their standard eight candidates so as to post good results at the end of the primary cycle. The researcher feels that if these factors are not controlled the government's quest for EFA by 2015 may not be achieved. From the findings in Table 4.6 above, the researcher was also able to project the expected Wastage rate of class 8 in 2011 to 2014.

4.4.2: Projected Enrolment and Wastage rate of Class Eight Pupils in 2011 to 2014

In order to determine the student enrolment in secondary schools in the year 2015, the researcher calculated the projected enrolment and Wastage rate in class eight in the years 2011 to 2014. The researcher also used the enrolment in class 7 in the year 2010 and the projected enrolment of class 7 in the years 2011 to 2014 in order to determine the projected enrolment and Wastage rate in the years in question. The Table 4.7 below presents the findings.

Table 4.7: Projected Enrolment and Crude Wastage rate of Class 8 in 2011 to 2014

Year	Class	Enrolment	Year	Expected Enrolment (Std 8)	Wastage rate	Percentage
2010	7	3400	2011	2944	456	13.4%
2011	7	2998	2012	2789	209	7.0%
2012	7	2735	2013	2449	309	10.5%
2013	7	2078	2014	1766	312	15.0 %

The Table 4.7 above indicates that the projected Wastage rate in class eight varies from year to year. The number of pupils enrolled in class seven in 2010 were 3400 and the number projected to be in class eight in 2011 is 2944. The Wastage rate in class eight in 2011 is expected to be 13.4%. In 2011 expected enrolment in class seven is 2998 while the projected class eight enrolment is 2789. The Wastage rate in class eight in 2012 is expected to be 7.0%. The researcher attributes the low Wastage rate in the year 2012 to earlier factors such as displacements and subsequent stabilization in Suba district after the 2008 post poll violence. In 2012 class seven expected enrolment is 2735 and the projected class eight enrolment is 2449 in the year 2013. The projected Wastage rate in class eight in the year 2013 is expected to be 10.56%. The projected enrolment in standard seven in the year 2013 is 2078 while that of class eight in 2014 is 1766. The Wastage rate in 2014 is expected to 15.0%. The Wastage rate was high due to low enrolment that was indicated in class 3 in 2010.

4.5.1 Transition Rate in Primary Schools

The purpose of Transition Rate is to convey information on the degree of promotion from one class to another. Transition Rate is calculated by dividing the number of new entrants by the number of pupils/students in previous class minus the number of repeaters multiplied by 100 .The researcher sought to find out the transition rate of class 3 cohort of 2006 to 2009 so as to project the number of students in secondary schools in 2020.The Table 4.8 below presents the findings.

Table 4. 4 : The Transition Rate of Class 3 Cohort of 2006 to 2009

Year	Transition rate (%)
2006	86
2007	83
2008	83
2009	85

The Table 4.8 above shows that there was high transition rate in 2006 (86%) followed by 2009 (85%). In 2007 and 2008 the transition rate was 83% in each case. The high transition rate reflects the success implementation of Free Primary Education. This transition rate is used to project the enrolment of students in secondary schools in the year 2020. To project enrolment of students of secondary in 2020, the enrolment and repeaters of class 3, 4, 5, 6, and 7 of years 2006,2007,2008,2009 and 2010 were used. The Table 4.9 below presents the findings.

Table 4. 5: The Flow of Primary School Pupils and Secondary School Students

Year/Class/Form	3	4	5	6	7	8	F 1	F2	F3	F4
2006 Enrolment	3372	3385	3253	3166	3180					
Repeaters	457	478	420	477	460					
2007 Enrolment	3496	3423	3294	3307	3300					
Repeaters	473	480	438	452	440					
2008 Enrolment	3457	3612	3419	3389	3320					
Repeaters	467	493	428	503	505					
2009 Enrolment	3436	3554	3360	3343	3338					
Repeaters	378	478	338	503	510					
2010 Enrolment	3304	3385	3294	3389	3400					
Repeaters	422	450	427	500	500					
2011 Enrolment			2877	2950	2998	2944				
2012 Enrolment				2445	2734	2789	2940			
2013 Enrolment					2078	2449	2813	2875		
2014 Enrolment						1766	2269	2488	2924	
2015 Enrolment							1501	2023	2315	2515

The Table 4.9 above indicates the flow of pupils and students in the year 2006 to 2015. Enrolment in these levels is highly dependent on access or intake capacity of the next class. The expected enrolment of this cohort in secondary school in 2015 will be high. .

4.5.2 Reasons for standards Eights' Low Transition Rate in the District

The researcher sought opinion on reasons why standard eight graduates failed to join secondary schools. The Table 4.10 below presents the findings.

Table 4. 6: Reasons for Standard Eight Drop Out

Reasons for drop out	**Frequencies**	**Percentage (%)**
Lack of fees.	21	39.63
Limited spaces	30	56.60
Early marriages	2	3.77
Total	**53**	**100**

Majority of respondents (56.6%) indicated that drop outs from secondary schools was due to limited places. Lack of fees was represented by 39.63% while 3.77% dropped out due to early marriages. These findings clearly show that limited spaces in secondary schools, is one of the major problems that cause drop outs.

4.6. Secondary Students projection in 2015.

The researcher sought to find out the projection of secondary school enrolment in 2015 Standard eight enrolment and transition rate was used to project the number of students in secondary schools in the year 2015. The Table 4.11 below presents the findings

Table 4. 7: Projection of Secondary School Enrolment in 2015

Year	Class 8 projection	Transition Rate (%)	Form	Year	Projection In 2015	wastage Rate	Percentage (%)
2014	1766	86	One	2015	1501	265	15
2013	2449	83	Two	2015	2037	412	16.8
2012	2789	83	Three	2015	2375	474	17
2011	2944	85	Four	2015	2532	412	14

.

As shown in the Table 4.11 above ,the number of pupils projected to be in class eight in 2014 is 1766 and the Transition Rate in that year is 85% ,so the projected Form one in 2015 were 1501.The low enrolment in this Form was because of Low enrolment of class 3 and 4 cohort of 2009. The Wastage rate of Form One in 2015 will be 15%. The projected enrolment of class eight in 2013 was expected to be 2449. The Transition Rate in that year was 83%, so the projected Form Two will be 2037. The Form Two Wastage rate is expected to be 16.8%.Class eight projected enrolment in 2012 is 2789 and the Transition Rate of that year is 83%, then the projected Form Three will be 2215. The Wastage rate of Form Three is expected to be 17% The class eight enrolment projection of 2011 is 2,944 and the Transition Rate in that cohort will be 86%, therefore, the projected Form Four in 2015 will be 2532. The Wastage rate expected will be 14%.High Transition Rate in schools shows that the education system is efficient in the District.

4.7.1 School Expansion Trends in the District.

The researcher sought to find out the number of classrooms constructed from 2006-2010. The Table 4.12 below shows the number of classrooms in the District from 2006 to 2010.

Table 4.8: Classroom Constructed from 2006-2010

	Number of classrooms.	**Percentage (%)**
2006	7	18.9
2007	8	21.6
2008	9	24.3
2009	6	16.2
2010	7	18. 9
TOTAL	37	100

The Table 4.12 indicates the number of classrooms that were constructed. In 2008, a total of 9 (24.3%) were constructed while in 2007, 8 (21.6%) classrooms were constructed. The numbers which were constructed in 2006 and 2010 were 7 which represent 18.9% respectively. The numbers which were constructed in 2009 were 6 (16.2%). The total classrooms constructed from 2006 to 2010 were 37 which accommodate 1480 students according to the standards requirement by UNESCO of 40 students per stream.

4.7.2: Students per Stream in 2010.

The researcher sought to find out the number of secondary schools students per stream in 2010. The Table 4.13 below shows the findings.

Table 4.9: Frequency Distribution of Schools by Enrolment per Stream

Students per stream	**Form 1**	**Form 2**	**Form 3**	**Form 4**	**Total**	**Percentage (%)**
70 and above	5	2	8	0	15	16.30
60-69	6	12	6	2	26	28.26
50-59	4	3	4	14	25	27.17
40-49	3	1	2	1	7	7.61
30-39	2	3	3	5	13	14.13
Below 29	3	2	0	1	6	6.52

The Table 4.10 above shows that 26 streams (28 .26%) have students between 60 to 69.The category of students between 50 -59 have 25 streams (27.17%). There are 15 streams in the category of students over 70 and above and this represents 6.30%. These categories of classes are congested and this had a negative effect on the efficiency of the education system. Only 7.61% represents streams that had standard class sizes, that is where actual utilization of resources were found. The categories of students between 30-39 (14.13%) and below 29(6.52%) represent a percentage of under utilization of the resources.

4.7.3 Schools' Plan to Construct Classrooms By 2015

The researcher sought to find out the number of classrooms the stakeholders planned to construct by 2015.A total of 16 secondary schools responded to the item. The Table 4.14 below presents the findings.

Table 10.14: The Classrooms To Be Constructed by 2015

	Frequency	Percentage(%)
Classrooms intended to be constructed before 2015	19	20.65
Present number of classrooms.	92	100

The Table 4.13 above shows that 19 (20.65%) number of classrooms are to be as from 2011 to 2015. This will increase the number of classrooms from 92 to 111. The researcher noted that this increase will be insignificant when compared to the current congestion and the increased enrolment of students by 2015.

4.7.4 Enrolment of Students and Number of Classrooms in 2015

The researcher sought to find out the comparisons between 2010 number of classrooms and enrolment with 2015 number of classrooms and its enrolment. Table 4.14 below presents the findings.

Table 4.11: Enrolment of Students and Number of Classrooms in 2015

Year	2010	2015
Enrolment of students	8014	8364
Number of classrooms	92	111
Average students per stream	87	75

The Table 4.14 above gives a clear picture on the number of students in 2010 and the corresponding number of classrooms available. The findings show that the average students per stream were 87 in 2010. In 2015, the expected enrolment of students is 8364 and the number of classrooms that will be available is 111 so the expected students per stream were 75.The findings indicate that the secondary school sector will continue to experience a high demand thus projecting the need to establish technical schools for students clearing high school education. There is therefore a need to make appropriate interventions to ensure that the strain likely to be experienced in the district is eased by establishing technical institution to absorb the possible dropouts.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter focuses on the summary of the study findings, conclusions and recommendations. Suggestions for further research are also enumerated.

5.1 Summary Of Findings.

The study set out to assess the demand of technical school places in Suba district in 2020. The researcher was guided by a number of research questions. From the first research question it was observed that there is an increased enrolment in primary schools in the District. The total enrolment of pupils of classes 3,4,5,6, and 7 from 2006 to 2010 is 84,177. It was also observed that there is a relatively high retention rate in primary schools. The average retention was in 2006 and 2008 with 101%. The lowest retention (98%) was recorded in 2010.

.

The year 2014 will post a Wastage rate of 15% amongst class eight pupils. The average Wastage rate in the years 2011 to 2014 was 11.5% in all the classes investigated. The researcher also noted that majority of respondents (56.6%) agreed that standard eight drop out was mainly due to limited spaces in secondary school and total lack of any technical institutions in Suba district.

The highest transition rate (86%) in primary schools was in 2006. In 2007 and 2008, the transition rate was 83% in each case and the lowest rate in the years investigated.

The study thus established that the average transition rate was 84.25% in all the years under investigation.

It will be observed that in 2015 secondary schools will have a total of 8364 .The projected Form 1 and 2 will be 1501 and 2037 respectively. Form 3 and 4 will have an enrolment of 2375 and 2532 respectively.

Another finding was the relation between the enrolment of students and the number of the classrooms. The researcher observed that high number of classrooms were constructed in 2008(24.3%) followed by 2008 (21.6%).In 2006 and 2010 the number of classrooms were 18.9% each and in 2009 it was 16.2%. By 2010, the total number of classrooms were 92. Also the researcher observed that there were overcrowded classes because the construction of additional classrooms were not keeping pace with increased number of pupils. 44.58% of students were in a stream of classes over 60-69 and 70 and above. Further, the researcher established that the average students stand at 87 per stream. The intended classrooms to be constructed in 2015 were 20.65% and projected enrolment in 2015 will be 8364 this will make average students per stream be 75. The researcher found out that there were no plans to establish any technical institution.

5.2 Conclusions

(a)The researcher noted that the enrolment and retention was high in primary schools. The total enrolment was 84,177 pupils .The retention rate was high in years 2006 to 2010.

The finding shows the success of FPE in the district because of high enrolment rate and retention indicates that enrolment in secondary in 2020 will be high. The study

established that there is enough capacity of spaces in the primary level of education and this should be translated to secondary schools and lead to establishment of technical institutions in Suba district.

(b) The study established that there will be an increased Wastage rate in primary schools which indicate that there is a problem. The drop out and repetitions are the two main problems which were identified by the researcher. These group of pupils/students are resources; financials, materials and Human resources.

(c) The study established that even though Wastage rate had been reported earlier ,the transition rate is still high from one class to another. This explained the need for early preparation for further expansion of secondary schools. In 2015 , we expect over 80% of primary pupils to be enrolled in secondary schools, thus the need for the establishment of technical institutions.

(d) Further, the study established that there is a serious Wastage rate in 2013 to 2014 enrolment to Form 1 of 15%. This had reflected to Form 1 enrolment which is low as compared to other enrolment in secondary. The findings shows that there was low enrolment in classes 3 and 4 cohort of 2009 as compared to enrolment of 2007 and 2008 cohort. The total enrolment of 2007 and 2008 is high as compared to total enrolment of 2009 and 2010.The Government should set up measures to cope up with the problem.

(e) The researcher observed that there is a clear mismatch between expansion of classrooms and students enrolment in secondary schools and mismatch of enrolment

from one stage to another. In 2015, the finding shows that the average students per stream will be 75.

5.3 Recommendations

(a) The stakeholders could be sensitized on education so that they can work towards ensuring that there is equal access to education opportunities for all and equitable distributions of learning institutions across all districts. The number of pupils/ students who repeat a class should be discouraged because the government had allocated funds to cater for the primary and secondary education.

(b)The Government to take disciplinary action to any teacher forcing pupils/students to repeat classes. Measures such as making the teachers to pay fees for students who repeat the class will help to reduced repetitions. The government also could reinforced the law on child right to force the parents not withdraw the pupils/students from schools.

(c) In order to attain Universal Primary Education in Kenya the Government should strengthen the policy on compulsory and Free Primary Education so as to increase Transition rate from primary education to secondary education. To achieve the policy of Education For All, the transition rate from primary to secondary should be almost 100% and even from one class to another and one stage to another in the three levels of education.

(d)The Government also should introduce Technical Training schools and make it compulsory for primary pupils drop outs. This will increase productivity of every youth and vision 2030 will be attained.

(e) The Government through the Ministry of Education and other stakeholders should build new schools, expand streams and create more low cost local day secondary and technical institutions as a way of reducing cost and increasing students' enrolment.

5.5 Suggestions For Further Study

(a)Studies similar to this one on projecting technical school places in other District could be carried out. Suba district and other immediate neighbouring districts do not have any technical institutions.

(b)A similar study that will focus on factors that influence the low enrolment of students in secondary schools in other District should be carried out to enable the drop outs at each stage catered for.

REFERENCES

Bogonko S.N (1992). *Reflection on Education in East Africa*. Nairobi: Oxford University Press.

Bongonko S (1992). *A History of Modern Education in Kenya:* Nairobi: Published by Evans Brothers limited

Chege and Oanda (2006). *Theories in the study of the Foundation of Education*; Nairobi; Published by Jomo Kenyatta Foundation

Chiori and Kiumi (2005) *Planning and Economics of Education.* Nairobi; Pangolin Publishers.

Cohn, E. (1975). *The Economic of Education:* Massachusetts. Ballinger Publishing Company

Coombs P. H (1967).What is Educational planning, *International Institute for Educational*

Cottymore, Y. (2005) *Gender Equity; New Opportunities for Moving Ahead*. Will behington Population Reference Bureau.

De Ferranti *et al* (2003). *Closing the Gap in Education and Technology*. New York. World Bank

De Walque D, (2004). "How does impact of HIV/AIDS Information Campaign Vary with Educational Attainment? Evidence from Royal Uganda" Policy Research working Paper 3289, *Public Service Development Research Group, World Bank,* Will behington D.C

Eshiwani G (1993). *Education in Kenya since Independence*: Nairobi. East African Publishers:

GoK (1992). *The National Development Plan;* 1993 – 1996. Nairobi, Government Press.

GoK (1965) Kenya, *Ministry of Education: Annual Report* 1966 – 1971; Government Printer.

Goldii (1999). Egalitarianism and Returns to Education." During the Great Transformation of American Education" *Journal of Political Economy* 107(6), S65-S94

Ishumi A (1994). *30 Years of Learning*: Ottawa, Published by the International Development Research Centre.

Kazim B (1987). *Education Policy and Development Strategy in the Third World:* London; Gower publishing Company Limited:

Kothari, R (1990) *Research Methodology; Methods and Techniques*. New Delhi; Vishva Praksha.

Levy, V. (1996). School Supply constraints and Children's Educational Outcomes in Royal Ghana" *Journal of Development Economics*. 51(2):291-314.

Lilis and Agot (1988).*Community Financing of Education in Kenya*: London; Pergamon Press, Oxford.

Lunyagi, B (2009) NGO's Compete to Fund Projects. *Teachers Image* Vol. 16, 2009.

Mahy (2003). *Childhood Mortality in the Developing World*: Review of Evidence from the Demographic and Health Survey" DHS Comparative Report

Mehta, A (1997) *Module on Enrolment and Teachers Projection Techniques*. NIERA, edited by N.C. Varghese. New Delhi.

Mutua and Namaswa (1992) *Educational Planning*. Nairobi; Educational Research and Publication.

Psacharopoulos, G & Woodhall (1995) *Education for Development*. New York; Oxford University Press.

RoK (2008*) First Medium Term Plan* (2008 – 2012) Kenya Vision 2030.

RoK (2008) *Economic Survey, 2008.* Nairobi, Government Printers.

RoK (2008) *Statistical Abstract*. Kenya National Bureau of Statistics (KNBS).

RoK (2007) *Kenya Vision 2030*. Nairobi; Government Printers.

RoK (2007) *Report of the Taskforce on Affordable Secondary Education;* Government Printers.

RoK (2005) Sessional Paper No. 1 2005; *A Policy Framework for Education Training and Research.* Nairobi; Government Printers.

Sifuna, Chege and Oanda (2006) *Theories in the study of Foundation of Education*, Nairobi. Jomo Kenyatta Foundation.

Sifuna and Karugu (1988) *Contemporary Issues in Education*. Nairobi; Kenyatta University.

Ta-Ngoc Chau (2003). *Demographic Aspects of Educational Planning*: Paris. International, Institute for Research

UNESCO (1961) *Conference of African States on the Development of Education in Africa:* Paris, Final report: UNESCO

UNESCO (2004s).Completing The Foundation for Lifelong Learning: An OECD Survey of Upper Secondary school. Paris OECD. Closing the gap in Education and Technology. World Bank Latin America and the Caribbean studies. Will behington DC World bank of American Education" *Journal of Political Economy* 107(6), S65-S94.

UNESCO (2008) *Education for All.* Monitoring Report, 2008.

Weiler, H.N (1985). "*Planning Educational History*" in Hussein and T.N. Postlethwatte (Eds) The International Encyclopaedia of Education Pergamon press Oxford

World Bank (1990) *World Declaration on Education for All (FA)*. Education for All and Programme for Action New York.

World Bank (1999). *Confronting Aids: Public Epidemic.* World Bank policy Research Report New York; Oxford University press.

World Bank (2000a). "A Policy Note" "*The Secondary Education for Employment*" Vol 1 Will behington D.C Royal Ghana" *Journal of Development Economics* 51(2):291-314.

World Bank (2005). "*Expanding Opportunities for Young People*. A New Agenda for Secondary Education Will behington DC.

Zimer J (1985). "*Social Demand Approach*" in T. Hussein and T.N Postlethwaite (Eds). The International Encyclopaedia of Education: Oxford Pergamon Press.

APPENDICES

APPENDIX A

Class three cohort Transition Rate & Retention

2006

$$T.R = \frac{(3400-500)}{3372} \times 100$$

T.R = 86%

2011 Class 8 projection

$$\frac{3423 \times 86}{100} = 2994$$

2012 Form one projection

$$\frac{3419 \times 86}{100} = 2940$$

2013

Form two projection

$$\frac{3343 \times 86}{100} = 2875$$

2014

Form three projection

$$\frac{3400 \times 86}{100} = 2924$$

2015

Form four projection

$$\frac{2914 \times 86}{100}$$

$$= 2515$$

2007

$$TR = \left(\frac{3389-500}{3496}\right) \times 100$$

$$= 83\%$$

2011

Class 7 projection

$$\frac{3612 \times 83}{100}$$

$$= 2998$$

2012

Class 8 projection

$$\frac{3360 \times 83}{100}$$

$$= 2789$$

2013

Form one projection

$$\frac{3389 \times 83}{100}$$

$$= 2813$$

2014

Form two projection

$$\frac{2998 \times 83}{100}$$

$$= 2488$$

2015

Form three projection

$$\frac{2789 \times 83}{100}$$

$$= 2315$$

2008

$$TR = \frac{(3294 - 472)}{3457} \times 100$$

$$= 83\%$$

2011 Class 6 Projection

$$\frac{3554 \times 83}{100}$$

$$= 2950$$

2012 Class 7 Projection

$$\frac{3294 \times 83}{100}$$

$$= 2734$$

2013 Class 8 Projection

$$\frac{2950 \times 83}{}$$

100

= 2449

2014 Form One Projection

2734 x 83

100

= 2269

2015 Form Two Projection

2449 x 83

100

= 2033

2009

TR = (3385 – 450) x 100

3436

= 85%

2011 Class 5 Projection

3385 x 85

100

= 2877

2012 Class 6 Projection

2877 x 85

100

= 2445

2013 Class 7 Projection

2445 x 85

100

= 2078

2014 Class 8 Projection

$$\frac{2078 \times 85}{100}$$

= 1766

2015 Form 1 Projection

$$\frac{1766 \times 85}{100}$$

= 1501

Actual Wastage rate

2006

Class 3-4

$$\frac{3404 - (3385 - 478)}{3404}$$

= 0.15

Class 4-5

$$\frac{3236 - (3253 - 420)}{3236}$$

= 0.12

Class 5-6

$$\frac{3139 - (3166 - 477)}{3139}$$

= 0.14

Class 6-7

$$\frac{3146 - (3180 - 460)}{3046}$$

$$= 0.11$$

2007

Class 3-4

$$\frac{3372 - (3423 - 480)}{3372}$$

$$= 0.13$$

Class 4-5

$$\frac{3385 - (3294 - 483)}{3385}$$

$$= 0.16$$

Class 5-6

$$\frac{3253 - (3307 - 452)}{3253}$$

$$= 0.12$$

Class 6-7

$$\frac{3166 - (3300 - 440)}{3166}$$

$$= 0.10$$

2008

Class 3-4

$$\frac{3496 - (3612 - 493)}{3496}$$

$$= 0.11$$

Class 4-5

$$\frac{3423 - (3419 - 428)}{3423}$$

$$=0.13$$

Class 5-6

$$\frac{3294 - (3389 - 503)}{3294}$$

$$= 0.12$$

Class 6-7

$$\frac{3307 - (3320 - 505)}{3307}$$

$$= 0.15$$

2009

Class 3-4

$$\frac{3457 - (3554 - 478)}{3457}$$

$$= 0.11$$

Class 4-5

$$\frac{3612 - (3360 - 338)}{3612}$$

$$= 0.16$$

Class 5-6

$$\frac{3419 - (3343 - 503)}{}$$

$$\frac{3419}{} = 0.17$$

Class 6-7

$$\frac{3389 - (3338 - 510)}{3389} = 0.17$$

2010

Class 3-4

$$\frac{3436 - (3385 - 450)}{3436} = 0.15$$

Class 4-5

$$\frac{3554 - (3294 - 427)}{3554} = 0.19$$

Class 5-6

$$\frac{3360 - (3389 - 500)}{3360} = 0.14$$

Class 6-7

$$\frac{3343 - (3400 - 500)}{3343} = 0.13$$

Project enrolment in class 7 & 8

Crude Wastage rate

$$\frac{3400 - 2944 \times 100}{3400}$$

$$= 13.4\%$$

$$\frac{2998 - 2789 \times 100}{2998}$$

$$= 7\%$$

$$\frac{2735 - 2449 \times 100}{2735}$$

$$= 10.56\%$$

$$\frac{2078 - 1766 \times 100}{2078}$$

$$= 15\%$$

Retention Rate

2006

Class 3-4

$$\frac{(3385 - 478) + 457}{3404}$$

$$= 98.8\%$$

Class 4-5

$$\frac{(3254 - 420) + 478}{3236}$$

$$= 102.3\%$$

Class 5-6

$$\frac{(3166 - 477) + 420}{3139}$$

$$= 99\%$$

Class 6-7

$$\frac{(3180 - 460) + 477}{3048}$$

$$= 104\%$$

2007

Class 3-4

$$\frac{(3423 - 480) + 473}{3372}$$

$$= 101\%$$

Class 4-5

$$\frac{(3294 - 438) + 480}{3385}$$

$$= 98\%$$

Class 5-6

$$\frac{(3307 - 452) + 438}{3253}$$

$$= 101\%$$

Class 6-7

$$\frac{(3300 - 440) + 452}{3307}$$

$$= 100\%$$

2008

Class 3-4

$$\frac{(3612 - 493) + 467}{3496}$$

= 102%

Class 4-5

$$\frac{(3419 - 428) + 493}{3423}$$

= 102%

Class 5-6

$$\frac{(3389 - 503) + 428}{3294}$$

= 100%

Class 6-7

$$\frac{(3320 - 505) + 503}{3307}$$

= 100%

2009

Class 3-4

$$\frac{(3554 - 478) + 378}{3457}$$

= 99.9%

Class 4-5

$$\frac{(3360 - 338) + 478}{3612}$$

= 96.7%

Class 5-6

$$\frac{(3343 - 503) + 338}{3419}$$

= 93%

Class 7-8

$$\frac{(3338 - 510) + 503}{3389}$$

= 98.3%

2010

Class 3-4

$$\frac{(3385 - 450) + 420}{3430}$$

= 9707%

Class 4-5

$$\frac{(3294 - 427) + 450}{3554}$$

= 93.3%

Class 5-6

$$\frac{(3389 - 500) + 427}{3360}$$

= 98.7%

Class 6-7

$$\frac{(3400 - 500) + 500}{3343}$$

= 102%

APPENDIX B

TIME SCHEDULE

ACTIVITY	DURATION (Months)	PERIOD
Proposal development	5	July 2010-November 2011
Preparation of instruments	1	January 2012
Data collection	2	February-March 2012
Data analysis	2	April-May 2012
Writing thesis	12	June 2012-June 2013
Presentation of the thesis	1	June 2014
Final correction of the thesis	1	July 2014

APPENDIX C

BUDGET ESTIMATES

Particulars	Amount (KSHS)
Travelling allowances for the researcher	40,000
Subsistence allowances for the researcher	30,000
Research Assistants	12, 000
Photocopying documents	15,000
Computing of data	20,000
Proposal typing and binding	8,000
Thesis typing and binding	15,000
Miscellaneous expenses	10,000
Total	150,000

APPENDIX D: QUESTIONNAIRE

Questionnaire for Head Teacher/ Deputy Head Teacher of primary school

The purpose of this questionnaire is to obtain data that will enable the researcher to find out the pupils enrolment, Wastage rate and transition rate so as to project the demand for secondary school places in 2010 in Suba district. Data provided shall be used for the purpose of research and shall be kept confidential.

Please tick in boxes provided to indicate information that apply to you.

SECTION A. BACKGROUND INFORMATION

(a) Indicate your gender

Male ☐

Female ☐

(b) Indicate your age bracket

50 years and above ☐

40-49 years ☐

30-39 years ☐

20-29 years ☐

Below years ☐

(c)For how long have you been working in your current station?

Over 15 years ☐

10-14 years ☐

5-9 years ☐

Less than 5 years ☐

(d)Indicate your position in the school

Head Teacher ☐

Deputy H/T ☐

SECTION B. Details on enrolment in primary school

give the enrolment of pupils in your school during the following years

2006	2007	2008	2009	2010
…….	…….	…….	…….	…….

Give the enrolment in the following classes in the year 2010

Class 3 _____

Class 4 _____

Class 5 _____

Class 6 _____

Class 7 _____

(iii)Indicate the enrolment of pupils over five (5) years in the following classes

	Class 3	class 4	class 5	class 6	class 7
2006	☐	☐	☐	☐	☐
2007	☐	☐	☐	☐	☐
2008	☐	☐	☐	☐	☐
2009	☐	☐	☐	☐	☐
2010	☐	☐	☐	☐	☐

How many pupils will not be promoted to the next grade in the following years?

	Class 3	Class 4	Class 5	Class 6	Class 7
2006	☐	☐	☐	☐	☐
2007	☐	☐	☐	☐	☐
2008	☐	☐	☐	☐	☐
2009	☐	☐	☐	☐	☐

Give the number of pupils who secured secondary school places during the following years

2006 _____

2007 _____

2008 _____

2009 _____

2010 _____

Which of the following is the MAIN reason why standard eight graduates do not join secondary school in Suba district?

i. Lack of fees

ii. Limited spaces in secondary schools

iii. Early marriage

APPENDIX E: QUESTIONNAIRE FOR PRINCIPALS AND THEIR DEPUTIES

Questionnaire for Principal/Deputy Principal of secondary schools.

The purpose of this questionnaire is to obtain data that will enable the researcher to find out the students enrolment rate and Wastage rate so as to project the demand for secondary places in 2020 in Suba district. The data provided shall be used for the purpose of research and shall be kept confidential.

Please tick in the boxes provided to indicate information that apply to you.

SECTION A. BACKGROUND INFORMATION

Indicate your gender

Male ☐

Female ☐

Indicate your age bracket

50 years and above ☐

40-49 years ☐

30-39 years ☐

20-29 years and below ☐

(iii) For how long have you been working in your current station?

Over 15 years ☐

10-14 years ☐

5-9 years ☐

Less than 5 years ☐

IV. Indicate your position in the school

Principal ☐

Deputy Principal ☐

SECTION B .Information about the student's enrolment and facilities in secondary schools

i. What is the current enrolment in your school? _____

ii. How many classrooms had been constructed during the following years in your school?

Year	No. of classes
2006	☐
2007	☐
2008	☐
2009	☐
2010	☐

iii. Indicate the categories of students per stream that fall in different forms in your school.

Categories of students	Form I	Form II	Form III	Form IV
70 students and above	☐	☐	☐	☐
60-69	☐	☐	☐	☐
50-59	☐	☐	☐	☐
40-49	☐	☐	☐	☐
30-39	☐	☐	☐	☐
Below 39	☐	☐	☐	☐

iv. What will be the Form one enrolment rate in the following years?

2006	☐
2007	☐
2008	☐
2009	☐
2010	☐

v. Do you intend to construct new classes in 2010, if yes,

How many _____

APPENDIX F: QUESTIONNAIRE FOR DEO'S

Questionnaire for the Officer and at the record department in the D.E.O's office.

The purpose of this questionnaire is to obtain data that will enable the researcher to find out the pupils enrolment, number of primary and secondary schools and transition rates as to project the demand for secondary school places in 2020 in Suba district. The Data provided shall be used for the purpose of research and shall be kept confidential.

Please tick in the boxes provided to indicate information that apply to you.

SECTION A. BACKGROUND INFORMATION

i. Indicate your gender

Male ☐

Female ☐

ii. Indicate your age bracket

50 years and above ☐

40-49 years ☐

30-39 years ☐

20-29 years and below ☐

iii. For how long have you been working in your current station?

Over 15 years ☐

10-14 years ☐

5-9 years ☐

Less than 5 years ☐

iv. What is your position in the D.E.O's office _____

SECTION B. Details on schools and students in the District.

Give the number of primary schools in the district _____

Indicate the number of secondary schools in the District _____

How many secondary schools were there in the District in the following years

2006 ☐

2007 ☐

2008 ☐

2009 ☐

(i) Would there be any need for more secondary schools in the District?

Yes ☐

No ☐

Explain your answer to (d) (i) above

_____

(f) From your own observation is the student's retention high in secondary school in the District?

Yes ☐

No ☐

If yes, what are the reasons behind the high retention?

_____

APPENDIX G: INTERVIEW SCHEDULES

INTERVIEW FOR EDUCATION OFFICER IN CHARGE OF STATISTICS AT THE D.E.O.'s OFFICE

This interview schedule is for collecting data on secondary schools so as to project the demand for secondary school places in 2020in Suba district.

(i) (a) Are there enough technical school places in the District?

(b) Explain the answer to (i) (a) above

(ii) (a) A number of pupils don't proceed to secondary school upon successful completion of the primary school curriculum. What do you think are the contributing factors? After secondary school, where are students registered for tertiary education?

(b) In your opinion, what do you think should be done to curb such a problem?

(iii) How can these problems be solved so as to achieve high enrolment rates in future?

APPENDIX H: COPY OF RESEARCH PERMIT