

KENYA 1999 POPULATION AND HOUSING CENSUS



REPUBLIC OF KENYA

Analytical Report on Education

Volume VIII



Central Bureau of Statistics
Ministry of Finance and Planning
P.O. Box 30266 Nairobi,
Telephone 333970 / 1 / 4 - 6
Website: www.Kenya.go.ke



REPUBLIC OF KENYA

Kenya 1999 Population and Housing Census

Volume VIII Analytical Report on Education

Central Bureau of Statistics
Ministry of Finance and Planning
August 2002

Kenya 1999 Population and Housing Census

© Central Bureau of Statistics, Ministry of Finance and Planning, 2002

P.O. Box 30266

00100 Nairobi, Kenya

Tel: 254-2-333970-6

Fax: 254-2-333030

<http://www.cbs.go.ke>

e-mail: herufi@treasury.go.ke

e-mail :director@hazina.cbs.go.ke

Contents

Pg. No.

List of Tables	iii
List of Figures	iv
List of Abbreviations	v
Foreword	vi
Acknowledgement	vii
Executive Summary	viii
Chapter 1 Introduction	1
1.1 Structure of Education and Training	1
1.2 Historical Overview and Trends	2
1.3 The 1999 Census Questions on Education	3
1.4 Quality of Data on Education	4
Chapter 2 School Attendance	5
2.1 Introduction	5
2.2 Population Attending School	6
2.3 Population That Dropped Out of School	13
2.4 The Population That Never Attended School	15
2.5 Literacy	14
Chapter 3 School Enrolment	20
3.1 Introduction	20
3.2 Current Enrolment	20
3.3 Scholastic Retardation Rates	28
3.4 Scholastic Progression Rates	31
Chapter 4 Educational Attainment	35
4.1 Introduction	35
4.2 Population Without Any Educational Attainment	37
4.3 Population with Primary Level of Education	38
4.4 Population with Secondary Level of Education	41
4.5 Population with Form 5-6	44
4.6 Population with University Level of Education	45

Kenya 1999 Population and Housing Census

Chapter 5 Projections of School Age Population
46

5.1	Introduction	46
5.2	Projections of Pre-Primary School Age Population	46
5.3	Projections of Primary School Age Population	47
5.4	Projections of Secondary School Age Population	48
5.5	Projections of School Enrolments	48

Chapter 6 Conclusions and Recommendations
50

6.1	Conclusions	50
6.2	Policy Recommendations	52
6.3	Recommendations for Future Census Undertaking	52

References
53

Appendix

Kenya 1999 Population and Housing Census Questionnaire	54
List of Contributors	56

List of Tables

2.1	School Attendance by Age Group and Sex	5
2.2	Population of Age Groups 6-13, 14-17 and 18-24 Years Attending School by District and Sex	11
2.3	Percentage of Age Groups 6-13, 14-17 and 18-24 Who Never Attended School by District and Sex	17
3.1	Persons Attending School by Census, School Enrolment Records and Sex	21
3.2	Persons Attending School by Census, School Enrolment Records, Class and Sex	21
3.3	Gross Enrolment Rates for Age Groups 6-13, 14-17 and 18-24 Years by District and Sex	22
3.4	Net Enrolment Rates for Age Groups 6-13, 14-17 and 18-24 Years by District and Sex	24
3.5	Persons Attending Primary School by Province	26
3.6	Primary School Gross Enrolment by Province and District 1999	26
3.7	Scholastic Retardation Rates by Sex and Rural-Urban Residence	28
3.8	Scholastic Retardation Rates by Sex, Province and Rural-Urban Residence	29
3.9	Scholastic Retardation Rates by Sex, District and Rural-Urban Residence	29
3.10	Scholastic Progression Rates by Sex and Rural-Urban Residence	31
3.11	Scholastic Progression Rates by Sex, Province and Rural-Urban Residence	32
3.12	Scholastic Progression Rates by Sex, District and Rural-Urban Residence	33
4.1	Percentage Distribution of Level of Education Completed by Age Group and Sex	36
4.2	Percentage Distribution of Population Aged 25 Years and Above by Level of Education, Selected Countries in Africa	37
4.3	Percentage Distribution of Persons With No Education by Age Group and Sex, 1969-99	37
4.4	Percentage Distribution of Persons With No Education by Age Group, Sex and Rural-Urban Residence	38
4.5	Percentage Distribution of Population with Std 1-4 as the Highest Level of Education Completed by Age Group and Sex, 1979-99	39
4.6	Percentage Distribution of Persons with Std 1-4 Education by Age Group, Sex and Rural-Urban Residence	39
4.7	Percentage Distribution of Population with Highest Level of Education as Std 5-8 by Age Group and Sex, 1979-99	40
4.8	Percentage Distribution of Persons With Std 5-8 Education by Age Group, Sex and Rural-Urban Residence	41
4.9	Percentage Distribution of Population with Form 1-4 Level of Education by Age Group and Sex, 1979-99	41
4.10	Percentage Distribution of Population with Form 1-4 as Highest Level of Education by Age Group, Sex and Rural-Urban Residence	42
4.11	Percentage Distribution of Population Aged 20-24 Form 1-4 Education by Sex and District, 1979-99	42
4.12	Percentage Distribution of Population with Form 5-6 Education by Age Group and Sex, 1979-99	44
4.13	Percentage Distribution of Population with University as Highest Level of Education Completed by Age Group, Sex and Rural-Urban Residence	45

Kenya 1999 Population and Housing Census

5.1	Projections of Pre-Primary School Age (3-5 Years) Population by Sex and District	46
5.2	Projected Percentage Increases for Pre-Primary School Age Population by Province	47
5.3	Projections of Primary School Age (6-13 Years) Population by Sex and District	47
5.4	Projected Percentage Increases for Primary School Age Population by Province	47
5.5	Projections of Secondary School Age (14-17 Years) Population by Sex and Province	48
5.6	Projected Percentage Increases for Secondary School Age Population by Province	48
5.7	School Enrolment Rates and Intercensal Changes	49
5.8	Projections for School Enrolment by Sex and Province	49

List of Figures

2.1	Population Attending School, Left School and Never Attended School	5
2.2	Population Attending School by Single Years and Sex, 5-24 Years	6
2.3	Distribution of Population Attending School by Age Group and Sex	7
2.4	Percentage Distribution of Population Attending School by Single Years of Age and Rural-Urban Residence	8
2.5	Percentage Distribution of Population Attending School by Age Group and Rural-Urban Residence	8
2.6	Trends in Population Attending School by Age Group, 1979-99	9
2.7a	Trends of Population Aged 6-9 Attending School Sex, 1979-99	9
2.7b	Trends of Population Aged 10-14 Attending School by Sex, 1979-99	9
2.8	Population Aged 6-13 Years in School by Province	10
2.9	Population Aged 6-13 Years Attending School by Province and Sex	10
2.10	Population Aged 14-17 Years Attending School by Province and Sex	11
2.11	Population Aged 18-24 Years Attending School by Province and Sex	11
2.12	School Dropouts by Age Group and Sex, 1999	13
2.13	Population That Dropped Out of School by Age and Sex, 1979-99	14
2.14	Population Aged 6-9 Years That Dropped Out of School by Province and Sex	14
2.15	Population Aged 10-14 Years That Dropped Out of School by Province and Sex	14
2.16	Population Aged 15-19 Years That Dropped Out of School by Province and Sex	15
2.17	Population That Never Attended School by Age Group and Sex	15
2.18	Population That Never Attended School by Age Group, 1979-99	16
2.19	Population Aged 6-13 That Never Attended School by Province and Sex	16
2.20	Population Aged 14-17 That Never Attended School by Province and Sex	17
2.21	Population Aged 18-24 That Never Attended School by Province and Sex	17
4.1	Population With No Education by Age Group and Sex, 1999	37

List of Abbreviations

AIDS	Acquired Immunodeficiency Syndrome
ECD	Early Childhood Development
FIDA	International Federation of Women Lawyers
GER	Gross Enrolment Rate
HIV	Human Immunodeficiency Virus
MoE	Ministry of Education
MOEST	Ministry of Education, Science and Technology
MOLHRD	Ministry of Labour and Human Resource Development
NER	Net Enrolment Rate
Std	Standard
UNDP	United Nations Development Programme
UNFPA	United Nations Fund for Population Activities

Kenya 1999 Population and Housing Census

Foreword

The Kenya 1999 Population and Housing Census was the fourth to be carried out since independence and the sixth since 1948 when the first census was conducted in Kenya. It was carried out on a de facto basis with the night of 24/25 August being taken as a reference date under the provision of the Statistics Act (Cap. 112) of the Laws of Kenya and Legal Notice No. 121 of 11 September 1998 and amendment No. 25 of 22 February 1999.

The main objective of this census was to collect demographic and socio-economic data required for policy formulation and decision making in planning processes. This objective was emphasised by the 1999 census theme, "Counting Our People for Development". Basic results of the 1999 census were published in Volumes I and II in January 2001. This second set comprising nine analytical reports addresses topics of fertility and nuptiality, mortality, migration and urbanisation, population projections, education, labour force, housing and gender dimensions. Highlights of the demographic indicators are presented in the Population Dynamics monograph.

Preparation of the analytical monographs involved collaborative efforts of both local and external experts, the Population Studies and Research Institute (PSRI), and various government ministries and departments. The monographs were authored under supervision of a lead consultant. The authors and consultants were recruited on competitive basis, ensuring that such persons had adequate knowledge of the subject they were to analyse and were familiar with Kenya demographic data. For the first time, university students in demography were attached to lead monograph authors.

Scanning technology was used for the first time to capture census data. This method reduced the data processing period to a record 6 months. In an effort to achieve internal consistency and minimise errors to acceptable levels, rigorous editing and validation of the data were carried out before analysing the results. The information presented in these reports is therefore based on more cleaned data sets, and is to be preferred in case there are differences in the results published in Volumes I and II.

This monograph presents the analysis of education trends in Kenya since 1989. The 1999 census results show declining trends in primary school enrolments. Also, school dropout rates have risen, and much faster for female students. The gross enrolment rate (GER) for primary schools declined from 106% in the 1989 census to 101% in 1999. The low enrolment rates are largely attributed to cost sharing in primary schools against a background of deepening poverty, and the impact of the HIV/AIDS pandemic. Over the same period, the progression rate from primary to secondary school declined by 4 percentage points to stand at 44.8%. Nonetheless, the proportion of persons aged 5 years and over without any level of education declined from 32.0% to 24.6%.

Dr. Adhu Awiti, MP
Minister for Planning
Ministry of Finance and Planning

Acknowledgement

The Kenya 1999 Population and Housing Census, with the theme "counting our people for development", was conducted in August 1999. It was the sixth national census, after those conducted in 1948, 1962, 1969, 1979 and 1989. Provisional results were released in February 2000, and basic reports were subsequently released in two volumes in January 2001 after a rigorous data processing exercise. This monograph is one of the nine that are a culmination of an ambitious, synchronized and all-inclusive in-depth analysis process addressing various topical areas regarding the demographic, social and economic profiles of the Kenyan population.

The census, being an enormous, complex and costly operation, was accomplished through concerted efforts of many organizations, institutions, government ministries and individuals who assisted in a variety of ways to prepare, collect, compile, process, analyse and publish the results. The Government of Kenya, through the Central Bureau of Statistics of the Ministry of Finance and Planning, wishes to thank them all for their inputs into this noble process.

The Government extends sincere gratitude to the development partners, particularly United Nations Population Fund (UNFPA), United Nations Development Programme (UNDP), United States Agency for International Development (USAID) and the Department for International Development (DFID) for providing technical and / or financial support. Very special thanks are extended to UNFPA and DFID for providing further technical and financial support for the compilation and dissemination of the nine monographs, and also to USAID, in collaboration with the United States Bureau of the Census, for supporting further data processing and the compilation of two sets of United Nations style tables and a census data sheet.

Further gratitude is due to the authors of the nine monographs, the technical support staff and other national and international professionals for their commitment and tireless efforts to successfully undertake the in-depth analysis exercise. Last but not least, all Kenyans deserve special thanks for their patience and willingness to provide the requisite information. We sincerely hope that the data contained in this monograph will be fully utilized in the national development planning process by all stakeholders for the welfare of the people of Kenya.

David S.O. Nalo
Director of Statistics
Central Bureau of Statistics

Executive Summary

Education remains one of the key indicators of human development. It imparts knowledge and skills for survival and develops a child or an individual to a total human being, ready to participate effectively in nation building. Primary education has therefore been declared by the United Nations as a human right which should be given to every child without discrimination. Kenya has an education system commonly known as the 8-4-4 system. The system comprises of 8 years of primary education, 4 years of secondary education and a minimum of 4 years of university education. Early childhood development (ECD), special education as well as technical and non-formal education is also included in the system. However, adult education and some vocational and technical institutions, which include youth polytechnic and institutes of technology, are under the Ministry of Labour and Human Resource Development (MOLHRD). The 8-4-4 system of education was introduced in 1985 to respond to the growing needs and challenges of socio-economic development of the country.

The 1999 Kenya Population and Housing Census questionnaire contained three questions on education. These questions were limited to the population aged 5 years and above and solicited information about the status of school attendance, highest level of education reached and the highest level of education completed. However, the questionnaire did not capture information about literacy because during the census undertaking, people are usually asked to state whether they know how to read and write without being subjected to simple tests to ascertain their actual literacy status. This tends to give inaccurate and unreliable data.

The 1999 census categorised school attendance into three groups: "At School", "Left School" and "Never Attended School". Analysis of school attendance that 34.9% of the population aged 5 years and over were reported to be a school with 36.7% of the males and 33.3% of the females. Also, 47.2% of the population had left school, either after completing one of the education levels or dropping out. Of those leaving school, 49.4% of the males and 45.0% of the females. Those who never attended school composed 17.9% of the total population, with 13.9% of the males and 21.7% of the females. The population that never attended school in the age group 6-13 years (primary school aged children) stood at 13.3%, with 13.1% of the males and 13.5% of the females. This provides an indicator of primary school non-enrolment rates. When compared to 1989 population data, it is evident that the proportion of the population attending school had declined from 37.0% to 35.0%, while the proportion that left school increased from 36.0% in 1989 to 47.0% in 1999. The proportion that never attended school had decreased from 24.0% in 1989 to 18.0% in 1999.

Analysis of the population attending school by sex and single years shows that the peak of school enrolment was at age 11 years for both sexes. At this age, 85.2% were reported to be at school, with 86.0% of the males and 84.5% of the females. Using 5-year age groups, school enrolment peaked at age group 10-14. Further, the data also show that at the initial school-going ages (5 to 7 years), the percentage of females attending school was slightly higher than that of males, while between age 7 and 9 the school attendance for male and female students was the same. The scenario is reversed after age 9 where the sex differential was in favour of males. The gender gap widened from age 15 from about 4 percentage points to 12 percentage points at age 19 years. These figures imply that wide variations in school attendance by sex start approximately at secondary school level where females were clearly the disadvantaged group. However, in general, the gender gap at national level has narrowed over the years since the 1979 census. At the provincial level, Central province with 91.2% had the highest proportion of population aged 6-13 years attending school followed by Nyanza province with 90.1%

while North Eastern province reported the lowest proportion of 20.5%

The census data indicate that enrolment in primary school was 6.5 million, with 50.8% being boys while enrolment in secondary school stood at 829,641, with males constituting 52.5%. These percentages are higher than those given by the Ministry of Education, Science and Technology (MOEST) by 10.9 percentage points and 25.4 percentage points, respectively. This may be attributed to the under coverage of schools, especially for private and community schools by MOEST. The gross enrolment rate (GER) for primary schools declined to 101% from 106% recorded in 1989 census. This confirms the persistent decline in enrolments over the years as reported by MOEST.

Scholastic retardation analysis indicates that 29.5% of the primary school children were over-age (over 14 years). The proportion of over-age boys stood at 31.0% compared to 27.9% for girls. Scholastic retardation is usually caused by the late start of schooling and repetition. Scholastic retardation for urban areas was lower (22.6%) than that in rural areas (30.6%). This is because parents from urban areas are more educated and tend to take their children to school at an early age. Scholastic retardation was relatively low in Nairobi (19.3%) and highest for North Eastern province (24.8%), Nyanza province (28.9%) and Western province (29.0%). These figures indicate an increase in retardation rates in most of the provinces in comparison with 1989 census results.

Scholastic progression, which is a measure of movement from one class or level to another, is normally used to determine the prospects or the opportunities for mobility that exist within the education system for those attending school. Nationally, the scholastic progression rate from primary to secondary school stood at 44.8% which compares favourably with the transition rates from MOEST which have been ranging between 40% and 45% for the last 5 years. This is a drop by about 4 percent points from the 1989 census progression rate, which stood at 49%. The rate (45.1%) for males was slightly higher than that for females (44.5%). Possible causes for this drop in progression rate between 1989 and 1999 could be partly due to the rise in cost of education, among other socio-cultural factors. The scholastic progression rate was highest in Nairobi (70.2%) followed by Central province (46.3%), and the lowest were in Eastern province (36.1%).

Concerning the level of education completed, the census results indicated that 75.4% of the total population aged 5 years and over had completed some level of education in 1999. This represents an increase of about 8 percentage points compared to the 1989 population census which indicated that 67.0% of the total population aged 6 years and above had completed some level of education. Also, 24.6% were found not to have completed any level of education in 1999, which was an improvement from the 1989-population figure of 32%. The proportion of the population that had completed Std 1-4 was 26.8%, Std 5-8, 31.0% and Form 1-4, 16.1%. This was a significant increase from 24.6%, 29.6% and 12.5% recorded in 1989 for the same categories, respectively. The proportion of the population reported to have completed university education was 0.7%. The proportion for males stood at 1.0% while that of females stood at 0.5%.

Chapter 1

Introduction

1.1 Structure of Education and Training

According to a number of recent publications, education and training in Kenya can be classified into three broad but interrelated categories: (a) general education, which includes early childhood development; and primary, secondary and university education, (b) adult and non-formal; and (c) technical-vocational, both institutional and on-the-job (King 1996, RoK 1988 and 1998, RoK and UNICEF 1999).

Early childhood development (ECD), which includes elements of general education - takes place between birth and age six, the official age of entry into primary school. The primary school course is 8 years long, followed by 4 years of secondary school and 4 years of a basic university degree course, what is known in Kenya as the 8-4-4 system. Progression from primary to secondary school and from secondary to university is through selection on the basis of performance in the national examinations for the Kenya Certificate of Primary Education (KCPE) and the Kenya Certificate of Secondary Education (KCSE). The selective manner of progression between levels is an indication that not all children who complete the primary course have the opportunity to pursue further education. For instance, according to the Ministry of Education statistics, only an average of 45% of the primary school pupils who take the KCPE examination are selected for entry into secondary school.

Both the state (through public budget allocations) and non-public sources (including households, communities, NGOs and the private sector) are involved in the provision of education. Non-public entities contribute to the bulk of expenses (both developmental and recurrent) in the ECD sub-sector. The state has met the largest share of expenses at the primary, secondary and university levels. This has gradually declined over the decades, and in recent years the proportion of the costs of public institutions met from non-public sector contributions has considerably increased.

1.2 Historical Overview and Trends

Kenya has an impressive record in expanding access to education over the last three decades, largely by establishing a comprehensive network of schools throughout the country. In 1960 before independence, the primary school gross enrolment ratio was 47%. By 1980, the country had nearly doubled the primary school gross enrolment rate to 90%. The expansion of secondary school enrolments between 1960 and 1980 was even more dramatic. The secondary school gross enrolment rate, which was merely 2% in 1960, increased more than ninefold to a level of 19% in 1980 and about 30% in 1990. However, the gains made in the first two decades after independence have been reversed since 1989. After peaking at 106.0% in 1989, the primary school gross enrolment rates fell to as low as 101.4% in 1999. The secondary enrolment rate also declined from 26% in 1990 to 19% in 1999.

1.2.1 Access and Equity in Schooling

School enrolment rates by single year ages indicate three important facts about schooling in Kenya. First, children start school late. For instance, available data indicate that only around half of all 6-year-olds are in school, although 6 years is the recommended age for starting primary school. About one out of every three children aged 7 years and a quarter of the children aged 8 years are not in school. Second, the proportion of children enrolled in school increases rapidly beyond age 7, approaching 90% through ages 10 to 14. This means that the vast majority of Kenyan children obtain 5-6 years of primary schooling. Third, beyond age 14 years, enrolment begins to fall sharply. This, of course, results in much lower secondary school enrolment rates.

In 1999, large disparities in secondary schooling appeared in enrolment rates across rural and urban areas and across economic groups within rural and urban areas. The gross secondary enrolment ratio was more than two times as large in the urban areas as in the rural areas. In the urban areas, the economic disparities were relatively smaller but still large in absolute magnitude.

An examination of the economic composition of enrolled students at primary, secondary and tertiary levels shows that while primary students were drawn more or less proportionately from all economic groups, secondary students were drawn disproportionately from the upper-income groups. Fewer than 9% of secondary students are drawn from the poorest per capita expenditure quintile, while 30% are drawn from the richest quintile. The distribution of tertiary students is even more skewed, with more than 45% of all tertiary students in Kenya being drawn from the richest 20% of the population.

Also, in 1999, large regional disparities occurred in enrolment rates. Even though the primary school gross enrolment ratio was 101% in 1999, five districts in the country - Garissa, Wajir, Mandera, Marsabit and Samburu - had a gross primary enrolment ratio of less than 50%. Similarly, even though the secondary school gross enrolment ratio for Kenya was 19% in 1999, five districts had secondary school gross enrolment ratios of less than 5%.

While boys and girls had roughly similar school enrolment rates up to age 12, girls started falling behind boys in school enrolment beyond that age. By age 16, more enrolment was about 15% greater than female enrolment rate; by age 18 the difference widened to 37%, and by age 20, it further widened to 43%. The largest gender disparity in secondary school enrolment rates is found in the urban areas.

Use of household survey data to explore the socio-economic determinants of enrolment reveals that the two strongest determinants of both primary and secondary school enrolment are the economic background of a child and mother's schooling. The empirical results also indicate that the care of younger siblings is a chore that keeps girls from attending primary or secondary school. Both primary and secondary school enrolments of girls (but not of boys) are adversely affected by the presence of children under 3 years of age in the household. The effect is particularly strong for secondary school aged girls.

1.2.2 Repetition

As in other developing countries, grade repetition is common in Kenya. One reason for the large discrepancy between, gross and net primary enrolment ratios is the high level of grade repetition, combined with delayed entry into school. According to statistics in the Ministry of Education, grade repetition is in the range of 13 to 16% in Std 1-6, increases to 18 to 19% in Std 7 and falls off sharply

Kenya 1999 Population and Housing Census

to under 5% in Std 8. The higher rate of repetition in Std 7 reflects the fact that students often repeat Std 7 in order to improve their performance on the KCPE and thereby get admitted into a good secondary school.

Girls tend to have slightly lower rates of repetition than boys. Although the difference is small, it may simply reflect the fact that parents pull girls out of school as soon as they do not progress on to the next grade but give boys a second chance. This would result in girls remaining in school, showing lower rates of grade repetition than boys.

1.2.3 Dropout Rates

Although dropout rates at each grade level were not as large as repetition rates, they add up significantly over the 8 years of primary school. Overall, the average dropout rate in each standard of primary school is 3.2%, identical for boys and girls. It increases from 2.7% in Std 1 to a high of 5.2% in Std 7, the year before KCPE is taken. Children drop out of primary school for several reasons. According to the 1995 Primary School Census, the most common reason given for dropping out of primary school (given in 19% of the cases) was lack of interest on part of parents owing to their ignorance or illiteracy. Poverty was cited in 13% of the cases as being important, while poor academic performance of the student was cited in 6.5% of the cases. Among girls, marriage and pregnancy were very important reasons for dropping out (cited in 13.5% of cases).

1.2.3 Grade progression and Retention

The combination and compounding of high rates of repetition and dropout means that school retention rates are low. For every 1,000 pupils that entered Std 1, a total of 877 completed Std 4 and 727 completed Std 8. Thus, of the students entering Std 1, nearly 30% drop out before completing the primary cycle. Continuation or transition rates from primary to secondary school are even lower. Even worse, the evidence suggests that transition rates from primary to secondary school actually declined over time. Girls have a significantly lower rate of moving from primary to secondary school than boys, perhaps due to factors such as teenage pregnancy, early marriage, household preference for males in allocating resources to education and imbalances in the allocation of household chores.

1.3 The 1999 Census Questions on Education

Columns 22 to 24 of the 1999 census questionnaire enquired about education status of each person. Enumerators were required to write the appropriate code in each column using pre-coded categories provided in the census questionnaire. The questions on education were limited to persons aged 5 years and above. The first question on education asked about the person's school attendance status. The question was restricted to full-time education in an institution like primary, secondary and technical schools or university. The definition excluded post-school training colleges as well as Madrasa schools where only reading and writing of the Koran are taught. The responses were recorded as "At school", "Left school" and "Never attended school". Responses not obtained were recorded as "Not stated".

The second question on education asked about the person's highest level of education completed. The highest class completed was recorded for a person who had been to school or was at school. A person who had sat for "0 Level" through a correspondence course, for example, was recorded to have completed Form 4. A person attending university was categorised as "Graduate". Those persons whose

highest level of education completed were not stated were placed in the "Not Stated" category.

A comparative analysis of the questions asked on education in the 1989 and 1999 population censuses indicates that some changes occurred in the 1999 census schedule. First, a question on literacy appeared in 1989 but not in 1999. The reason for omitting the question was that simply asking persons whether they knew how to read and write did not portray a true picture. Obtaining reliable information on literacy levels requires a comprehensive in-depth literacy survey. Experience has shown that many people claim to be literate but when tested are found to be illiterate.

Another change was that while the questions on education in the 1989 census were limited to persons aged 6 years and above, the ones in that questions asked in 1999 were limited to persons aged 5 years and above. This was useful for the inclusion of some information on pre-primary school attendance, although the official age for pre-primary school is 3 years of age. It is recommended that the next population census should consider limiting the education questions to persons aged 3 years and above to give a more realistic picture concerning primary school education.

1.4 Quality of Data on Education

The 1999 population census, as in most previous censuses, was done during school holidays and hence might have led to some under-enumeration of students. Some students could have reported themselves as not being in school. In addition, persons in post-primary and secondary training institutions could have been reported to be at school, especially when persons other than the individuals themselves provided the information. The quality of data on education was assessed by the degree of imputations done as well as by comparisons with other existing educational statistics from other sources.

Further analysis on the quality of the education data was done by comparing the results of the 1999 census data with those from other sources. The 1999 census data on class/level completed for those attending school were compared with the enrolment statistics by class/level from the Ministry of Education, Science and Technology for the year 1999.

Chapter 2

School Attendance

2.1 Introduction

The Kenya 1999 Population and Housing Census categorised school attendance into three groups: "At school", "Left school" and "Never attended school". Figure 2.1 and Table 2.1 provide the percentage distribution of age groups by levels of education. Census data on education was collected for children aged 5 years and above. The "proper" ages for schooling according to the policy were 3 to 5 years for pre-school, 6 to 13 years for primary and 14 to 17 years for secondary. The age group 18-24 was used for tertiary and university education, considering that university programmes vary from 4 to 7 years. However, it is recognised that university parallel programmes existed at the time of the census, and it is expected that adults of age 25 years and over could still be schooling.

Figure 2.1 Population Attending School, Left School and Never Attended School, 1999

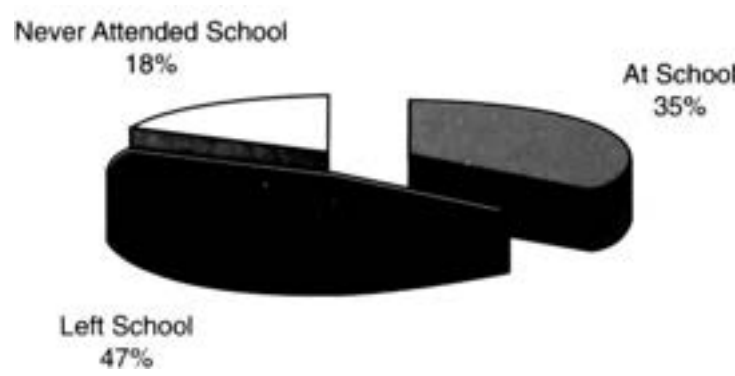


Table 2.1 School Attendance by Age Group and Sex

Age Group	Total	Population		% At School			% Left School			% Never attended		
		M	F	Total	M	F	Total	M	F	Total	M	F
Total	23,837,582	11,704,014	12,133,568	34.9	36.7	33.3	47.2	49.4	45.0	17.9	13.9	21.7
5 years	758,304	385,154	373,150	50.1	49.5	50.8	24.2	24.4	23.9	25.7	26.1	25.3
6-13	6,415,957	3,230,519	3,185,438	80.3	80.4	80.1	6.4	6.4	6.4	13.3	13.1	13.5
14-17	2,836,242	1,419,902	1,416,340	68.2	70.6	65.8	22.6	20.7	24.6	9.2	8.8	9.6
18-24	3,079,495	1,453,472	1,626,023	21.7	26.6	17.2	68.9	65.0	72.3	9.5	8.3	10.5
25-29	3,302,937	1,579,037	1,723,900	3.1	3.8	2.5	87.6	89.1	86.1	9.3	7.0	11.4
30+	7,444,647	3,635,930	3,808,717	1.3	1.4	1.2	67.0	78.0	56.6	31.7	20.6	42.2

It is observed that reporting on the status of school attendance during the 1999 census improved slightly from the previous census. While 2.7% had not reported their school attendance status during the 1999 census, 3.0% did not have their school attendance status reported during the 1989 census. There was a general improvement in the reporting of the ages of the population by school attendance.

The overall picture emerging from Table 2.1 is that 35% of the total population of children ages 5 years and above was attending school in 1999, while 47% were reported to have left school and only 18% were reported to have never attended school. When compared to the 1989 census, it is evident that the proportion of the population attending school had declined from 37% to 35%, while the proportion that left school increased from 36% in 1989 to 47% in 1999. The proportion that never attended school had, however, decreased from 24% in 1989 to 18% in 1999. If for comparison purposes the figures for 5-year-olds were excluded to consider children 6 years and above as above 1989 census, this would give 34%, 48%, 18%, for those at school, who left school and those that never attended school respectively. The drop in the population attending school from 37% in 1989 to 35% in 1999 is an indicator of the declining enrolment rates in schools for the last 10 years.

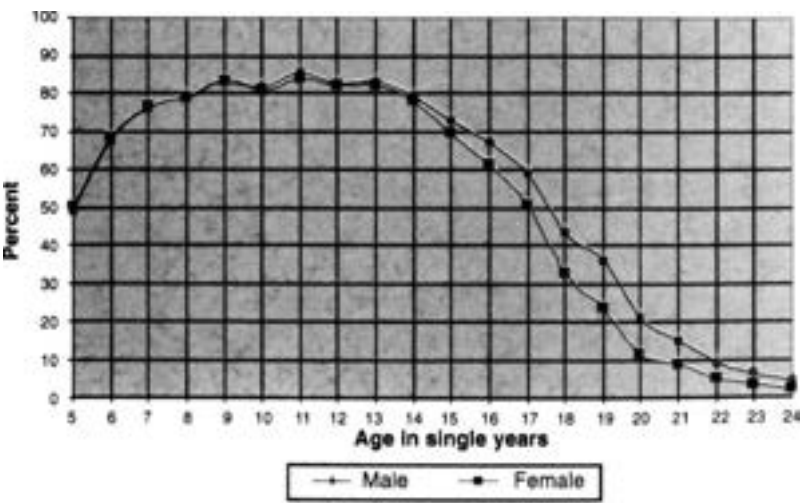
A bigger percentage of the male population was represent in the category of those at school and those that left school compared to the female population. For example, 37% of the male population was at school while about 33% of the female population were reported to be at school. The proportion of female population that never attended school was higher than that of the male population.

2.2 Population Attending School

2.2.1 Analysis of Population Attending School at National Level

Analysis of the population aged 5 years and above who were attending school by sex and single years of age shows that the peak of school enrolment was at age 11 years for both sexes. At this age, 85.2% were reported to be at school, with 86.0% of them males and 84.5% females. This indicates a decline from the 1989 census which showed the peak of primary school enrolment to be 11 years, with about 88% reported to be attending school.

Figure 2.2 Population Attending School by Single Years and Sex, 5-24 Years



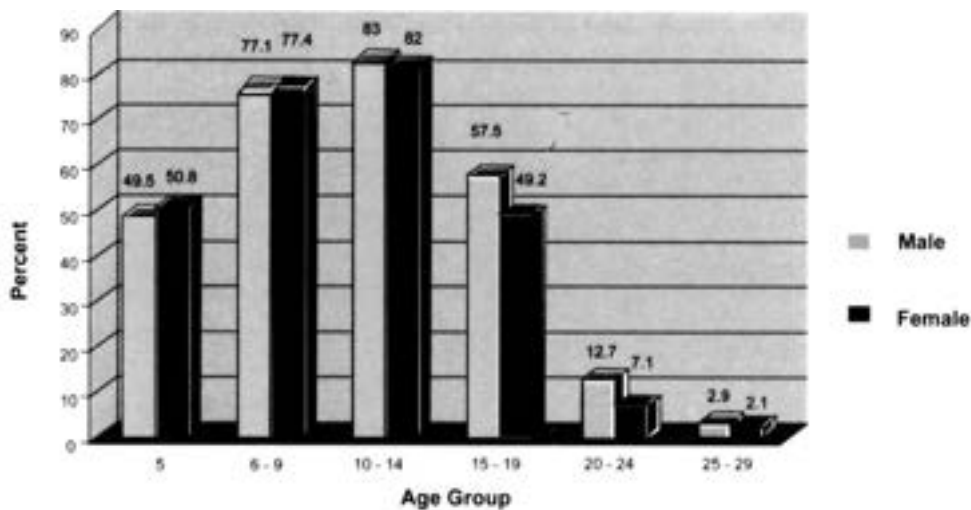
Kenya 1999 Population and Housing Census

Figure 2.2 shows that a greater proportion of the female population aged 5 and 6 years attended school compared to the male population, while the reverse was observed for age 9 onward. This implies that a bigger proportion of female population leave school before completing the primary education cycle. Although the "proper" age to start primary education is 6 years, only 68.2% reported to be attending school (67.7% males and 68.8% females). This is, however, an improvement from the 1989 census where only about 42% of the 6-year-olds were reported to be attending school.

The age pattern obtained is such that enrolment increases by age up to 11 years, plateaus slightly up to age 13, and then drops thereafter (see Figure 2.3). This pattern can be attributed to the pyramidal shape of the schooling opportunities, which is wider at the base (primary level), narrower at the middle (secondary level) and very narrow at the top (university level). When 5-year age groups are used, the peak of school enrolment was at age group 10-14 as shown in Figure 2.3.

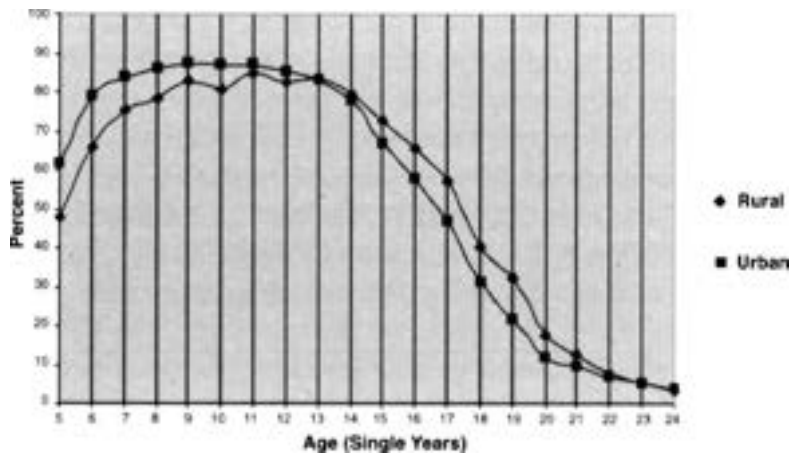
The data also show that at the initial school-going age (5 to 7 years), the percentage of females attending school was slightly higher than for males, while between age 7 and 9 the school attendance for male and female students was the same. The scenario was reversed after age 9 where the sex difference was in favour of males. The gender gap widened from age 15 where it was about 4%, reaching 12% at the age of 19 years. These figures imply that wide variations in school attendance by sex starts approximately at secondary school level where the females were clearly the disadvantaged group.

Figure 2.3 Distribution of Population Attending School by Age Group and Sex



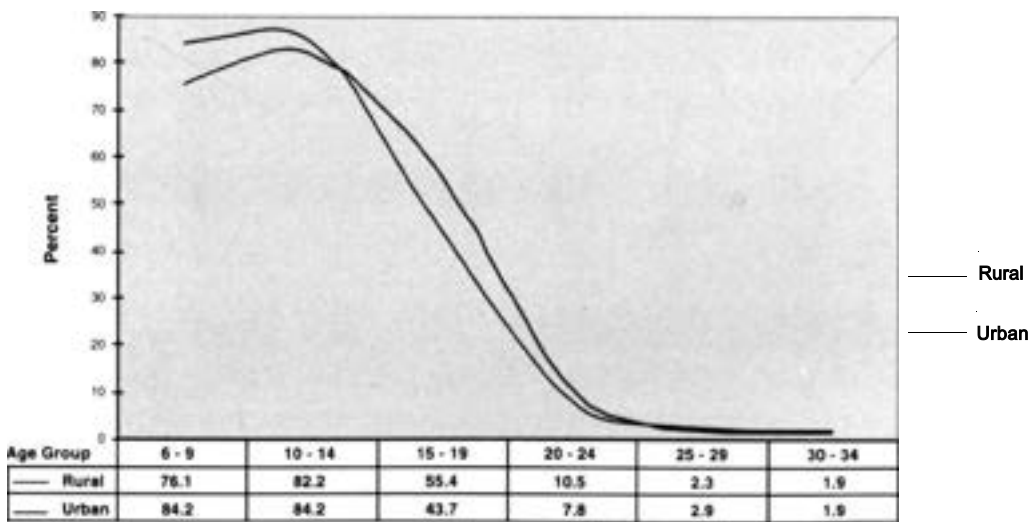
The age pattern of the population found to be attending school in the rural and urban areas was almost similar to the national total. Using single years of age, the peak age was 9 years for urban (86.4 %) and 11 years for rural (84.1%). Figure 2.4 shows rural-urban differential in the patterns of population attending school by single years of age. A bigger percentage of the urban population attended school at the initial ages, but the percentage of urban and rural population attending school was equal at age 13. Thereafter, the percentage of rural population attending school exceeded that of urban population until age 23. This trend can be explained by the fact that more children of pre-primary and primary school age (3-13 years) are attending school in urban areas, where their parents are working. At secondary school age (14-17 years), the bigger percentage of the population attending school are in the rural areas.

Fig. 2.4 Percentage Distribution of Population Attending School by Single Year of Age and Rural-Urban Residence, 1999



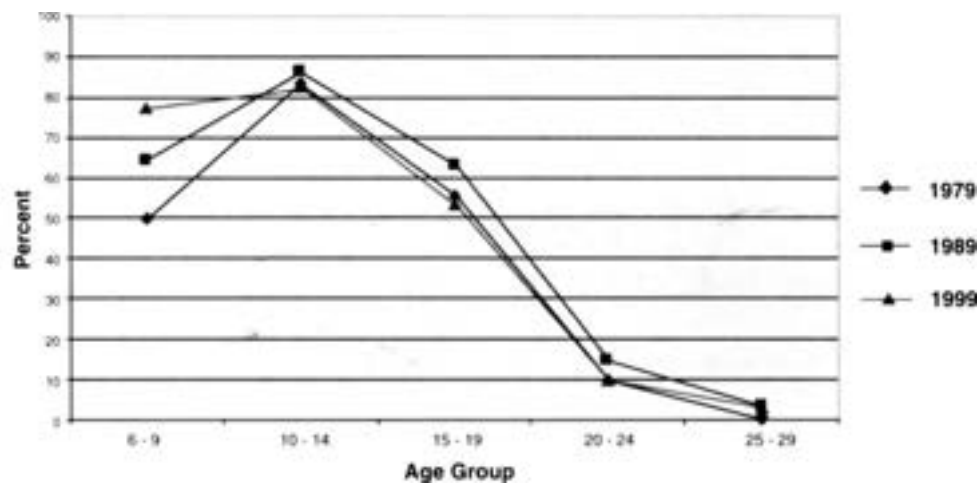
Analysis of population attending school by 5-year age groups and rural-urban residence as shown in Figure 2.5 indicates that between age groups 6-9 and 10-14 years, the proportion of the urban population attending school is higher than that of the rural population, while the reverse is true from age groups 15-19 20-24 years.

Figure 2.5 Percentage Distribution of Population Attending School by Age Group and Rural-Urban Residence



Using the population attending school as a measure of school enrolment, the 1979-99 trends depicted in Figure 2.6 indicate that a decline in school enrolment was registered in all age groups except age 6-9 years where remarkable improvements were recorded from about 50% in 1979 to 76% in 1999. This confirms the situation depicted by the Ministry of Education annual statistical records which show an overall decline in gross enrolment ratios (GER) has been attributed to a number of factors, including the cost of education at all levels which has been unaffordable by the majority of households, poor economic performance leading to high and increasing unemployment levels, thereby aggravating the poverty situation and the impact of HIV/AIDS, among others.

2.6 Trends in the Population Attending School by Age Group, 1979-99



The gender gap at national level has narrowed over the years as shown in Figure 2.7a and 2.7b. However, the figures indicate that participation of males and females in lower primary (ages 6-9) is almost equal. The gap widens at upper primary, secondary and tertiary levels in favour of the male population. Low female participation in education has been attributed to a number of factors, including cultural practices coupled with the poor economic situation.

Figure 2.7a Trends of Population Aged 6-9 Attending School by Sex, 1979-99

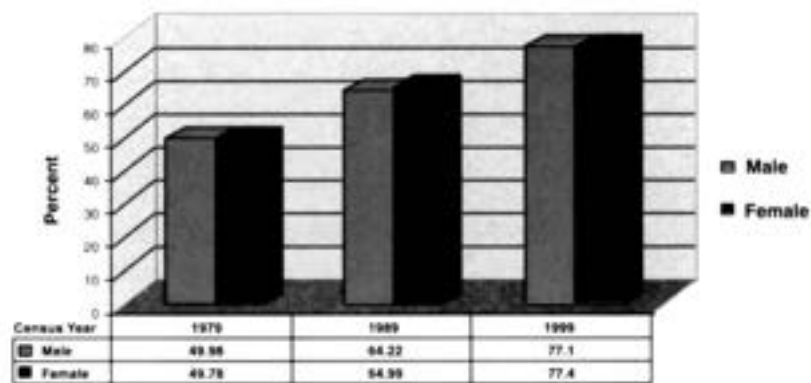
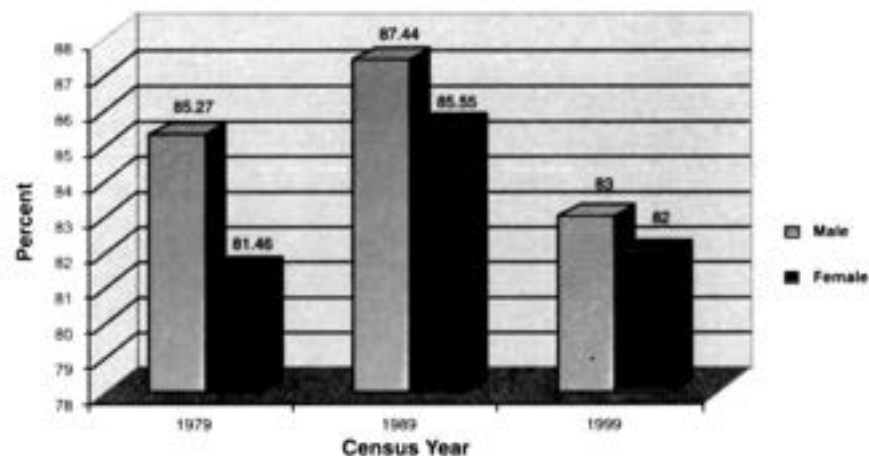


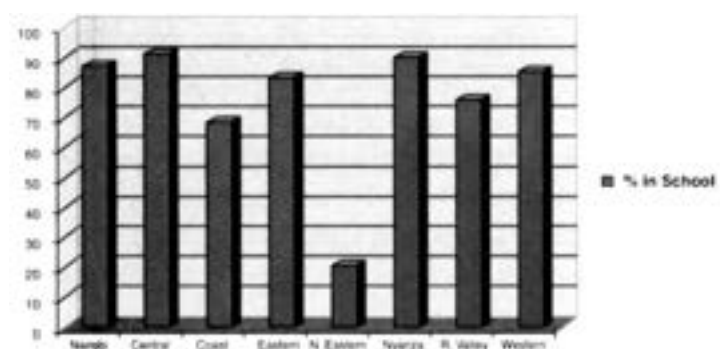
Figure 2.7b Population Aged 10-14 Attending School by Sex, 1979-99



2.2.2 Provincial Level Analysis of the Population Attending School

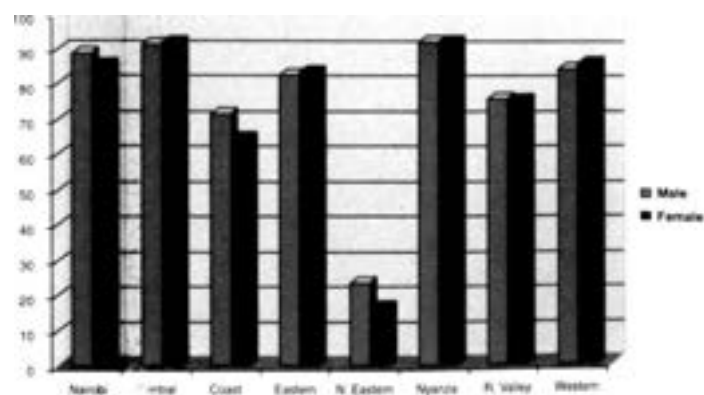
Proportions of the population attending school at provincial level provides a picture of regional differentials in school enrolment (see Figure 2.8). The provinces with relatively higher proportion of population aged 6-13 years attending school were Nyanza, Western, Central and Eastern. These had proportions of over 70%. However, this indicates a drop in school attendance since 1989 when Central and Nyanza provinces had proportions of over 90%. North Eastern province is in a class of its own with only 20.5% of the population in the age group 6-13 attending school, down from 26% in 1989. Coast province comes a distant second in the disadvantaged category with 68.2% while Rift Valley is third in this category with 75.6%.

Figure 2.8 Population Aged 6-13 years in School by Province



At this particular age group, primary school age, the data reveal that not much difference occurred by sex as shown in Figure 2.9. Besides North Eastern, Coast and Nairobi provinces, where gender disparities are noticed, the other provinces had near gender balance at this level. However, gender disparities become significant for age groups 14-17 and 18-24 years (secondary school and tertiary institutions), as shown in Figures 2.10 and 2.11. It is clear that the gender gap gets wider as the age level increases. In Eastern and Central provinces, gender disparities are in favour of females for the age group 6-13, and this is maintained to the next level (14-17 years). While Western province records a slightly greater percentage of female population attending school for age group 6-13, this trend is not maintained to the next level, 14-17 years. The most significant gender differences for the 14-17 years age group are observed in North Eastern, Nairobi and Coast provinces as shown in Figure 2.10. As Figure 2.11 shows, the age group 18-24 years has the most significant gender differences in all provinces, to the detriment of females. North Eastern province has the least representation for both male and female population at this level, while Nyanza province has the greatest representation for the male population.

Figure 2.9 Population Aged 6-13 Years Attending School by Province and Sex



Kenya 1999 Population and Housing Census

Figure 2.10 Population Aged 14-17 Years Attending School by Province and Sex

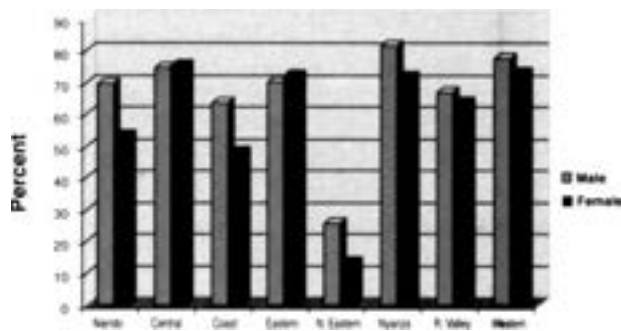
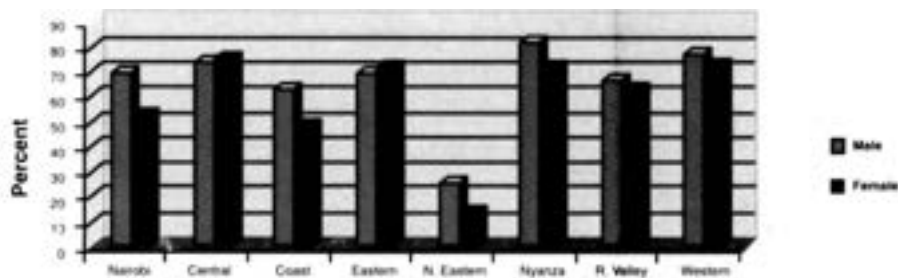


Figure 2.11 Population Aged 18-24 Years Attending School by Province and Sex



2.2.3 Analysis of the Population Attending School at District Level

Using the primary school age 6-13 years, the population attending school was found to vary widely by district. The proportion of the population aged 6-13 years attending school by district and sex are given in Table 2.2. The 1989 census analysis considered the worse-off districts to be those with under 60% of the primary school age group attending school, and the better-off districts were those with over 90% of the same age group attending school. Following the same approach for the 6-13 years age group in the 1999 census, the worse-off districts, mainly located in hardship areas, were Tana River (44.0%), Isiolo (59.3%), Marsabit (33.9%), Moyale (53.6%), Garissa (23.0%), Mandera (19.9%), Wajir (18.9%), Turkana (17.3%) and West Pokot (50.0%). Some of the better-off districts include Kiambu (91.6%), Murang'a (93.2%), Nyeri (92.9%), Gucha (91.8%), Rachuonyo (91.7%), Suba (92.2%), Keiyo (91.0%) and Marakwet (91.0%).

Table 2.2 Population of age groups 6-13,14-17, and 18-24 attending school by District and Sex

Province / District	6-13 years			14-17 years			18-24 years		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Kenya	80.3	80.4	80.1	68.2	70.6	65.8	17.5	21.7	13.8
Nairobi	86.7	88.4	85.2	60.1	69.5	53.2	12.6	13.9	11.4
Central	91.2	90.9	91.4	74.8	74.4	75.2	18.9	20.8	17.0
Kiambu	91.6	91.9	91.2	72.7	74.4	71.0	15.9	17.6	14.4
Kirinyaga	89.8	89.1	90.5	72.5	70.5	74.6	18.4	19.6	17.2
Murang'a	93.2	92.9	93.6	78.9	76.9	81.1	24.5	26.4	22.7
Nyandarua	90.3	89.7	90.9	71.2	69.8	72.8	15.3	17.8	12.9
Nyeri	92.9	92.5	93.2	78.9	77.7	80.2	22.4	23.8	21.0
Thika	90.0	90.1	89.8	73.2	75.1	71.4	17.2	19.4	15.0
Maragua	90.5	89.9	91.1	76.8	75.5	78.1	23.1	26.5	19.9
Coast	68.2	71.5	64.8	55.7	63.4	48.0	11.4	15.0	8.3
Kilifi	64.7	69.7	59.6	59.1	69.2	48.7	14.2	20.8	9.2
Kwale	61.7	66.3	57.0	51.1	60.2	41.9	10.7	15.9	6.9
Lamu	75.2	75.2	75.3	56.6	59.0	54.1	8.7	11.0	6.6
Mombasa	79.7	81.3	78.1	54.6	61.6	48.6	9.7	10.9	8.5

Table 2.2 cont.

Province/ District	6-13 years			14-17 years			18-24 years		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Taita Taveta	87.7	87.7	87.7	70.4	72.1	68.5	16.2	18.4	14.0
Tana River	44.0	47.8	40.1	34.0	40.0	27.8	8.0	11.9	4.7
Malindi	67.1	71.5	62.6	59.2	69.6	48.1	12.4	18.7	7.2
Eastern	83.0	82.5	83.5	71.0	70.0	72.0	19.5	22.8	6.6
Embu	88.6	87.9	89.3	72.4	70.4	74.4	20.6	20.8	20.4
Isiolo	59.3	61.2	57.3	46.5	50.6	42.4	11.6	14.3	9.2
Kitui	85.6	85.1	86.1	75.1	75.3	74.8	20.6	27.1	15.6
Makueni	88.8	88.0	89.5	78.5	76.4	80.6	23.2	27.0	19.8
Machakos	89.5	88.9	90.0	78.7	77.5	80.0	23.0	26.8	19.4
Marsabit	33.9	37.4	30.4	30.5	35.5	25.1	9.2	13.2	5.3
Mbeere	85.9	85.0	86.8	72.7	70.7	74.8	22.3	25.5	19.4
Meru Central	88.5	87.6	89.4	70.9	68.5	73.3	17.0	17.7	16.3
Moyale	53.6	60.8	46.0	39.4	50.0	28.5	11.1	17.0	5.5
Mwingi	79.0	77.9	80.1	71.6	71.4	71.8	21.5	29.8	15.7
Meru North	74.2	73.3	75.2	57.2	55.4	58.8	12.0	14.0	10.4
Tharaka	77.3	76.0	78.5	71.0	69.6	72.4	22.8	26.9	19.6
Meru South	88.5	87.3	89.7	73.3	70.8	75.8	20.9	23.1	18.9
N. Eastern	20.5	23.7	16.7	20.4	25.9	13.6	7.8	10.9	4.3
Garissa	23.0	26.6	18.8	20.6	26.9	13.0	9.0	11.8	6.0
Mandera	19.9	23.9	15.3	21.5	28.1	13.2	7.2	10.9	2.9
Wajir	18.9	21.3	16.1	19.5	23.5	14.4	7.2	10.1	3.6
Nyanza	90.1	90.2	90.0	76.8	81.6	71.8	22.0	30.1	15.3
Gucha	91.8	91.9	91.8	87.3	89.8	84.9	34.1	44.4	25.8
Homa Bay	91.1	91.3	91.0	73.9	82.5	65.0	17.9	28.3	10.0
Kisii Central	90.5	90.7	90.2	84.4	87.3	81.6	27.7	36.3	21.0
Kisumu	90.4	90.8	90.0	68.1	74.2	62.4	15.7	20.1	11.9
Kuria	86.8	87.5	86.2	77.1	81.6	72.3	20.6	29.0	13.5
Migori	90.9	91.1	90.8	72.3	81.8	62.9	16.8	25.6	9.4
Nyamira	89.2	89.1	89.2	82.3	83.8	80.8	28.8	37.0	22.1
Rachuonyo	91.7	91.7	91.7	77.9	83.5	71.9	22.1	33.2	13.0
Siaya	86.5	86.2	86.9	69.5	73.6	65.1	15.8	22.5	10.6
Suba	92.2	92.3	92.1	74.9	84.0	65.6	18.2	27.6	9.6
Bondo	88.5	88.5	88.5	72.0	75.5	68.1	17.1	24.3	11.2
Nyando	91.0	91.2	90.9	74.7	79.7	69.5	19.0	25.7	12.8
Rift Valley	75.6	75.9	75.4	65.2	66.8	83.6	16.8	21.2	12.7
Baringo	67.0	66.5	67.5	69.9	68.9	70.8	26.0	31.8	20.7
Bomet	88.3	87.4	89.2	75.4	76.4	74.5	21.9	30.8	14.4
Keiyo	91.0	90.8	91.1	86.2	85.6	86.7	26.8	31.2	22.7
Kajiado	60.1	62.6	57.5	51.3	55.9	46.5	11.9	15.7	8.5
Kericho	89.3	89.0	89.5	76.1	78.5	73.6	20.0	25.3	14.9
Koibatek	88.1	87.8	88.4	80.8	80.9	80.7	27.7	32.2	23.5
Laikipia	80.0	80.4	79.6	66.0	66.9	65.0	14.5	16.9	12.3
Marakwet	91.0	91.1	91.0	82.7	82.6	82.8	23.7	30.8	17.7
Nakuru	86.3	86.3	86.3	67.3	69.2	65.4	13.1	15.7	10.7
Nandi	88.8	88.2	89.4	78.3	78.7	77.8	23.0	28.2	18.0
Narok	60.0	63.9	55.8	51.8	56.6	46.5	11.6	17.2	6.6
Samburu	36.0	40.4	31.4	27.9	34.7	20.9	10.4	16.2	5.5
Trans Mara	70.8	70.4	71.2	62.4	66.5	58.3	15.7	23.3	9.0
Trans Nzoia	84.5	84.0	85.0	72.2	73.5	70.7	16.7	21.2	12.5
Turkana	17.3	18.4	16.1	12.8	14.3	11.1	4.6	6.5	2.7
Uasin Gishu	87.5	87.2	87.8	74.5	75.9	73.1	19.7	23.1	16.5
West Pokot	50.0	50.9	49.0	49.4	52.8	45.7	14.5	20.8	9.2
Buret	89.8	89.3	90.3	75.8	76.9	74.7	19.1	24.4	13.9
Western	85.1	84.3	85.9	75.3	77.5	73.1	21.0	27.7	15.3
Bungoma	88.9	88.3	89.5	81.3	83.1	79.5	25.8	34.2	18.5
Busia	82.7	82.5	82.9	69.0	74.5	63.3	15.8	23.1	10.0
Mt. Elgon	88.9	88.3	89.5	82.1	84.8	79.3	26.5	35.7	17.7
Kakamega	83.1	81.7	84.6	74.0	75.5	72.5	20.5	26.3	15.6
Lugari	87.9	86.6	89.1	75.2	74.5	75.8	19.0	22.9	15.6
Teso	77.8	78.9	76.7	73.2	79.7	66.8	19.6	27.7	12.5
Vihaga	88.2	87.1	89.3	77.6	77.7	77.4	21.6	26.3	18.0
Butere Mumias	79.5	78.8	80.3	66.7	70.1	63.3	15.2	21.0	10.6

2.3 Population That Dropped Out of School

2.3.1 Analysis of School Dropout at National Level

The proportion of the population that left school to those who ever attended school is a much better index of school dropouts when compared with the proportion of the population that left school to the total population. The latter is heavily affected by the population that never attended school. The school dropout ratios were therefore computed as percentages of the population that had left school in 1999 out of those who had ever attended school.

The distribution of the population that had dropped out of school at national level in 1999 is given in Figure 2.12. Analysis of the population aged 5 years and above as reported during the census shows that the proportions of the population aged 5 years who were found to be out of school was 57.4% for both the male and female population. The proportions of those who were out of school for the age group 6-9 was 7.7% and 7.6% for males and females, respectively. This indicates an increasing trend since the 1989 population census that recorded 2% for the same age group. The proportions further increased to 8% in the age group 10-14 years, up from 4% in 1989. The dropouts increased substantially to 41% (37.0% for males and 45.3% for females) in the age group 15-19 which accommodates most of those in the secondary school age population (14-18 years). By age 20, over 85% were found to have dropped out of school. The results demonstrate that school retention is highest at the ages corresponding to the lower primary school level, low at secondary school age and lowest at the higher education levels. The data reveal disparities in school dropout by sex whereby females were disadvantaged, and these disparities become more significant in the age groups 15-19 years and 20-24 years, the ages for attending secondary and tertiary education. However, the gap narrows rapidly after 24 years of age as shown in Figure 2.12.

Figure 2.12 School Dropouts by Age Group and Sex, 1999

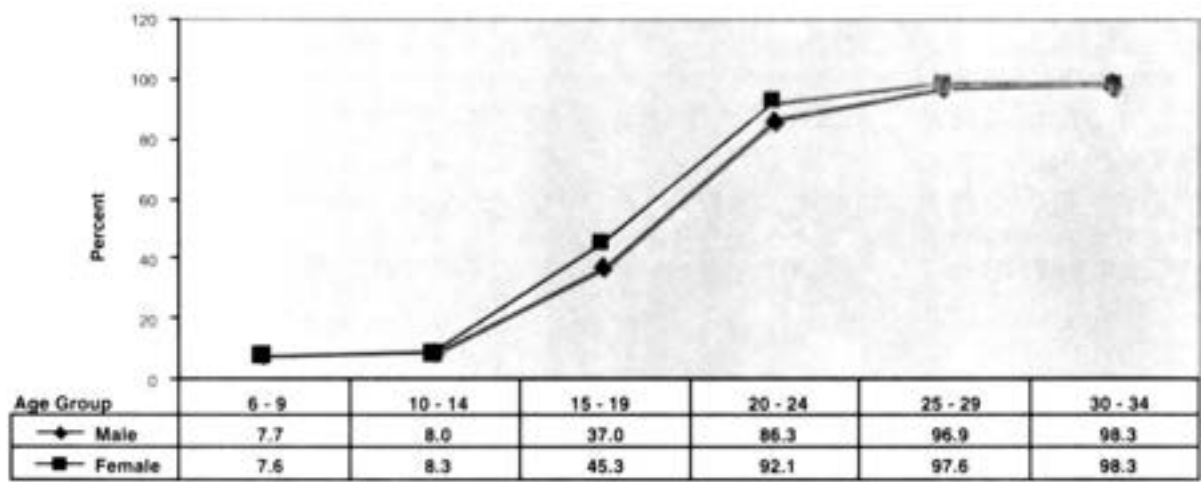
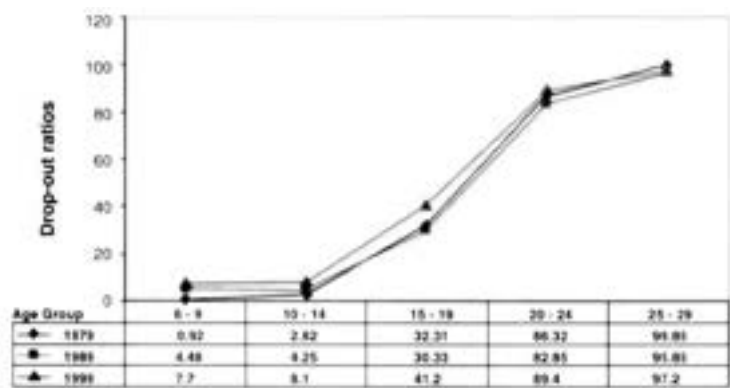


Figure 2.13 indicates an overall-increasing trend in school dropout recorded between 1979 and 1999 in the 6-9 years age group to 20-24 years age group. Although dropouts had decreased for age groups 15-19 and above between the 1979 and 1989 population censuses, they substantially increased by 1999 for all the age groups except 6-9 years. The very high increase in dropouts in age group 15-19 years could be attributed to the high cost of secondary education, coupled with increased poverty levels during the 1990s.

Figure 2.13 Population That Dropped Out of School by Age and Sex, 1979-99



2.3.2 Analysis of School Dropout at Provincial Level

The estimates of school dropouts in the age groups 6-9, 10-14 and 15-19 are provided in Figures 2. 14, 2.15 and 2.16. The picture emerging from the figures is that Central province had the lowest dropout, followed closely by Eastern and Western for the three age groups. On the other hand. North Eastern province had the highest dropouts, followed closely by Coast and Nairobi, for the 10-14 years age group.

Gender differences in dropouts can be noted in all provinces for all age groups, mostly in favour of the male population except in Central and Eastern provinces where female dropouts are lower than that of males. This explains why the percentage of female population attending school in these two provinces was higher than that of the male population. The situation also confirms what is portrayed in the Ministry of Education, Science and Technology enrolment records.

Figure 2.14 Population Aged 6-9 Years That Had Dropped Out of School by Province and Sex

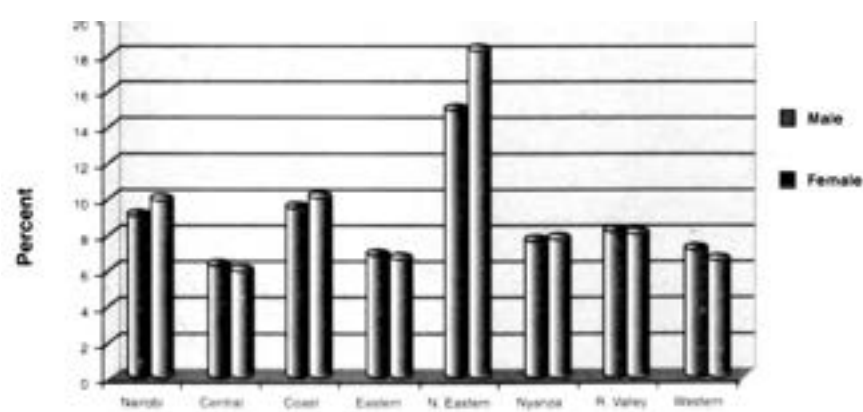
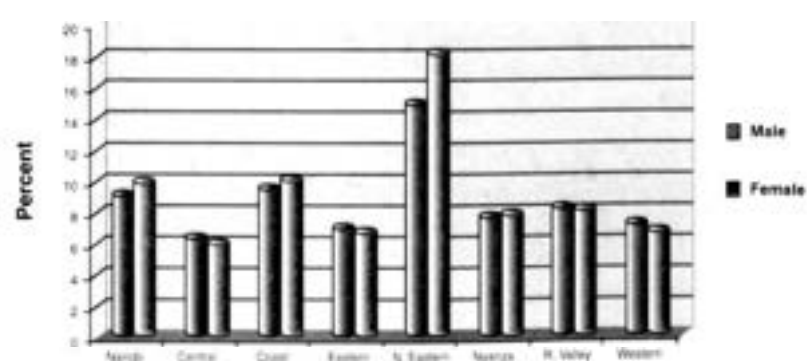
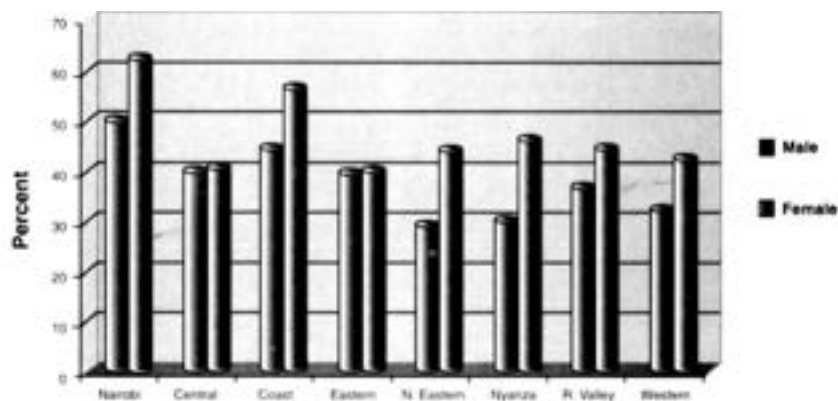


Figure 2.15 Population Aged 10-14 Years That Had Dropped Out of School by Province and Sex



Kenya 1999 Population and Housing Census

Figure 2.16 Population Aged 15-19 Years That Had Dropped Out of School by Province and Sex



2.4 The Population That Never Attended School

2.4.1 National Level Analysis of Population Without Education

The percentage of the population that never attended school is one of the most important indices to provide information on educational expansion as well as non-users of educational opportunities. As Figure 2.17 shows, the age pattern of the population that never attended school displays three distinct segments. The first segment is for age 5 years and age group 6-13 which indicates a gradual decline from 26% at age 5 to 9% at age 13, with a sharp drop between age 5 to 9 years. The second segment is located between ages 14 to 24 years where the proportion of the population that never attended school ranged between 8% and 10%. This age bracket had the lowest proportion of the population which did not attend school. The third segment is the age group 25-29 years and above where the percentage without education increased from 12% to over 40%.

Wide variations by sex in the percentage of population that had never gone to school can only be noted beyond age group 14-17 years. Between ages 5 and 13 years, the differences in percentages between males and females are minimal, The females were noted to have the higher percentage of those who reported not to have attended school in all ages.

Figure 2.17 Population That Never Attended School by Age Group and Sex

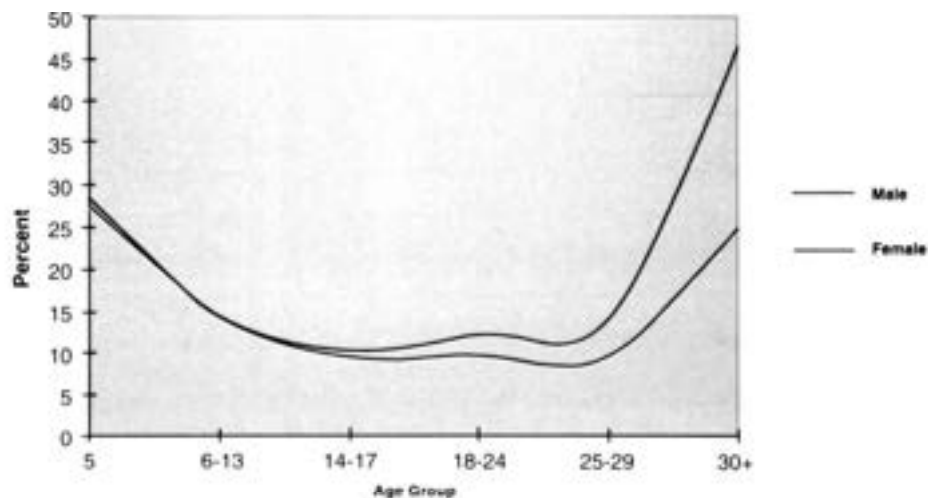
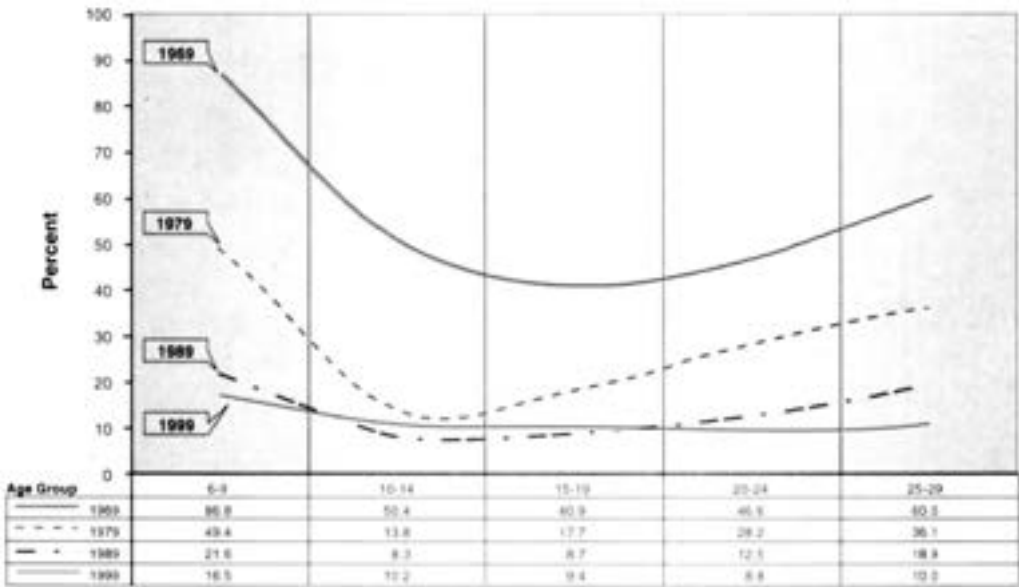


Figure 2.18 shows the 1969-99 trends in the population of age groups 6-9 years to 24-29 years that had never attended school. The overall trend portrayed is a decline in the proportion of the population that never attended school over the period. The 1999 figures portray a deviation from the declining trends of proportion of the population that never attended school for the 10-14 and 15-19 age groups. This situation confirms the picture of declining rates in school attendance between 1989 and 1999.

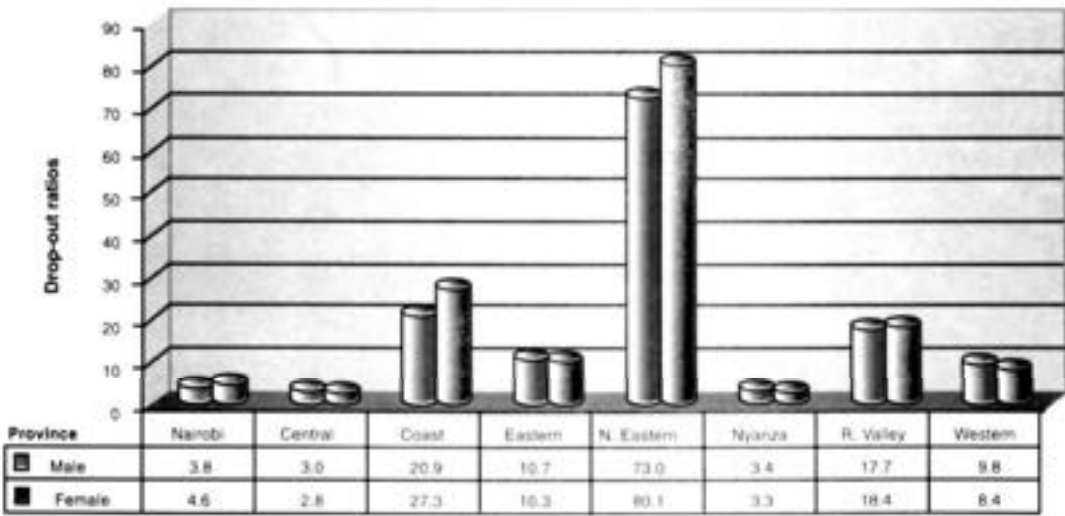
Figure 2.18 Population That Never Attended School by Age Group, 1969-99



2.4.2 Provincial Level Analysis of the Population That Never Attended School

Figures 2.19, 2.20 and 2.21 show the proportions of the population that never attended school in the age groups 6-13, 14-17 and 18-24 by province and sex. North Eastern province had the highest percentage of the population in the age groups 6-13, 14-17 and 18-24 (representing primary, secondary and tertiary levels) with no schooling. About 78% of those with no schooling were in the age group 18-24 years. Other provinces in the disadvantaged category include the Coast and Rift Valley provinces, with persistently high percentages of the population with no schooling at the three levels. The better-off provinces were Nairobi, Central and Nyanza.

Figure 2.19 Population Age 6-13 Years Who Never Attended School by Province and Sex



Kenya 1999 Population and Housing Census

Figure 2.20 Population Age 14-17 Years Who Never Attended School by Province and Sex

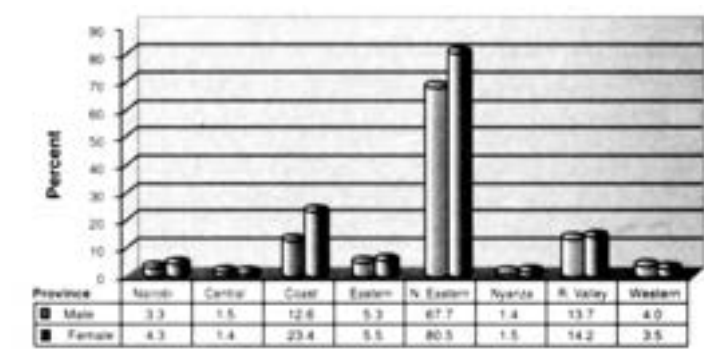
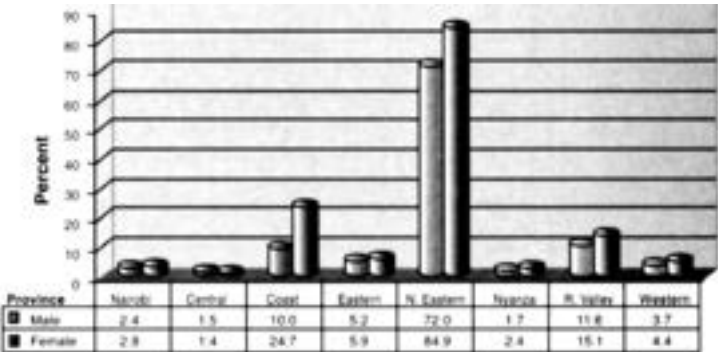


Figure 2.21 Population Age 18-24 Years Who Never Attended School by Province and Sex



The data also revealed that variations by sex were most significant in Coast and North Eastern provinces at all levels to the detriment of the female population. As observed earlier, gender disparities became apparent at secondary and tertiary levels. Gender disparities in four of the eight provinces (Central, Eastern, Nyanza and Western) for the 6-13 years age group were in favour of females, although the differences hardly exceeded 1%. For the 14-17 years age group, gender disparities favoured females in Central and Western provinces, by margins of up to 0.4%.

2.4.3 District Level Analysis of the Population That Never Attended School

The distribution of the population that never attended school provides a pointer of where more efforts need to be directed. Table 23 provides a summary of the population that never attended school by age groups, district and sex.

Table 2.3 Percentage of Population of Age Groups 6-13,14-17 and 18-24 Who Never Attended School by District and Sex

Province / District	6-13 years			14-17 years			18-24 years		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Kenya	13.3	13.1	13.5	9.2	8.8	9.6	9.0	7.8	10.1
Nairobi	4.2	3.8	4.6	3.9	3.3	4.3	2.6	2.4	2.8
Central	2.9	3.0	2.8	1.4	1.5	1.4	1.4	1.5	1.4
Kiambu	2.6	2.5	2.7	1.4	1.3	1.5	1.5	1.5	1.4
Kirinyaga	3.2	3.5	3.0	1.9	2.1	1.7	1.6	1.6	1.6
Murang'a	2.2	2.3	2.1	1.0	1.2	0.9	1.3	1.4	1.2
Nyandarua	3.6	3.8	3.5	1.8	1.9	1.7	1.7	1.8	1.7
Nyeri	1.7	1.8	1.6	1.0	1.0	0.9	1.1	1.2	1.0
Thika	3.7	3.7	3.7	1.6	1.6	1.6	1.4	1.4	1.4
Maragua	3.5	3.7	3.3	1.5	1.5	1.4	1.4	1.5	1.3
Coast	24.1	20.9	27.3	18.1	12.6	23.4	17.8	10.0	24.7
Kilifi	27.7	22.9	32.6	18.8	10.1	27.8	23.1	8.9	33.8
Kwale	30.5	26.1	35.1	23.9	16.0	32.0	27.2	14.2	36.8
Lamu	17.0	17.2	16.9	13.4	12.0	14.7	16.0	12.2	19.6

Table 2.3 cont.

Province / District	6-13 years			14-17 years			18-24 years		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Mombasa	10.8	9.5	12.0	9.6	7.4	11.5	6.9	5.0	8.8
Taita Taveta	6.0	5.8	6.3	3.5	2.9	4.1	4.4	3.4	5.3
Tana River	50.7	46.8	54.8	49.1	44.4	54.1	48.8	42.7	54.1
Malindi	24.8	20.7	29.1	16.4	8.7	24.5	21.4	8.2	32.1
Eastern	10.5	10.7	10.3	5.4	5.3	5.5	5.6	5.2	5.9
Embu	4.0	4.2	3.8	2.1	2.3	1.9	1.9	2.0	1.7
Isiolo	33.8	32.1	35.6	34.2	32.2	36.2	37.1	32.3	41.5
Kitui	9.0	9.3	8.7	2.8	2.7	2.8	3.1	2.5	3.5
Makueni	6.3	6.7	5.9	1.4	1.6	1.2	1.4	1.4	1.4
Machakos	5.0	5.3	4.7	1.2	1.2	1.1	1.2	1.2	1.1
Marsabit	61.0	57.4	64.8	59.4	54.9	64.2	66.8	59.5	74.2
Mbeere	6.2	6.6	5.8	2.2	2.6	1.8	2.4	2.4	2.3
Meru Central	4.4	4.9	3.9	2.2	2.8	1.6	1.8	2.1	1.6
Moyale	41.7	34.6	49.1	46.9	37.8	56.3	55.8	46.9	64.3
Mwingi	13.6	14.2	13.0	4.2	3.9	4.4	4.4	3.4	5.2
Meru North	16.1	16.8	15.5	8.5	8.6	8.4	8.0	7.6	8.3
Tharaka	14.0	14.7	13.2	4.2	4.4	3.9	3.8	3.4	4.1
Nithi (Meru S.)	5.0	5.6	4.5	1.9	2.4	1.4	1.5	1.8	1.3
N / Eastern	76.3	73.0	80.1	73.3	67.7	80.5	78.0	72.0	84.9
Garissa	72.3	68.7	76.5	70.6	63.7	78.9	71.6	64.5	79.2
Mandera	78.0	73.8	82.6	73.7	66.9	82.1	81.1	74.2	89.1
Wajir	78.1	75.7	80.9	75.4	71.5	80.5	81.7	77.0	87.4
Nyanza	3.4	3.4	3.3	1.5	1.4	1.5	2.1	1.7	2.4
Gucha (Kisii S.)	2.1	2.1	2.1	0.9	0.9	0.9	1.4	1.2	1.6
Homa Bay	2.3	2.3	2.3	1.3	1.1	1.4	2.2	1.4	2.7
Kisii Central	3.8	3.8	3.8	1.5	1.4	1.6	1.8	1.5	2.1
Kisumu	3.6	3.6	3.6	1.7	1.7	1.7	1.7	1.5	1.9
Kuria	7.6	7.2	7.9	3.3	3.0	3.7	6.3	4.3	8.0
Migori	2.9	2.9	2.8	1.4	1.1	1.7	2.2	1.7	2.6
Nyamira (Kisii N.)	2.3	2.4	2.2	0.9	1.0	0.8	1.5	1.4	1.6
Rachuonyo	1.9	2.0	1.9	1.0	0.9	1.0	1.5	1.0	1.8
Siaya	6.3	6.7	6.0	2.4	2.4	2.5	3.3	2.7	3.7
Suba	2.6	2.6	2.5	1.5	1.1	1.9	2.0	1.6	2.5
Bondo	3.4	3.5	3.3	1.3	1.3	1.4	2.0	1.7	2.2
Nyando	2.8	2.9	2.7	1.4	1.5	1.4	1.8	1.6	1.9
Rift Valley	18.1	17.7	18.4	13.9	13.7	14.2	13.4	11.6	15.1
Baringo	27.6	27.9	27.3	19.6	20.7	18.6	21.3	19.9	22.6
Bomet	4.5	4.9	4.0	1.5	1.8	1.3	1.4	1.6	1.2
Keiyo	3.7	4.1	3.4	1.3	1.5	1.2	1.7	2.0	1.4
Kajiado	33.4	30.8	36.0	25.8	22.7	28.9	24.2	18.0	29.8
Kericho	3.9	4.2	3.6	1.7	1.7	1.6	1.5	1.5	1.5
Koibatek	5.7	6.0	5.5	2.6	2.9	2.3	2.3	2.4	2.2
Laikipia	13.6	12.9	14.3	10.2	9.3	11.3	11.0	8.4	13.4
Marakwet	3.6	3.7	3.6	2.2	2.3	2.0	2.9	2.3	3.4
Nakuru	6.2	6.3	6.2	3.3	3.2	3.4	2.9	2.6	3.1
Nandi	5.6	6.0	5.1	2.3	2.7	1.9	2.1	2.2	2.0
Narok	34.1	29.8	38.7	26.6	22.8	30.7	32.3	23.7	39.9
Samburu	58.3	53.6	63.2	61.7	55.3	68.2	58.7	49.5	66.3
Trans Mara	21.7	21.9	21.5	11.8	10.0	13.7	14.7	9.8	19.0
Trans Nzoia	9.8	10.2	9.3	5.3	5.6	5.1	5.4	5.0	5.7
Turkana	78.9	77.7	80.1	81.2	80.0	82.5	79.2	76.2	81.9
Uasin Gishu	5.7	6.1	5.3	3.5	3.8	3.2	3.2	3.4	3.1
West Pokot	44.9	43.9	46.0	35.9	33.8	38.2	38.8	31.0	45.4
Buret	2.8	3.0	2.7	1.2	1.3	1.2	1.4	1.3	1.4
Western	9.1	9.8	8.4	3.7	4.0	3.5	4.1	3.7	4.4
Bungoma	5.9	6.4	5.3	2.3	2.6	2.0	2.1	2.1	2.2
Busia	11.0	11.2	10.7	4.6	4.0	5.3	6.2	4.3	7.7
Mt. Elgon	6.4	7.1	5.8	2.1	2.4	1.9	2.2	1.7	2.7
Kakamega	10.7	11.9	9.4	4.7	5.4	3.9	4.8	5.1	4.5
Lugari	7.1	8.0	6.1	3.7	4.4	3.1	3.2	3.7	2.8
Teso	16.1	15.6	16.7	6.0	4.5	7.5	7.1	4.8	9.1
Vihiga	6.6	7.5	5.7	2.4	2.7	2.0	2.6	2.8	2.5
Butere Mumias	13.2	13.9	12.6	5.9	8.1	5.6	6.4	5.6	7.0

Kenya 1999 Population and Housing Census

The data revealed that there existed very wide disparities between the advantaged and disadvantaged districts. While the percentage of those aged 6-13 years that never attended school was less than 2% in Nyeri, it was 78% in Wajir. It is apparent from the data that most of the disadvantaged districts are in the arid and semi-arid zones. The districts considered disadvantaged were those that had more than 25% of a particular age group without education. These included all the districts in North Eastern province and districts such as Marsabit, Turkana, Samburu, Kajiado, Narok, West Pokot, Moyale, Tana River and Kwale. Districts categorised as better-off were those with under 3% of the population 6-13 years that never attended school. These included Nyeri, Kiambu, Murang'a, Gucha, Homa Bay, Migori, Nyamira, Rachuonyo, Suba, Nyando and Buret districts.

Overall, males had a lower percentage of no education in the age group 6-13 years in most districts. No major disparities by sex existed in the districts categorised as better off. However, major disparities by sex were observed in the disadvantaged districts where differences between male and female percentages were as high as over 10 percentage points.

Comparison of the three age groups across districts shows some variations in trends between the age groups 6-13 and 18-24 years. The general trend is that the percentage of population with no schooling is high for the 6-13 years age group, decreases in the 14-17 years age group and increases again in the 18-24 years age group. In some districts, however, the population in the 18-24 years age group does not go up but remains more-or-less stagnant. This situation prevails in the better-off districts. The high percentage of population with no schooling for the age group 6-13 years could be attributed to the late start in education.

2.5 Literacy

The United Nations Education, Scientific and Cultural Organization (UNESCO) defines a literate person as one who can read and write, with understanding, a short simple statement on one's everyday life. The 1999 census did not have a question on literacy. However, recent results from the Kenya Multiple Indicator Cluster Survey (MICS 2000), indicate that the majority (73.7%) of the population aged over 15 years is literate. Also, the proportion of children reaching Std 5 increased from 67.8% in 1990 to 88.9% in 2000.

The country had set goals to lower its illiteracy rate to 20% by the year 2000. This implies that the education sector has not yet really contributed to its full potential to human development. A secondary goal for Kenya is to reduce geographical disparities in literacy rates.

Chapter 3

School Enrolment

3.1 Introduction

The 1999 census questions on education gathered information concerning the level of education reached and level of education completed. Those who reported to be attending school were asked to state the highest standard or form completed.

The class or form that a particular person was attending was computed by adding one to the reported highest class or form completed. For example, those who were attending school but had their highest class completed as Std 4 were assumed to be attending Std 5. Those who were attending school but had their highest level completed as none were assumed to be attending Std 1. Likewise, those who reported to have completed Std 8 and were still in school were assumed to be in Form 1. Those attending universities as undergraduates and postgraduates were allocated special codes.

Evidence in the census data showed that some errors occurred in the recorded highest level or class completed for those who were reported to be in school. Some respondents confused the education level reached with education level completed as reflected in the small proportions of the population attending school who reported to have completed Std 1 and Form 4. Some respondents may have understood formal schooling to include post-primary and post-secondary training institutions such as teacher training colleges, polytechnics and other colleges. The census figures on current enrolment for Std 1, Form 4 and beyond should be interpreted with caution. Assessment of the quality of the census figures was also done by comparing them with the 1999 school enrolment records.

3.2 Current Enrolment

Analysis of the 1999 census data on current enrolment was done mainly by comparing the census figures of persons attending school with school enrolment records available in the Ministry of Education, Science and Technology (MOEST) for the year 1999. Table 3.1 shows the comparison of the census figures of persons attending school with the MOEST school enrolment records by sex.

Table 3.1 shows that 7.3 million people were reported to be attending school in 1999 by broad education levels and sex. The census figures are higher than the figures from the Ministry enrolment records due to the fact that the census is a complete enumeration and total coverage whereas the Ministry does not include a large proportion of the private schools. Computation of the census figures provided in Table 3.1 reveals that 88.6% of those attending school in 1999 were at primary level while those attending secondary were 11.3%. When these figures are compared with the 1989 census, they depict an increase of 1.6 percentage points for primary (Std 1 to 8) and 0.6 percentage points for secondary (Form. 1 to 4).

Kenya 1999 Population and Housing Census

Table 3.1 Persons Attending School by Census, School Enrolment Records and Sex

Std / Form	1999 Census	Total School Enrolment Records	% Differ	1999 Census	Male School Enrolment Records	% Differ.	1999 Census	Female School Enrolment Records	% Differ.
Std 1 -8	6504479	6064300	7.3	3326600	3082200	7.9	3177879	2982100	6.6
Form 1-4	829641	713259	16.3	435427	375509	16.0	394214	337750	16.7
Form 5+	7515			4527			2988		
Total	7341 635	6777559	8.3	3766554	3457709	8.9	3575081	331 9850	7.7

The 1999 census data show that there were 6.5 million people who reported to be in primary school by the time of the census compared to 6.1 million people in the MOEST records, giving a difference of 7.3%. For secondary school enrolment, the census data depict 0.8 million people enrolled in secondary schools compared to 0.7 million people, given in the MOEST records.

32.1 National Level Analysis of Current Enrolment

Table 3.2 shows the distribution of the people reported to be attending school in 1999 at primary and secondary levels by sex. The corresponding school enrolment figures from MOEST school enrolment records are also given for comparison. This table provides a much clearer picture of the inconsistency between the census figures and school enrolment records. The figures show that the disparity may have been caused by over-reporting in Std 1, Std 8, Form 1 and Form 4 and also under-reporting in Std 2, Std 7 and Form 3 in the 1999 census. The pattern of the discrepancies still persisted when the data were analysed by sex.

Table 3.2 Persons Attending School by Census, School Enrolment Records, Class and Sex

Class	1999 Census	Total MoE Enrolment	% Differ.	1999 Census	Male MoE Enrolment	% Differ.	1999 Census	Female MoE Enrolment	% Differ.
Std 1	1125896	945650	19.1	586410	488882	19.9	539486	456768	18.1
Std 2	1011544	913912	10.7	525271	485392	8.2	486273	438520	13.5
Std 3	920134	815665	12.8	477852	418997	14.0	442282	396668	11.5
Std 4	853735	784790	8.8	437708	399413	9.6	416027	385377	8.0
Std 5	741700	696212	6.5	375030	348764	7.5	366670	347448	5.5
Std 6	682181	635021	7.4	338820	313236	8.2	343361	321785	6.7
Std 7	673820	631114	6.8	332508	309731	7.4	341312	321383	6.2
Std 8	495469	445244	11.3	253001	228639	10.7	242468	216605	11.9
Form 1	221874	173909	27.6	113990	89626	27.2	107884	84283	28.0
Form 2	212387	181924	16.7	110323	95030	16.1	102064	86894	17.5
Form 3	182783	161246	13.4	96415	85530	12.7	86368	75716	14.1
Form 4	212597	144745	46.9	114699	77947	47.1	97898	66798	46.6
Form 5+	7515			4527			2988		

Large disparities of more than 10% were noted in Std 1 (24.3%), Form 1 (25.3%), Form 2 (11.9%) and Form 4 (31.0%). This pattern of disparities was also recorded in 1989 as a result of under-reporting of 9.0% in Std 1 and over-reporting of 18.7% and 43.1% in Std 8 and Form 1, respectively. The large discrepancy in Std 1 can be attributed to the fact that people who reported attending class one shared the same code with those who reported being in pre-primary. Persons who completed Std 7 in the 7-4-2-3 system of education and were attending some vocational training institute or those who stated the level reached instead of the level completed could possibly be the reason for over-reporting of Std 8 enrolment.

There was no significant pattern that emerged when analysis of the discrepancy between the census and school enrolment records was done by sex for Std 8, Form I and Form 2, Table 3.2 also reveals that there was moderate over-reporting in Std 7 of 2.0% for males and a slight underreporting for females of 0.5%. There was notable discrepancy in terms of gender in Form 3, which indicated an under-reporting of 6.1% for females compared to 0.1% for males.

3.2.2 Gross Enrolment Rate

The gross enrolment rate (GER) is a measure of the proportion of children enrolled in a schooling level (irrespective of the age group for that level) expressed as a percentage of the total number of children (population) in the relevant age group for that level

GER =
$$\frac{\text{Total enrolment regardless of age in a particular level}}{\text{Population of age group officially corresponding to the level}} \times 100$$

In general, there was decline in GER for all levels in Kenya. A GER of 101% was reported for level 1 (primary school level) and 29% and 1.2% for levels 2 and 3, respectively. This indicates a decline from the previous census (1989) which reported a GER of 106%, 33% and 2.7% for the three levels. This is a clear indication that there are over-age learners in primary level of education, a situation confirmed by the scholastic retardation rates discussed elsewhere in this report. These results slightly differ from MOEST results due to the fact that there was better coverage in the 1999 census.

Table 3.3 presents the GER for age groups 6-13 years, 14-17 years and 18-24 years by district and sex. For all the age groups there were no significant differences in the overall enrolment rates for both males and females. However major disparities were witnessed in North Eastern province for age 14-17 years where the males reported almost double the GER of females.

Table 3.3 Gross Enrolment Rates for Age Groups 6-13,14-17, and 18-24 by District and Sex

Province/ District	6-13 years			14-17 years			18-24 years		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Kenya	101.4	103	99.8	29.3	30.7	27.8	1.2	1.6	0.8
Nairobi	102.5	104.9	100.2	59.9	72.0	51.1	4.3	5.4	3.3
Central	117.5	117.7	117.3	41.1	40.1	42.1	1.2	1.7	0.9
Kiambu	109.4	110.2	108.5	51.5	50.9	52.0	1.6	2.1	1.2
Kirinyaga	124.1	123.5	124.8	34.4	32.9	36.0	0.7	0.8	0.5
Murang'a	125.6	125.3	126.0	37.8	35.6	40.1	1.0	1.4	0.7
Nyandarua	110.8	110.8	110.9	29.9	29.0	30.9	0.9	1.2	0.5
Nyeri	122.8	122.9	122.7	46.0	44.2	47.9	1.1	1.3	0.9
Thika	114.7	115.7	113.7	44.5	45.2	43.8	1.9	2.7	1.1
Maragua	121.1	120.6	121.6	35.4	35.7	35.0	0.8	1.1	0.4
Coast	81.2	87.6	74.7	21.7	24.2	19.2	0.5	0.7	0.4
Kilifi	76.9	86.2	67.5	15.8	18.0	13.4	0.3	0.4	0.3
Kwale	70.7	78.4	62.7	13.2	15.3	11.1	0.2	0.3	0.2
Lamu	90.5	91.8	89.1	14.8	16.0	13.6	0.2	0.3	0.2
Mombasa	95.3	98.6	92.1	40.5	47.5	34.5	0.9	1.2	0.7
Taita Taveta	110.0	111.5	108.5	30.3	30.1	30.5	0.3	0.4	0.2
Tana River	49.0	55.3	42.2	10.7	12.4	8.9	0.1	0.1	-
Malindi	82.2	91.7	72.4	13.1	16.4	9.7	0.3	0.4	0.2
Eastern	105.6	104.9	106.4	26.0	25.9	26.0	0.8	1.1	0.6
Embu	119.1	118.7	119.6	40.1	36.4	43.9	1.0	1.2	0.8
Isiolo	71.3	74.5	67.9	18.5	19.9	16.9	0.3	0.4	0.2
Kitui	105.3	104.8	105.8	20.4	20.9	19.9	0.6	0.9	0.4
Makueni	111.5	110.3	112.7	28.2	28.0	28.4	0.8	1.2	0.6
Machakos	117.6	117.3	118.0	31.7	32.5	30.7	1.4	1.7	1.1
Marsabit	41.0	47.0	34.8	11.5	14.6	8.1	0.4	0.7	0.1
Mbeere	112.2	110.5	114.1	26.5	26.7	26.4	0.8	1.1	0.5

Kenya 1999 Population and Housing Census

Table 3.3 cont.

Province/ District	6-13 years			14-17 years			18-24 years		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Meru Central	117.6	116.7	118.4	33.4	30.0	36.7	0.7	0.9	0.5
Moyale	63.7	75.1	51.7	12.1	17.1	7.1	0.3	0.6	0.1
Mwingi	98.1	96.3	99.9	17.7	19.2	16.4	0.5	0.7	0.3
Meru North	89.4	86.8	92.1	13.6	13.8	13.5	0.3	0.4	0.2
Tharaka	104.0	100.9	107.2	14.8	16.4	13.2	0.5	0.8	0.3
Nithi (Meru S.)	113.7	111.9	115.6	35.4	33.2	37.6	0.8	1.1	0.6
N / Eastern	28.6	34.7	21.4	10.0	12.6	6.6	0.2	0.2	0.1
Garissa	31.3	37.7	23.8	11.9	14.9	8.3	0.3	0.4	0.1
Mandera	28.7	36.5	19.9	7.7	10.5	4.2	0.1	0.1	-
Wajir	26.4	31.0	20.8	10.0	12.4	7.0	0.1	0.2	0.1
Nyanza	117.8	121.0	114.7	29.3	32.4	26.1	0.8	1.2	0.4
Gucha (Kisii S.)	125.0	126.3	123.6	43.8	47.5	40.0	0.7	1.1	0.3
Homa Bay	118.8	124.4	113.0	20.8	24.3	17.2	0.7	1.1	0.4
Kisii Central	119.5	121.2	117.8	41.7	44.5	38.9	0.7	1.1	0.4
Kisumu	111.8	114.8	108.9	31.7	35.1	28.4	1.2	1.7	0.8
Kuria	111.2	115.7	106.7	16.0	20.0	11.6	0.3	0.6	0.1
Migori	119.5	126.3	112.9	15.3	18.8	11.9	0.6	1.0	0.3
Nyamira (Kisii N.)	120.2	121.2	119.2	44.2	46.5	41.9	0.8	1.3	0.5
Rachuonyo	122.5	126.5	118.3	24.5	29.1	19.5	0.7	1.3	0.3
Siaya	110.0	112.0	107.9	18.8	20.4	17.2	0.7	1.2	0.3
Suba	121.8	127.8	115.7	18.5	24.5	12.4	0.5	0.8	0.1
Bondo	113.6	116.5	110.7	21.2	24.6	17.5	0.7	1.1	0.4
Nyando	117.7	120.5	114.7	23.7	27.7	19.5	0.9	1.3	0.4
Rift Valley	93.5	95.1	91.9	25.1	26.7	23.5	0.8	1.1	0.5
Baringo	91.9	91.8	92.0	27.7	29.1	26.3	0.7	1.0	0.4
Bomet	112.3	111.9	112.7	22.3	26.7	17.9	0.7	1.2	0.3
Keiyo	119.3	120.2	118.5	36.5	35.3	37.5	0.8	0.9	0.7
Kajiado	71.3	75.9	66.5	26.0	27.4	24.7	1.3	1.6	1.0
Kericho	115.5	117.3	113.6	27.8	31.1	24.4	0.7	1.1	0.4
Koibatek	115.4	114.6	116.2	33.1	35.0	31.2	0.7	0.9	0.4
Laikipia	99.2	100.2	98.2	29.2	28.7	29.8	0.7	1.0	0.5
Marakwet	117.9	118.7	117.1	23.1	26.8	19.3	0.5	0.8	0.2
Nakuru	101.5	102.3	100.8	33.5	34.6	32.3	0.9	1.2	0.6
Nandi	112.8	113.5	112.2	25.1	26.4	23.8	1.3	1.6	1.0
Narok	68.5	74.3	62.2	14.6	17.2	11.9	0.2	0.3	0.1
Samburu	42.2	49.7	34.4	10.4	12.9	7.8	0.3	0.5	0.1
Trans Mara	82.2	84.3	80.1	13.6	17.7	9.5	0.3	0.5	0.1
Trans Nzoia	103.2	104.0	102.4	22.9	24.3	21.4	0.7	1.0	0.5
Turkana	20.2	22.9	17.5	4.6	5.4	3.8	0.2	0.3	0.1
Uasin Gishu	107.6	108.2	107.0	35.8	37.0	34.5	1.2	1.6	0.8
West Pokot	62.2	66.4	58.0	10.0	11.6	8.4	0.3	0.5	0.1
Buret	114.6	116.1	113.1	28.2	31.1	25.2	0.8	1.1	0.5
Western	107.6	108.7	106.5	26.3	27.4	25.1	0.6	1.0	0.3
Bungoma	114.6	116.1	113.1	30.2	32.7	27.7	0.8	1.2	0.4
Busia	102.1	105.0	99.1	19.4	22.2	16.6	0.5	0.9	0.2
Mt. Elgon	113.8	116.0	111.5	24.0	28.0	19.9	0.5	0.6	0.3
Kakamega	105.7	106.2	105.2	28.0	27.7	28.2	0.7	1.0	0.4
Lugari	106.2	105.5	106.9	26.5	24.7	28.3	0.5	0.7	0.3
Teso	97.0	102.3	91.8	21.7	24.5	18.9	0.3	0.5	0.2
Vihiga	113.0	111.9	114.0	29.0	27.8	30.1	0.6	0.9	0.4
Butere Mumias	98.3	99.2	97.4	21.1	23.1	19.0	0.6	1.0	0.3

Comparison between the sexes indicates that the males reported higher GER for all age groups except in Central province (age 14-17 years) and Eastern province (ages 6-13 years and 14-17 years) where the GERs for females are higher. The GER for age 6-13 years is highest for males in Suba (127.8%), Rachunyo (126.5%) and Migori and Gucha both recording 126.3%. Females in Muranga recorded the highest GER at 126.0% for age 6-13 years.

At age 18-24 years there are no major disparities between the sexes. Nairobi recorded the highest GER for both males and females: 5.4%, and 3.3%, respectively. All other districts recorded less than 1% for female GER except Kiambu, Thika, Machakos, Kajiado and Nandi. Most districts, however, recorded GER greater than 1% for males at 18-24 years. All districts in North Eastern and Coast except Mombasa recorded GER of less than 1%.

The marked difference between the age groups indicates high dropout rates with low proportions proceeding to higher levels of education. This urges for policy measures to be put in place to address the high dropout rates.

3.2.3 Net Enrolment Rate

The net enrolment rate (NER) is a measure of the proportion of children enrolled in a schooling level who belongs to the relevant age group, expressed as a percentage of the total number of children in the same age group

NER =
$$\frac{\text{Total enrolment in a particular level by a given age group}}{\text{Population of age group officially corresponding to the level}} \times 100$$

Table 3.4 indicates that NER for age 6-13 years was 70.1% for the total and 69.6% and 70.5% for males and females respectively, Consequently there was a drastic drop for age 18-24 years to 23.4% for males and 17.6% for females. Well-off districts in Central, Eastern, Nyanza, Nairobi and Western recorded impressive NERs of over 70% on average for both sexes for the age 6-13 years. On the other hand, Tana River, Marsabit, Samburu and Turkana districts as well as North Eastern province recorded NERs below 35%. Other districts namely Kilifi, Kwale, Isiolo, Moyale, Kajiado, Narok and West Pokot, recorded NERs below 50% for 6-13 years owing to their nomadic lifestyle and insecurity. However, female enrollment is higher in Central and Eastern provinces for age groups 6-13 years and 14-17 years and only higher in Western province for age group 6-13 years while in Nyanza province no difference exists in enrollment for males and females in the 6-13 years age group.

Table 3.4 Net Enrolment Rates for Age Groups 6-13, 14-17 and 18-24 by District and Sex

Province / District	6-13 years			14-17 years			18-24 years		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Kenya	70.1	69.6	70.5	13.2	12.3	14.1	20.3	23.4	17.6
Nairobi	79.7	80.8	78.6	30.9	34.2	28.6	17.1	17.7	16.4
Central	84.8	84.2	85.5	20.2	18.4	22.0	21.9	22.8	21.1
Kiambu	83.0	82.8	83.2	28.5	26.4	30.4	19.2	19.7	18.7
Kirinyaga	84.1	83.0	85.3	14.8	13.2	16.6	21.4	21.4	21.3
Murang'a	88.7	88.0	89.5	17.6	15.9	19.4	26.9	28.0	25.9
Nyandarua	82.3	81.3	83.3	16.0	14.1	18.0	18.2	19.4	17.1
Nyeri	86.9	86.2	87.6	21.7	19.8	23.6	25.7	26.2	25.3
Thika	84.1	83.9	84.3	22.0	20.6	23.2	20.3	21.6	19.0
Maragua	86.2	85.5	86.9	15.4	14.3	16.6	25.5	28.0	23.3
Coast	55.8	58.3	53.3	9.7	9.6	9.7	14.2	16.8	11.8
Kilifi	50.0	53.9	46.0	6.2	6.3	6.2	16.2	22.0	11.9
Kwale	47.8	51.2	44.3	5.4	5.5	5.3	12.7	16.9	9.5
Lamu	65.1	65.0	62.2	7.0	6.4	7.6	10.6	12.2	9.1
Mombasa	70.0	70.9	69.0	19.1	20.0	18.3	13.4	13.7	13.1
Taita Taveta	78.5	78.0	79.0	14.5	13.0	16.0	18.7	19.8	17.6
Tana River	33.6	36.7	30.3	5.0	5.0	5.1	9.8	12.7	7.3
Malindi	53.6	57.0	50.2	5.0	5.6	4.4	15.2	20.5	11.0
Eastern	72.1	71.0	73.3	11.1	10.0	12.3	21.8	24.2	19.6
Embu	83.5	82.4	84.6	17.8	15.4	20.2	23.1	22.6	23.5
Isiolo	50.7	52.0	49.3	9.4	9.3	9.5	13.8	15.6	12.1
Kitui	70.8	69.3	72.4	8.4	7.5	9.4	23.1	28.4	19.0
Makueni	76.8	75.3	78.4	12.6	11.3	14.0	25.4	28.4	22.7
Machakos	79.3	78.1	80.5	13.7	12.7	14.7	25.9	28.9	23.2

Kenya 1999 Population and Housing Census

Table 3.4 cont.

Province/ District	6-13 years			14-17 years			18-24 years		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Marsabit	28.0	31.0	24.9	4.5	5.1	3.8	10.5	13.9	7.1
Mbeere	76.9	75.7	78.2	10.0	9.2	10.9	24.2	26.6	22.1
Meru Central	81.2	79.8	82.6	14.7	11.8	17.7	19.1	19.1	19.1
Moyale	45.5	52.1	38.6	5.4	6.8	3.9	12.8	17.9	7.9
Mwingi	64.9	63.1	66.8	6.5	5.9	7.0	23.6	30.9	18.4
Meru North	62.1	60.6	63.5	5.3	4.6	5.9	13.9	14.9	13.2
Tharaka	62.1	60.4	63.9	3.8	3.9	3.6	24.5	28.2	21.6
Nithi (Meru S.)	80.8	78.9	82.7	16.1	13.4	18.9	23.0	24.6	21.6
N / Eastern	19.4	22.5	15.7	4.3	5.0	3.3	8.4	11.3	5.1
Garissa	21.1	24.5	17.1	5.0	6.0	3.8	9.9	12.4	7.2
Mandera	19.2	23.2	14.6	3.3	4.1	2.4	7.6	11.2	3.5
Wajir	18.2	20.5	15.4	4.4	4.9	3.7	7.6	10.4	4.3
Nyanza	79.1	78.7	79.5	12.8	12.5	13.1	25.2	31.6	19.9
Gucha (Kisii S.)	79.6	79.1	80.2	16.3	15.9	16.6	37.2	45.7	30.3
Homa Bay	80.2	79.8	80.6	9.8	9.8	9.8	21.6	29.9	15.4
Kisii Central	79.6	79.2	80.0	18.7	17.7	19.6	30.3	37.7	24.5
Kisumu	79.7	79.7	79.7	15.8	15.7	15.8	18.7	21.7	16.1
Kuria	71.0	70.9	71.2	5.0	5.3	4.7	23.9	30.4	18.4
Migori	78.3	78.1	78.4	6.4	6.5	6.3	20.6	27.3	15.0
Nyamira (Kisii N.)	80.6	80.0	81.3	20.0	18.7	21.3	31.8	38.6	26.4
Rachuonyo	82.4	82.0	82.8	10.3	10.7	9.9	25.8	34.6	18.6
Siaya	77.1	76.3	77.9	9.1	9.0	9.3	18.4	24.0	14.2
Suba	79.9	79.4	80.5	7.4	8.1	6.6	21.5	28.9	14.8
Bondo	77.2	76.8	77.6	8.9	9.3	8.5	20.6	26.0	16.2
Nyando	79.0	78.7	79.4	10.6	10.9	10.2	22.2	27.3	17.6
Rift Valley	64.4	63.9	64.9	10.7	9.8	11.7	19.4	22.6	16.4
Baringo	58.6	57.8	59.4	10.9	9.8	12.1	28.2	33.2	23.6
Bomet	76.4	74.8	78.0	7.5	7.3	7.7	24.9	32.0	19.0
Keiyo	78.9	78.0	79.7	14.2	10.5	17.7	29.2	32.4	26.0
Kajiado	50.8	52.3	49.3	13.1	12.1	14.1	14.8	17.6	12.3
Kericho	78.1	77.1	79.1	11.2	10.7	11.7	22.9	26.7	19.2
Koibatek	74.9	73.5	76.3	11.0	9.5	12.4	29.9	33.4	26.6
Laikipia	71.4	71.7	71.8	15.0	13.4	16.6	17.7	18.7	16.7
Marakwet	77.7	77.1	78.3	7.6	8.1	7.0	26.2	31.9	21.2
Nakuru	74.9	74.2	75.6	17.7	16.6	18.8	16.0	17.4	14.8
Nandi	74.2	72.6	75.8	8.4	7.0	9.9	25.5	29.5	21.8
Narok	47.9	50.6	45.1	5.6	5.3	5.9	13.8	18.3	9.8
Samburu	28.9	32.6	25.0	3.7	3.9	3.4	12.5	17.2	8.5
Trans Mara	55.2	54.2	56.1	4.0	4.1	4.0	18.0	24.4	12.2
Trans Nzoia	71.5	70.2	72.8	10.3	9.4	11.2	18.9	22.2	15.9
Turkana	13.5	14.6	12.3	1.7	1.7	1.7	5.6	7.0	4.2
Uasin Gishu	74.4	73.3	75.6	14.5	12.8	16.2	22.4	24.8	20.2
West Pokot	38.8	39.4	38.2	3.0	2.8	3.2	16.2	21.5	11.8
Buret	78.9	77.7	80.1	11.0	9.9	12.0	22.4	26.1	18.8
Western	72.8	71.3	74.2	10.9	9.6	12.1	23.3	29.0	18.6
Bungoma	75.6	74.3	76.9	10.8	9.6	12.1	28.5	35.5	22.3
Busia	70.8	70.2	71.4	8.3	8.3	8.3	18.3	24.1	13.8
Mt. Elgon	73.2	71.2	75.2	7.0	6.4	7.7	28.6	36.4	21.1
Kakamega	71.0	68.8	73.1	12.0	10.0	14.0	22.8	27.8	18.6
Lugari	73.1	70.7	75.5	12.0	9.6	14.5	21.3	23.9	18.9
Teso	63.6	64.3	63.0	8.4	7.7	9.2	21.5	28.5	15.5
Vihiga	78.5	76.9	80.1	14.0	12.1	15.5	23.7	27.6	20.6
Butere Mumias	68.2	67.0	69.5	9.2	8.9	9.5	17.4	22.2	13.8

At 14-17 years, NER is highest (34.2%) for males in Nairobi, and also the females (28.6%). This decreased to 5.0% for males and 3.3% for females in North Eastern, Mandera and Wajir reported the worst NER at 18-24 years of less than 5.0% for females, however, the NER for males decreased from 22.5% at 6-13 years to 5.0% at 14-17 years while that of females decreased from 15.7% to 3.3%.

The decrease in NER in the North Eastern province for the age groups 6-13 years (level 1 NER) to 14-17 years (level 2 NER) explains the proportion of the population going to secondary school compared to the population in the proportion in this particular age group i.e 14-17 years to be relatively low.

3.2.4 Provincial Level Analysis of Current Enrolment

Analysis at the provincial level was mainly done by comparing the census figures of persons attending school with school enrolment records obtained from the Ministry of Education. Table 3.5 clearly shows that there were huge discrepancies in primary school figures in all the provinces. The highest discrepancy of 44.9% was recorded in Nairobi which could be attributed to a number of school going population who do not reside in Nairobi but were enumerated in the province. This is expected due to the full coverage of the population in the census compared to Ministry enrolment figures, which excludes private and community schools.

Table 3.5 Persons Attending Primary School by Province

Province / District	1999 Census	School Enrolment Records	% Difference
Kenya	6,504,479	6,064,300	7.3
Nairobi	296,257	204,494	44.9
Central	920,639	899,659	2.3
Coast	423,367	400,202	5.8
Eastern	1,155,681	1,133,956	1.9
N Eastern	64,999	48,134	35.0
Nyanza	1,233,325	1,097,908	12.3
R. Valley	1,527,631	1,443,255	5.8
Western	882,580	836,692	5.5

source. 1999 Census and MoES&T enrolment records

North Eastern and Nyanza provinces recorded high discrepancies of 35.0% and 12.3%, respectively. This depicts a sharp contrast with 1989 census results which had recorded a discrepancy of 7.4% in favour of the Ministry of Education figures being higher for North Eastern province and 1.9% discrepancy for Nyanza province (CBS 1989 census Table 3.5).

Province / District	1999 Census	School Enrolment Records	% Difference
Nairobi	296,257	150,847	96.4
Central	920,639	820,768	12.2
Kiambu	154,833	108,703	42.4
Kirinyaga	110,233	103,713	6.3
Muranga	101,531	105,818	(4.1)
Nyeri	127,511	155,793	(18.2)
Thika	165,533	114,939	44.0
Nyandarua	149,733	125,659	19.2
Maragua	111,265	106,143	4.8
Coast	423,367	378,094	12.0
Taita Taveta	99,867	62,005	61.1
Kilifi	82,271	92,465	(11.0)
Tana River	14,547	19,625	(25.9)
Lamu	94,787	16,000	492.4
Kwale	59,746	83,393	(28.4)
Mombasa	21,209	58,471	(63.7)
Malindi	50,940	46,135	10.4
Eastern	1,155,681	1,127,837	2.5
Machakos	67,101	241,472	(72.2)
Kitui	16,778	132,657	(87.4)
Embu	135,996	92,459	47.1
Meru Central	219,597	101,470	116.4
Marsabit	250,806	8,849	2,734.3
Isiolo	11,874	13,639	(12.9)
Makueni	46,807	214,954	(78.2)

Kenya 1999 Population and Housing Census

Table 3.6 Primary School Gross Enrolment by Province and District, 1999

Province / District	1999 Census	School Enrolment Records	% Difference
Meru South	115,308	73,328	57.2
Mwingi	8,961	76,356	(88.3)
Meru North	76,692	116,492	(34.2)
Moyale	129,792	8,902	1,358.0
Mbeere	24,438	47,259	(48.3)
Tharaka	51,531	-	-
North Eastern	64,999	47,970	35.5
Wajir	21,427	16,379	30.8
Mandera	19,982	18,141	10.1
Garissa	23,590	13,450	75.4
Nyanza	1,233,325	1,022,912	20.6
Kisumu	143,739	177,457	(19.0)
Kisii Central	80,943	132,847	(39.1)
Kisii South	143,139	73,611	94.5
Homa Bay	121,827	70,722	72.3
Siaya	41,365	148,048	(72.1)
Kisii North	141,061	130,223	8.3
Migori	150,316	110,404	36.2
Kuria	93,351	32,286	189.1
Suba	128,663	36,749	250.1
Rachuonyo	43,889	77,869	(43.6)
Bondo	63,516	32,696	94.3
Nyando	81,516	-	-
Rift Valley	1,527,631	1,408,894	8.4
Baringo	62,566	62,887	(0.5)
Bomet	111,068	122,809	(9.6)
Buret	40,090	61,556	(34.9)
Kajiado	63,244	52,999	19.3
Keiyo	125,253	43,208	189.9
Kericho	36,779	113,818	(67.7)
Koibatek	72,339	35,320	104.8
Laikipia	40,573	68,735	(41.0)
Marakwet	263,137	38,245	588.0
Nakuru	153,472	243,981	(37.1)
Nandi	62,309	143,590	(56.6)
Narok	15,298	51,919	(70.5)
Samburu	36,976	17,209	114.9
Trans Mara	143,580	31,805	351.4
Trans Nzoia	20,652	124,812	(83.5)
Turkana	146,854	31,009	373.6
Uasin Gishu	47,621	141,057	(66.2)
West Pokot	85,820	43,559	97.0
Western	882,580	834,301	5.8
Busia	244,010	85,821	184.3
Bungoma	92,747	230,463	(59.8)
Kakamega	38,879	84,554	(54.0)
Vihiga	152,884	145,059	5.4
Mt. Elgon	57,329	35,777	60.2
Teso	42,307	39,270	7.7
Lugari / Malava	141,378	118,961	18.8
Butere / Mumias	113,046	94,396	19.8
Kenya	6,504,479	5,791,623	12.3

3.3 Scholastic Retardation Rates

3.3.1 National Analysis of Scholastic Retardation Rates

Scholastic retardation refers to persons attending a certain education level when they are already over-age in comparison with ages recommended for the particular level by the Ministry of Education in formal schooling. Scholastic retardation is usually caused by late start of schooling and repetition.

A crude measure of scholastic retardation was computed basing on information from the reported ages of the people attending primary school level. This is due to better quality of enrolment figures at primary level compared to other levels. The formula used for the computation of scholastic retardation is:

Scholastic Retardation Rate = $\frac{\text{Persons attending primary school aged 14 years+}}{\text{All persons attending primary school}} \times 100$

The lower limit of age 14 years is based on the "actual" schooling ages for primary level, i.e, Standards 1 to 8, which is 6 to 13 years. Any person attending primary school level aged 14 years and above must have either started school late or must have repeated a class. The crude rate therefore accommodates both late starters and repeaters.

Table 3.7 indicates that 30% of the persons attending primary school level in 1999 were supposed to have completed if they had gone to school at the correct age and never repeated a class. The crude retardation rate in 1999 census depicts a slight increase in retardation rate from the 1989 rate of 29%. The results also show that scholastic retardation is higher in rural areas than in urban areas. The males had a higher retardation rate in school compared to the females in both the urban and rural areas.

Table 3.7 Scholastic Retardation Rates by Sex and Rural-Urban Residence

Region	Percentage of Primary School Enrdments Aged 14 yrs*		Total
	Male	Female	
Kenya	31.0	27.9	29.5
Rural	32.2	28.9	30.6
Urban	23.8	21.4	22.6

3.3.2 Provincial Level Analysis of Scholastic Retardation Rates

Table 3.8 presents provincial level analysis of scholastic retardation. The results indicate that scholastic retardation is relatively low in Nairobi (19%) and highest for North Eastern province (30%), Nyanza province (29%) and Western province (29%). These figures indicate an increase in retardation rates in most of the provinces in comparison with the 1989 census. Disparities by sex showed that retardation rates were higher for the females than males in all the provinces.

Table 3.8 Scholastic Retardation Rates by Sex, Province and Rural-Urban Residence, 1999

Province	Percentage of Primary School Enrdments Aged 14 yrs*								
	Total	Total Male	Female	Total	Rural Male	Female	Total	Urban Male	Female
Nairobi	19.9	20.6	19.3				19.9	20.6	19.3
Central	26.2	26.9	25.5	26.8	27.4	26.1	21.1	21.9	20.4
Coast	30.0	32.3	27.3	32.2	34.7	29.1	25.1	26.7	23.5
Eastern	30.7	31.3	30.0	31.0	31.6	30.3	24.0	25.4	22.5
N / Eastern	30.6	33.7	24.8	30.0	33.0	23.8	31.8	35.1	26.4
Nyanza	31.2	33.4	28.9	31.8	34.0	29.4	24.7	25.8	23.6
R / Valley	29.8	31.5	28.1	30.8	32.5	29.0	22.1	23.2	20.9
Western	31.1	33.2	29.0	31.6	33.7	29.4	25.6	26.7	24.7
Kenya	29.5	31.0	27.9	30.6	32.2	28.9	22.6	23.8	21.4

3.3.3 District Level Analysis of Scholastic Retardation Rates

As indicated in Table 3.9, wide disparities exist between the districts. High scholastic retardation rates exist in Tharaka (39.5%) and West Pokot (36.7%) districts while Kiambu had the lowest rate (22.8%). Nairobi province deteriorated from a retardation rate of 17% in 1989 to 20% in 1999. Analysis by sex reveals that males had higher retardation rates as compared to females. This can be attributed to the child labour phenomenon and poverty where males opt to look for employment after or before reaching Std 8 or during times of stress. West Pokot and Tharaka districts registered the highest male retardation rates of 39.8% and 39.4%, respectively. With the exception of Nairobi, Kiambu district had the lowest scholastic retardation rates for both males (23.6%) and females (22%).

The chances of getting a female aged 14 years and above in primary school in Tharaka district are higher than any other district. This could be explained by the high female retardation rates (39.5%) in the district coupled with the Meru traditions and beliefs towards females. The same trend is also observed in Meru North (Nyambene) district.

Disparities in retardation by sex and area also exist. The rural areas reported higher scholastic retardation rates compared to the urban areas. However, in both rural and urban areas, males had higher retardation rates. The above scenario does not hold in Nyeri, Maragua, Mbeere and Lugari districts where females displayed higher scholastic retardation rates in the urban areas. Districts with low retardation rates were generally considered better-off while those with high percentage rates were worse-off when the quartile approach is applied.

Table 3.9 Scholastic Retardation Rates by Sex, District and Rural-Urban Residence

Province	Percentage of Primary School Enrdments Aged 14 yrs*								
	Total	Total Male	Female	Total	Rural Male	Female	Total	Urban Male	Female
Kenya	29.5	31.0	27.9	30.6	32.2	28.9	22.6	23.8	21.4
Nairobi	19.9	20.6	19.3	-	-	-	19.9	20.6	19.3
Central	26.2	26.9	25.5	26.8	27.4	26.1	21.1	21.9	20.4
Kiambu	22.8	23.6	22.0	23.4	24.2	22.7	19.8	20.9	18.7
Kirinyaga	30.3	30.9	29.7	30.7	31.3	30.1	21.6	21.3	21.9
Murang'a	28.0	28.4	27.6	28.1	28.6	27.8	19.9	22.1	18.0
Nyandarua	24.1	25.1	23.1	24.3	25.2	23.3	23.3	24.8	21.7
Nyeri	27.8	28.5	27.2	28.3	29.0	27.6	21.9	22.0	21.9
Thika	24.9	25.7	24.0	25.8	26.6	24.9	21.0	21.7	20.4
Maragua	27.2	27.5	26.8	27.3	27.7	27.0	19.8	18.3	21.0
Coast	30.0	32.3	27.3	32.2	34.7	29.1	25.1	26.7	23.5
Kilifi	34.0	36.5	30.8	34.8	37.3	31.6	27.1	29.1	24.9
Kwale	31.4	33.8	28.4	31.9	34.3	28.8	27.6	29.6	25.5
Lamu	26.9	28.0	25.7	27.6	28.6	26.5	23.5	24.8	22.2

Table 3.9 cont.

Province	Percentage of Primary School Enrdments Aged 14 yrs*								
	Total	Total Male	Female	Total	Rural Male	Female	Total	Urban Male	Female
Mombasa	25.0	26.5	23.5	27.9	30.7	24.8	24.8	26.2	23.4
Taita Taveta	27.5	29.0	25.9	28.3	29.9	26.7	21.9	22.8	21.0
Tana River	29.9	32.3	26.7	30.2	32.5	26.9	28.1	30.6	25.1
Malindi	33.3	36.5	29.1	34.7	38.0	30.3	25.7	27.9	23.3
Eastern	30.7	31.3	30.0	31.0	31.6	30.3	24.0	25.4	22.5
Embu	28.5	29.1	27.9	29.1	29.7	28.5	20.4	21.3	19.6
Isiolo	27.5	28.9	25.8	29.0	30.6	27.0	25.3	26.3	24.1
Kitui	31.9	33.1	30.7	32.1	33.3	30.9	20.1	20.9	19.5
Makueni	30.3	30.9	29.6	30.4	31.0	29.7	25.3	27.7	22.9
Machakos	31.6	32.5	30.8	31.9	32.7	31.1	25.4	27.5	23.4
Marsabit	30.6	32.9	27.3	31.0	33.7	27.0	28.9	29.4	28.3
Mbeere	30.3	30.3	30.2	30.3	30.4	30.3	23.9	22.9	24.9
Meru Central	29.7	30.4	29.0	30.3	31.0	29.6	22.2	23.1	21.4
Moyale	27.1	29.2	24.0	26.7	28.7	23.6	28.8	31.1	25.5
Mwingi	33.0	33.7	32.3	33.3	34.0	32.6	19.0	20.4	17.7
Meru North	29.3	28.9	29.6	29.3	28.9	29.7	26.3	27.6	25.1
Tharaka	39.5	39.4	39.5	39.5	39.4	39.5	-	-	-
Nithi (Meru S.)	27.6	28.1	27.0	27.8	28.3	27.2	18.2	18.5	17.8
North Eastern	30.6	33.7	24.8	30.0	33.0	23.8	31.8	35.1	26.4
Garissa	31.1	33.8	26.2	30.8	32.8	26.9	31.5	35.0	25.4
Mandera	31.8	35.2	24.8	31.8	35.3	23.1	31.8	34.9	26.3
Wajir	29.2	32.3	23.6	28.5	31.7	22.4	32.7	35.4	28.7
Nyanza	31.2	33.4	28.9	31.8	34.0	29.4	24.7	25.8	23.6
Gucha (Kisii S.)	34.8	35.9	33.6	34.9	36.0	33.7	28.1	29.6	26.8
Homa Bay	30.5	34.1	26.5	30.9	34.8	26.5	27.2	28.3	26.2
Kisii Central	32.0	33.3	30.7	32.4	33.7	31.1	23.6	24.3	22.8
Kisumu	26.9	28.8	25.0	29.4	31.6	26.9	22.1	22.9	21.3
Kuria	34.6	37.3	31.7	34.8	37.6	31.8	32.3	33.1	31.5
Migori	32.4	36.3	28.1	32.9	36.8	28.4	28.1	30.5	25.9
Nyamira (Kisii N.)	31.2	32.3	30.0	31.5	32.6	30.4	24.6	26.3	22.9
Rachuonyo	30.7	33.3	27.9	30.9	33.5	28.0	23.0	22.8	23.2
Siaya	28.6	30.6	26.3	28.7	30.8	26.4	24.7	25.7	23.8
Suba	32.5	36.1	28.6	32.8	36.3	28.8	26.2	29.5	23.5
Bondo	30.7	32.8	28.4	31.1	33.2	28.7	23.3	23.6	23.1
Nyando	31.2	33.2	29.1	31.7	33.7	29.4	27.0	28.1	25.9
Rift Valley	29.8	31.5	28.1	30.8	32.5	29.0	22.1	23.2	20.9
Baringo	34.9	35.7	34.2	35.3	35.9	34.6	28.9	30.4	27.5
Bomet	30.7	32.0	29.3	30.7	32.0	9.4	21.7	23.7	19.8
Keiyo	33.0	34.3	31.7	33.2	34.5	31.9	24.1	24.0	24.3
Kajiado	27.0	29.4	24.1	28.6	31.2	25.4	20.7	21.8	19.6
Kericho	30.8	32.7	28.8	31.1	33	29.2	24.0	27.2	21.0
Koibatek	34.0	34.9	33.0	34.8	35.6	34.0	28.4	30.2	26.6
Laikipia	26.7	27.8	25.5	27.7	28.8	26.5	21.6	22.4	20.8
Marakwet	32.8	33.7	31.9	32.8	33.7	31.9			
Nakuru	25.0	26.3	23.7	26.5	27.9	25.2	20.1	20.9	19.3
Nandi	33.1	35.0	31.3	33.4	35.3	31.5	24.8	25.7	23.9
Narok	28.7	30.7	26.2	29.2	31.1	26.7	22.2	24.2	20.2
Samburu	29.3	32.4	24.6	30.7	34.6	23.9	16.6	27.5	25.7
Trans Mara	31.8	34.6	28.7	32.0	34.9	28.8	25.6	26.5	24.8
Trans Nzoia	29.5	31.4	27.6	30.0	31.9	28.1	22.3	23.5	21.2
Turkana	30.9	33.9	26.8	31.0	34.3	26.6	30.0	32.2	27.6
Uasin Gishu	29.6	31.1	28.2	31.8	33.2	30.3	21.6	22.9	20.3
West Pokot	36.7	39.8	33.1	37.3	40.4	33.7	27.9	30.4	25.3
Buret	29.4	31.4	27.3	29.4	31.5	27.4	22.4	24.0	20.9
Western	31.1	33.2	29.0	31.6	33.7	29.4	25.6	26.7	24.7
Bungoma	32.7	34.7	30.5	33.2	35.4	31.0	27.0	28.0	26.0
Busia	29.2	31.9	26.4	29.6	32.3	26.7	24.4	26.2	22.7
Mt. Elgon	34.5	37.5	31.3	34.8	37.9	31.6	25.5	26.8	24.3
Kakamega	31.8	34.3	29.3	32.4	35.0	29.9	24.7	26.2	23.4
Lugari	30.1	32.1	8.2	30.4	32.4	28.3	24.0	22.2	25.7
Teso	33.4	36.2	30.2	34.8	37.7	31.5	21.0	22.2	19.8
Vihiga	29.4	30.3	28.6	29.6	30.5	28.7	26.9	27.5	26.5
Butere / Mumias	29.1	31.1	27.1	29.3	31.3	27.3	26.3	27.4	25.3

3.3 Scholastic Progression Rates

Scholastic progression rate is a measure of movement from one class or level to another and is normally used to determine the prospects or the opportunities for mobility that exist within the education system for those attending school. Due to limitations of information gathered during the 1999 census, a rather crude index was computed using the formula below.

Scholastic Progression Rate =
$$\frac{\text{Form 1 enrolment}}{\text{Standard 8 enrolment}} \times 100$$

The scholastic progression rate can also be computed to show the movement from one class or form to the other or from secondary level to university level. However, due to the scanty information collected during censuses, progression rate analysis will be restricted to movement from primary level to secondary level. The measures obtained are only approximate because census figures for Form I and Std 8 enrolments had different over-enrolment rates. In an expanding total population such as that in Kenya, the age cohorts of Std 8 will be 3-4% larger than those for Form I. A more refined measure could have been the proportion of the cohort that were in Std 8 in 1998 and which enrolled in Form 1 in 1999. Unfortunately, that information could not be obtained from census data.

Table 3.10 provides information on scholastic progression rates from Std 8 to Form 1 by sex and rural-urban residence in 1999. The census data show that nationally only 45% of people enrolled in primary schools move to secondary level. This indicates a drop of 4.0 percentage points from the 1989 progression rate, which stood at 49.0%. Possible causes of the drop in progression rate between 1989 and 1999 could be the rise in cost of education in the era of cost sharing, high population growth resulting in the expansion of the school-age population and other socio-cultural factors. However, this can only be verified through further research. It should be noted that the scholastic progression rate of 45% is close to the ones reported by the Ministry of Education which have been ranging around 40% in the last 5 years.

A national scholastic progression rate of 45% indicates, by implication, a wastage rate of 55% between primary and secondary levels. The wastage rate generated from the 1989 census between these two levels was 50% (CBS, 1989, Table 4.10). The scholastic progression rate was relatively higher in the urban areas (60%) compared to the rural areas (42%).

Table 3.10 Scholastic Progression Rates by Sex and Rural-Urban Residence, 1999

Region	Percentage of Form 1 to Standard 8 enrolments		
	Male	Female	Total
Kenya	45.1	44.5	44.8
Rural	42.2	41.2	41.7
Urban	59.9	60.1	60.0

In comparison with the 1989 census, the 1999 census maintained almost the same trend of progression rates of 60% and 42% for urban and rural residences, respectively. The data also show that males and females have equal prospects for progression to the next level but females have better prospects (60.1%) than males (59.9%) in the urban areas. This is in contrast to the 1989 findings which indicated that males in urban (60%) and rural areas (50%) had better prospects than females in the same areas (56% and 44%, respectively). This information can also be used as an index of opportunities and facilities available for secondary schooling.

3.4.1 Provincial Level Analysis of Scholastic Progression

The provincial level data given in Table 3.11 indicate that scholastic progression rates are higher in Nairobi (68%), Western (47%) and Central (46%). In 1989, the scholastic progression rates for these provinces was Nairobi (68%), Western (44%) and Central (55%). Central province registered a relatively higher decline in scholastic progression rates in comparison with 1989 figures. Provinces with relatively lower progression rates are Eastern (37%), Coast (40%), North Eastern (41%) and Rift Valley (42%).

Table 3.11 Scholastic Progression Rates by Sex, Province and Rural-Urban Residence, 1999

Province	Percentage of Form 1 to Standard 8 Enrdment								
	Total	Total Male	Female	Total	Rural Male	Female	Total	Urban Male	Female
Nairobi	71.2	72.3	70.2				71.1	72.4	70.0
Central	46.3	46.4	46.3	45.0	45.3	44.8	57.5	56.4	58.6
Coast	41.2	41.0	41.4	34.1	34.1	34.2	52.3	53.2	51.4
Eastern	37.2	38.4	36.1	36.5	37.9	35.2	51.1	47.4	54.9
N / Eastern	40.4	39.7	42.0	40.2	38.8	44.1	40.6	41.3	39.4
Nyanza	45.9	44.8	47.1	44.6	43.7	45.9	56.9	56.5	57.4
R / Valley	42.3	43.0	41.7	40.2	41.2	39.1	56.0	54.9	57.1
Western	47.5	48.9	46.1	46.3	47.5	45.1	58.1	62.5	54.3
Kenya	44.8	45.1	44.5	41.7	42.2	41.2	60.0	59.9	60.1

In 1989, provinces which had a relatively lower progression rate were Nyanza (44%), Western (44%), Coast (46%) and North Eastern (46%). At the national level, females had a slightly higher progression rate (45.1%) than males (44.8%). In comparison with 1989 national figures, males had a higher progression rate (51%) than females (49%). The national rural-urban pattern indicates higher progression rate in the urban areas (60%) than in rural areas (41%). This pattern of progression rate is confirmed in all the provinces.

3.4.2 District Analysis of Scholastic Progression Rates

District level analysis of scholastic progression rates indicated wide disparities as indicated in Table 3.12. With the exception of Nairobi, which recorded the highest progression rate of 71.2%, other districts with high progression rates were Gucha (63.7%) and Nyamira (60.1%). Kitui and Mwingi districts recorded the lowest rates of 29.4% and 29.2%, Sex differentials in scholastic progression rates did not reveal wide disparities in most districts. Out of 70 districts, 24 showed higher scholastic progression rates for females than males. This could be interpreted to mean that the societies are now responding positively to campaigns for equal opportunities for both males and females in school.

Analysis by rural-urban residence depicts higher progression rates for urban residents than rural residents. This may be because urban residents are financially better off and understand educational benefits. Chances of females progressing in school are higher in urban areas in 37 districts as opposed to rural areas in 28 districts which showed otherwise. It should be understood from the analysis that the higher the scholastic progression rate, the better the educational opportunity for movement and achievement

Kenya 1999 Population and Housing Census

Table 3.12 Scholastic Progression Rates by Sex, District and Rural-Urban Residence, 1999

Percentage of Form 1 to Standard 8 Enrdment									
Province District	Total	Total Male	Female	Total	Rural Male	Female	Total	Urban Male	Female
Kenya	44.8	45.1	44.5	41.7	42.2	41.2	60.0	59.9	60.1
Nairobi	71.2	72.3	70.2	-	-	-	71.1	72.4	70.0
Central	46.3	46.4	46.3	45.0	45.3	44.8	57.5	56.4	58.6
Kiambu	53.8	52.2	55.3	51.7	50.3	53.0	64.0	61.3	66.5
Kirinyaga	44.9	46.5	43.4	44.3	45.6	43.1	57.1	68.3	49.5
Murang'a	42.5	41.6	43.3	42.2	41.4	43.0	53.6	49.5	57.0
Nyandarua	38.5	38.1	38.8	38.6	38.0	39.1	37.7	38.7	36.8
Nyeri	45.1	46.3	44.1	44.5	45.6	43.5	51.5	53.6	49.9
Thika	48.4	48.9	48.0	44.6	46.2	43.1	64.2	59.7	68.4
Maragua	47.6	47.9	47.2	47.4	47.8	47.1	54.6	54.4	54.8
Coast	41.2	41.0	41.4	34.1	34.1	34.2	52.3	53.2	51.4
Kilifi	34.5	33.4	36.2	32.1	31.2	33.5	49.7	49.6	49.9
Kwale	37.0	37.2	36.6	35.8	36.0	35.4	43.3	44.1	42.3
Lamu	39.9	39.9	39.9	36.9	37.5	36.3	50.3	49.4	51.1
Mombasa	52.8	53.8	51.7	31.6	30.7	32.8	54.1	55.4	52.8
Taita Taveta	35.6	36.8	34.4	34.3	36.0	32.6	44.5	42.7	46.3
Tana River	39.8	39.4	40.4	38.3	38.4	38.1	48.3	45.0	52.5
Malindi	38.6	37.8	40.1	33.8	32.6	36.2	53.9	56.5	50.2
Eastern	37.2	38.4	36.1	36.5	37.9	35.2	51.1	47.4	54.9
Embu	48.1	49.8	46.7	47.1	49.5	45.1	59.7	53.5	65.2
Isiolo	42.1	38.7	46.8	34.6	30.4	41.0	52.0	50.5	53.7
Kitui	29.2	29.9	28.4	28.7	29.6	27.8	54.2	45.9	63.1
Makueni	41.8	43.8	40.0	41.8	43.8	39.9	43.6	43.5	43.7
Machakos	40.8	43.1	38.7	40.1	42.7	37.7	50.7	47.8	53.8
Marsabit	42.7	38.7	51.0	43.7	41.2	49.4	40.1	30.6	54.2
Mbeere	34.4	37.1	31.9	34.4	37.2	31.8	32.5	29.2	37.5
Meru Central	34.0	32.4	35.2	32.5	31.3	33.6	52.7	47.8	56.6
Moyale	37.2	36.9	38.2	33.2	32.9	33.9	50.4	49.5	52.6
Mwingi	29.4	30.5	28.3	29.1	30.0	28.1	47.4	55.1	39.1
Meru -North	33.2	35.7	31.3	33.0	35.7	30.7	41.6	35.1	46.5
Tharaka	35.9	39.9	32.1	35.9	39.9	32.1	-	-	-
Nithi (Meru S.)	35.0	35.2	34.9	34.5	34.6	34.4	63.2	69.4	58.8
North Eastern	40.4	39.7	42.0	40.2	38.8	44.1	40.6	41.3	39.4
Garissa	38.3	38.8	37.2	36.7	36.6	36.7	40.0	41.3	37.7
Mandera	37.4	37.8	36.3	36.9	36.5	38.2	37.8	39.1	35.1
Wajir	44.4	41.8	50.4	43.7	41.0	50.3	47.2	45.4	50.6
Nyanza	45.9	44.8	47.1	44.6	43.7	45.9	56.9	56.5	57.4
Gucha (Kisii S.)	63.7	61.2	66.4	63.7	61.0	66.6	61.1	67.8	55.9
Homa Bay	33.2	33.1	33.3	31.8	31.0	32.5	40.2	43.9	36.4
Kisii Central	59.8	59.2	60.4	59.0	58.2	59.8	75.2	79.1	71.6
Kisumu	46.9	45.8	48.2	34.6	33.8	35.6	66.7	68.3	65.2
Kuria	35.8	38.7	31.5	35.7	39.1	30.5	36.6	34.2	39.1
Migori	32.4	31.2	34.4	30.4	30.1	30.8	46.7	40.2	54.5
Nyamira (Kisii N.)	60.1	60.7	59.6	59.8	60.4	59.2	68.1	67.3	69.0
Rachuonyo	35.5	36.3	34.2	35.3	35.9	34.3	41.9	52.5	32.1
Siaya	32.6	32.4	32.9	31.5	31.4	31.6	51.1	52.9	49.6
Suba	34.0	34.9	32.5	33.8	35.2	31.3	38.1	28.4	50.0
Bondo	35.0	37.0	32.5	34.4	36.6	31.6	46.9	46.0	47.7
Nyando	36.4	36.6	36.2	35.6	36.6	34.4	42.3	36.3	49.2
Rift Valley	42.3	43.0	41.7	40.2	41.2	39.1	56.0	54.9	57.1
Baringo	37.2	40.1	34.2	36.7	39.9	33.5	45.2	43.9	46.8
Bomet	32.4	34.6	29.7	32.2	34.6	29.5	57.1	48.0	66.7
Keiyo	38.3	39.6	37.1	38.1	39.4	36.9	47.2	51.6	43.9
Kajiado	55.1	52.5	58.4	49.4	47.3	52.0	73.1	70.1	76.4
Kericho	46.7	48.6	44.6	46.4	49.4	43.1	50.0	39.8	62.0
Koibatek	36.2	38.5	34.0	35.6	38.0	33.4	40.1	42.6	37.7
Laikipia	37.0	36.1	37.9	36.0	35.9	36.1	41.2	36.9	45.3
Marakwet	31.5	33.3	29.3	31.5	33.3	29.3	-	-	-
Nakuru	44.7	46.7	42.8	39.8	42.3	37.3	57.6	59.0	56.4
Nandi	40.2	40.1	40.3	39.8	39.7	40.0	50.0	52.8	47.8
Narok	40.1	38.1	43.5	38.6	38.0	39.5	55.8	39.0	81.4
Samburu	40.9	40.9	40.9	40.1	37.3	49.0	41.6	46.5	36.6
Trans Mara	39.5	38.3	41.3	38.6	38.0	39.6	51.8	43.8	62.5

Table 3.12 cont.

Percentage of Form 1 to Standard 8 Enrdment									
Province District	Total	Total Male	Female	Total	Rural Male	Female	Total	Urban Male	Female
Trans Nzoia	47.9	49.7	46.1	46.9	49.0	44.9	58.6	58.1	59.1
Turkana	37.1	32.8	44.6	34.6	31.4	40.7	44.9	37.9	54.0
Uasin Gishu	50.1	50.2	50.0	46.3	46.5	46.2	61.8	61.7	61.8
West Pokot	39.4	34.8	46.9	37.6	33.1	45.1	57.7	54.4	61.6
Buret	39.7	40.9	38.4	39.5	40.5	38.3	55.7	63.3	46.2
Western	47.5	48.9	46.1	46.3	47.5	45.1	58.1	62.5	54.3
Bungoma	49.1	50.2	47.9	48.1	48.9	47.3	55.7	60.1	51.8
Busia	37.3	39.8	34.4	35.5	37.9	32.6	55.0	61.3	49.4
Mt.Elgon	46.2	46.9	45.4	45.9	47.0	44.6	52.6	44.4	60.0
Kakamega	50.4	51.6	49.3	48.6	49.3	47.9	64.1	71.9	58.6
Lugari	55.9	56.0	55.8	56.0	56.1	56.0	52.6	55.0	50.7
Teso	51.2	47.5	56.4	45.9	43.3	49.9	96.5	90.0	103.7
Vihiga	44.9	47.7	42.7	44.9	47.5	42.7	46.3	50.7	42.7
Butere / Mumias	46.4	49.3	43.4	45.4	48.3	42.4	54.4	57.9	51.0

Chapter 4

Educational Attainment

4.1 Introduction

Information about the population by sex, age, school attendance and highest level reached were published in Volume II (Tables 1 and 2) of the Kenya 1999 Population and Housing Census. This information is given at national, provincial and district levels. The highest education level completed was categorised into six groups: none, Std 1 to 4, Std 5 to 8, Form 1 to 4, Form 5 to 6 and university. Table 4.1 in this volume provides the percentage distribution of the population aged 5 years and above by age group and highest level of education attained. The category "none" includes those who never went to school, those who left school before completing Std I and those who were enrolled in Std I at the time of the census. It is worth mentioning that figures presented for Form 5 and 6 are insignificant compared to other levels of education because of the change in the education system from 7-6-3 to 8-4-4 in 1984. Only a few schools still maintain the older system of education in Kenya.

Unlike the 1989 census, which collected education information of persons who were aged 6 years and above, the 1999 census collected information on education of persons aged 5 years and above. It is therefore possible that in the 1999 census, the category of "none" includes persons who were 5 years but did not state schooling status due to under-age. The category "university" is for all university graduates, including undergraduates and those who were enrolled for postgraduate programmes in 1999.

To make the 1999 population figures on educational attainment comparable with 1989 population figures, the concept of "completed", which excludes incomplete classes or forms attended, was adopted.

For all persons attending school in 1999, the highest level completed is one level lower than the highest level reached. For persons not attending school in 1999, the highest level completed may be the same as "highest level reached" or one level below it, but not greater. The 1999 population figures on education are strictly not comparable with the 1979 population figures, which used the concept of "highest level reached".

Table 1 of the Kenya 1999 Population and Housing Census Volume II categorised education information into "at school", "left school" and "never attended" by administrative regions and sex. Table 4.1 shows that about 75% of the total population aged 5 years and over had completed some level of education in 1999. This represents an increase of 8 percentage points compared to the 1989 population census figures which indicated that 67% of the total population aged 6 years and above had completed some level of education.

However, it should be understood that the 1999 population figures take into account persons aged 5 years and above while the 1989 population figures considered persons aged 6 years and above. About 25% of the total population had not completed any level of education in 1999, which registered an

improvement from the 1989 population figure of 32% for the same category. The proportions of persons who had completed primary school (Std 1-4, Std 5-8), secondary school (Form 1-4, Form 5-6) and university levels of education were 57.8%, 16.8% and 0.8%, respectively. When compared with 1989 population figures, education attainment clearly improved between the period 1989 to 1999.

Table 4.1 Percentage Distribution of Highest Level of Education Completed by Age Group and Sex

Age Group	None	Primary		Secondary		Univ.	NS	Total
		Std 1-4	Std 5-8	Form 1-4	Form 5-6			
5-9	52.1	45.1	2.8	0.0	0.0	0.0	0.0	100.00
10-14	13.7	59.7	25.2	1.3	0.0	0.0	0.0	100.00
15-19	10.0	17.4	55.2	17.1	0.2	0.0	0.0	100.00
20-24	9.3	9.7	47.9	31.9	0.3	0.9	0.0	100.00
25-29	10.9	8.9	43.4	34.1	0.7	2.0	0.0	100.00
30-34	13.7	10.2	38.4	32.3	3.0	2.3	0.0	100.00
35-39	18.2	13.5	33.9	30.0	2.6	1.7	0.0	100.00
40-44	27.3	16.0	28.7	24.3	1.9	1.7	0.0	100.00
45-49	32.3	18.3	28.6	17.7	1.5	1.6	0.0	100.00
50-54	40.2	18.8	26.2	12.3	1.1	1.4	0.0	100.00
55-59	49.0	22.6	19.3	7.3	0.7	1.1	0.0	100.00
60+	65.1	20.1	10.3	3.6	0.3	0.4	0.0	100.00
Total	24.6	26.8	31.0	16.1	0.7	0.8	0.0	100.00
Males								
5-9	53.0	44.0	3.0	0.0	0.0	0.0	0.0	100.00
10-14	13.8	61.5	23.3	1.4	0.0	0.0	0.0	100.00
15-19	9.4	20.2	53.7	16.4	0.2	0.0	0.0	100.00
20-24	8.0	10.6	45.8	34.2	0.3	1.1	0.0	100.00
25-29	8.2	8.5	41.8	37.9	0.8	2.7	0.0	100.00
30-34	9.3	8.8	37.7	36.7	4.2	3.3	0.0	100.00
35-39	11.1	11.4	35.0	36.1	4.0	2.5	0.0	100.00
40-44	16.5	14.1	31.6	32.2	3.1	2.5	0.0	100.00
45-49	19.1	17.1	33.4	25.5	2.5	2.4	0.0	100.00
50-54	23.4	18.6	34.6	19.4	1.9	2.1	0.0	100.00
55-59	31.0	25.1	28.9	12.1	1.2	1.7	0.0	100.00
60+	49.4	27.2	16.2	6.0	0.5	0.7	0.0	100.00
Total	21.0	27.8	30.9	18.1	1.0	1.1	0.0	100.00
Females								
5-9	51.1	46.3	2.6	0.0	0.0	0.0	0.0	100.00
10-14	13.6	58.0	27.2	1.2	0.0	0.0	0.0	100.00
15-19	10.7	14.7	56.6	17.8	0.2	0.0	0.0	100.00
20-24	10.4	8.9	49.8	30.0	0.2	0.7	0.0	100.00
25-29	13.4	9.3	44.8	30.6	0.6	1.3	0.0	100.00
30-34	18.0	11.6	39.2	27.9	1.9	1.4	0.0	100.00
35-39	25.0	15.6	32.8	24.3	1.3	1.0	0.0	100.00
40-44	38.0	17.8	25.9	16.5	0.8	1.0	0.0	100.00
45-49	45.3	19.6	23.8	10.0	0.6	0.8	0.0	100.00
50-54	57.0	19.1	17.8	5.2	0.4	0.6	0.0	100.00
55-59	65.8	20.3	10.4	2.8	0.2	0.4	0.0	100.00
60+	79.0	13.9	5.2	1.6	0.1	0.2	0.0	100.00
Total	28.0	25.9	31.0	14.2	0.4	0.5	0.0	100.00

Attempts have been made to compare data on educational attainment by level of education for some African countries (Table 4.2). Data available indicate that educational attainment in Kenya is higher than some African countries except Mauritius and South Africa. Results of the analysis of the highest level of education completed are presented in four categories: population with no level of education completed, those with primary Std 1 to 8, secondary Form 1 to 4 and Form 5 (post secondary). The latter includes university level of education.

Kenya 1999 Population and Housing Census

Table 4.2 Percentage Distribution of Population Aged 25 Years and Above by Level of Education, Selected Countries in Africa

Country	Year	No Schooling	Primary	Secondary	Post Secondary
Egypt	1986	64.1	16.5	14.8	4.6
Congo	1984	58.8	21.5	16.9	3.0
Libya	1984	59.7	23.9	13.7	2.7
Malawi	1987	55.0	39.8	4.8	0.4
Mauritania	1988	60.8	34.1	3.8	1.3
Mauritius	1990	18.3	48.7	31.1	1.5
South Africa	1995	13.0	24.0	52.4	8.8
Sudan	1983	76.7	18.6	3.9	0.8
Tunisia	1984	66.3	18.9	12.0	2.8
Kenya	1999	27.3	45.7	25.3	1.6

Source: Adapted from 1999 UNESCO Statistical Year Book and Kenya Population Census

4.2 Population Without Any Educational Attainment

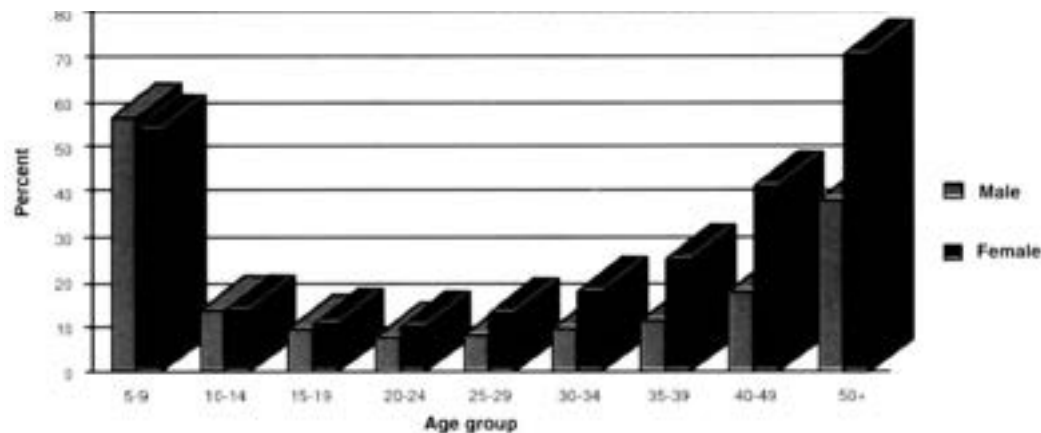
The proportions of the population without any educational attainment by age group and sex for the years 1969, 1979, 1989 and 1999 are shown in Table 4.3. There was a sharp decline for the proportions with no educational attainment in 1999 for all the age groups except age 5-9 years as seen in Figure 4. 1.

The increase in proportion with no education for the age group 5-9 between 1989 and 1999 as shown in Table 4.3 may be an artifact of statistics because the analysis of 1999 population census included persons aged 5 years who were schooling. The decline in the proportion of population with no level of education attained for all age groups is an indicator of improving education opportunities between 1989 and 1999.

Table 4.3 Percentage Distribution of Persons With No Education by Age Group and Sex, 1969-99

	Male				Female			
	1969	1979	1989	1999	1969	1979	1989	1999
5-9	86.2	49.6	55.2	56.6	87.5	49.7	53.3	54.4
10-14	43.5	12.6	15.9	14.0	53.2	14.2	20.0	13.8
15-19	31.7	13.1	8.6	9.4	50.3	23.2	12.2	10.7
20-24	31.3	18.7	8.9	8.0	61.1	39.5	16.6	10.4
25-29	41.9	22.6	11.4	8.2	75.4	50.2	26.7	13.4
30-34	54.3	26.4	16.2	9.3	83.3	62.9	40.2	18.0
35-39	-	35.5	19.8	11.1	-	72.4	49.1	25.0
40-49	70.0	46.4	36.5	17.8	90.6	80.7	66.2	41.2
50+	85.8	71.3	51.7	38.5	96.4	91.9	82.9	70.8

Figure 4.1 Population With No Education by Age Group and Sex, 1999



The apparent increase reflected in the age group 5-9 could be due to inclusion of those attending Std 1 in 1999 whose level of education completed was recorded as none. Analysis of school attendance by age had already established that there were large proportions of those in this age group attending Std 1 in 1999.

Table 4.3 further indicates that the percentage of males with no education was higher in the younger age cohorts (below 15 years) than for females for the 1999 census. However, the situation was reversed for the older age cohorts (above 15 years). The percentage of females with no education was greater than that of males for higher age groups.

The overall percentage for those with no level of education completed was slightly higher when compared with those who were reported to have never gone to school. The national pattern of the population with no level of education completed by age group and rural-urban residence is shown in Table 4.4. The table indicates that the percentage of persons with no education is higher in the rural areas than in the urban areas for all age groups. The lowest percentage of persons with no education falls in the age cohort 20-24 years.

In comparison to the 1989 population census, the percentage population with no education improved from 32% in 1989 to 25% in 1999. The age cohorts 40-44 and above years depicted a higher percentage of population with no education than the national average (25%).

Table 4.4 Percentage Distribution of Persons with No Education by Age Group, Sex and Rural-Urban Residence, 1999

Age Group	Total	Total Male	Female	Total	Rural Male	Female	Total	Urban Male	Female
5-9	53.0	51.1	52.1	54.6	52.7	53.7	43.7	42.0	42.8
10-14	13.8	13.6	13.7	14.9	14.5	14.7	6.4	8.7	7.6
15-19	9.4	10.7	10.0	10.2	11.6	10.9	5.0	6.9	6.1
20-24	8.0	10.4	9.3	9.9	12.4	11.2	3.5	5.1	4.3
25-29	8.2	13.4	10.9	10.6	15.8	13.4	3.7	6.6	5.0
30-34	9.3	18.0	13.7	12.1	20.8	16.8	3.8	9.2	6.1
35-39	11.1	25.0	18.2	13.8	27.9	21.5	4.8	13.5	8.4
40-44	16.5	38.0	27.3	19.9	41.3	31.4	7.5	21.4	12.8
45-49	19.1	45.3	32.3	22.3	48.3	36.2	9.1	26.9	15.7
50-54	23.4	57.0	40.2	26.4	59.5	43.8	12.3	38.4	21.8
55-59	31.0	65.8	49.0	33.0	67.6	51.5	19.7	48.4	31.1
60+	49.4	79.0	65.1	51.0	80.3	66.7	34.4	63.8	48.6
Total	21.0	28.0	24.6	23.8	30.9	27.5	10.5	15.4	12.9

4.3 Population with Primary Level of Education

4.3.1 Population with Primary Standards 1-4

There was improvement in all age groups between 1989 and 1999 except in the age groups 5-9 and 25-34 as shown in Table 4.5. The decline in percentage distribution of population with primary Std 1-4 as the highest level of education completed between 1989 and 1999 is because of the exclusion of those who were 5 years in the 1989 census figures. A possible reason for the increase noted in most age groups between 1989 and 1999 could be as a result of the improvements in the school enrolments in primary Std 1-4 level. However, it is to be noted that except for ages 10-19, the increases are marginal. The increase in the older age cohorts (40 years and above) was also recorded in the 1989 census.

Table 4.5 Percentage Distribution of the Population with Primary Std 1-4 as Highest Level of Education Completed by Age Group and Sex, 1979-99

Age Group	Male				Female				Total			
	1979	1989	1999	% Change	1979	1989	1999	% Change	1979	1989	1999	% Change
5-9	48.5	41.1	44.0	7.1	48.3	43.1	46.3	7.4	48.4	42.1	45.1	7.2
10-14	58.0	56.6	61.5	8.6	53.4	53.1	58.0	9.2	55.7	54.9	59.7	8.8
15-19	17.0	13.4	20.2	51.0	15.1	10.7	14.7	36.9	16.0	12.1	17.4	44.4
20-24	11.1	7.8	10.6	36.8	12.7	8.3	8.9	7.5	11.9	8.0	9.7	20.8
25-29	12.5	8.7	8.5	-2.4	14.2	10.9	9.3	-14.6	13.4	9.9	8.9	-9.6
30-34	13.8	10.9	8.8	-19.3	14.2	12.7	11.6	-8.6	14.0	11.8	10.2	-13.6
35-39	19.1	13.2	11.4	-13.4	15.1	13.8	15.6	13.0	17.0	13.5	13.5	0.1
40-44	21.7	14.9	14.1	-5.2	12.8	14.3	17.8	24.8	17.2	14.6	16.0	9.8
45-49	22.1	20.5	17.1	-16.6	11.6	14.8	19.6	32.8	16.8	17.6	18.3	4.2
50-54	22.3	24.2	16.6	-23.1	9.0	12.5	19.1	52.7	15.5	18.3	18.8	2.9
55+	16.6	22.6	24.3	17.8	4.5	8.4	16.5	95.4	19.8	15.4	20.2	31.7
Total	24.2	25.8	27.8	7.6	21.4	23.3	25.9	11.2	22.8	24.6	26.8	9.2

Disparities in the level of educational attainment by sex age group and rural-urban residence are presented in Table 4.6. The proportion with Std 1-4 as highest level completed decreases with age in the younger age groups below 10 years but increases in the older age cohort of 30 years and above. This pattern was also recorded in 1989 census figures, especially the age category of "30 years and above" which was 20 percentage points and above in 1989 (Kenya population Census, 1989, Table 5.6).

Table 4.6 Percentage Distribution of Persons with Std 1-4 Education by Age Group, Sex and Rural-Urban Residence, 1999

Age Group	Male			Female			Total		
	Male	Total	Female	Male	Rural	Total	Male	Urban	Total
5-9	46.3	44.0	45.1	42.2	44.6	43.4	54.4	56.2	55.3
10-14	58.0	61.5	59.7	62.3	59.2	60.8	55.9	51.0	53.3
15-19	14.7	20.2	17.4	22.0	15.9	19.0	11.1	9.7	10.3
20-24	8.9	10.6	9.7	12.7	10.3	11.4	5.3	5.2	5.3
25-29	9.3	8.5	8.9	10.7	10.8	10.7	4.4	5.4	4.8
30-34	11.6	8.8	10.2	11.1	13.2	12.2	4.4	6.5	5.3
35-39	15.6	11.4	13.5	13.9	17.3	15.8	5.6	8.5	6.8
40-44	17.8	14.1	16.0	16.7	19.3	18.1	7.2	10.5	8.5
45-49	19.6	17.1	18.3	19.5	20.7	20.1	9.5	12.6	10.7
50-54	19.1	18.6	18.8	20.4	19.8	20.1	11.7	14.0	12.5
55-59	20.3	25.1	22.6	26.5	20.6	23.3	17.7	17.1	17.4
60+	13.9	27.2	20.1	27.7	13.9	20.3	21.9	14.6	18.4
Total	25.9	27.8	26.8	30.5	27.3	28.9	17.8	19.5	18.6

The increase of the proportion with primary Std 1-4 as the highest level of education completed for all categories reflects the efforts made in attaining universal primary education in Kenya. Further research needs to be done to assess the impact of structural adjustment programmes (SAPs) introduced in the late 1980s which introduced cost sharing on education. Rural residents had a higher proportion with primary education (Std 1-4) as the highest level reached compared to urban residents. Previous research on migration in Kenya has shown that urban residents migrate from rural areas after completing higher levels of education in search for jobs.

4.3.2 Population with Primary Standard 5-8

Table 4.7 shows the percentage distribution of population with primary education Std 5-8 as the highest level of education completed by age group and sex for 1979, 1989 and 1999. The 1979 figures are not strictly comparable with the 1989 and 1999 census figures because they were overestimated. Except for the age groups 5-9 years and 35-49 years, other age groups showed an improvement of the proportion of population, with primary Std 5-8 as the highest level of education completed between the period 1989 and 1999. No significant changes occurred between 1989 and 1999 for the age group 5-9 in the proportions with Std 5-8 as highest level completed. The overall improvement of about 5% shown in Table 4.7 reflects past efforts made towards attainment of universal primary education, Sex disparities show more improvement among females than males between 1989 and 1999.

Table 4.7 Percentage Distribution of Population with Highest level of Education as Primary Std 5-8 by Age Group and Sex, 1979-99

Age Group	Male				Female				Total			
	1979	1989	1999	% Change	1979	1989	1999	% Change	1979	1989	1999	% Change
5-9	0.2	0.0	3.0	-	0.3	0.0	2.6		0.2	0.0	2.8	-
10-14	27.5	26.7	23.3	-12.6	28.8	30.0	27.2	-9.2	28.2	25.0	25.2	0.7
15-19	47.0	59.3	53.7	-9.4	41.4	59.5	56.6	-4.9	44.2	60.3	55.2	-8.5
20-24	34.1	42.7	45.8	7.2	28.3	44.4	49.8	12.2	31.1	44.8	47.9	6.8
25-29	35.7	37.8	41.8	10.6	25.0	34.4	44.8	30.2	30.2	40.9	43.4	6.0
30-34	36.6	34.6	37.7	8.9	17.8	27.9	39.2	40.5	27.1	36.5	38.4	5.3
35-39	31.0	36.1	35.0	-3.1	9.8	25.1	32.8	30.6	19.8	37.0	33.9	-8.4
40-44	25.7	37.4	31.6	-15.5	6.2	17.7	25.9	46.7	15.7	37.4	28.7	-23.2
45-49	19.9	32.2	33.4	3.9	4.2	10.1	23.8	136.6	12.0	30.8	28.6	7.1
50-54	12.9	25.6	34.6	35.0	2.4	6.6	17.8	168.9	7.5	24.1	26.2	8.6
55+	6.2	14.2	6.5	-54.4	1.1	3.1	12.6	303.4	3.7	13.6	19.5	43.6
Total	19.7	30.1	30.9	2.5	14.7	27.0	31.0	15.0	17.2	29.6	31.0	4.8

The distribution of the population with Std 5-8 as the highest level of education completed by age group, sex and the area of residence in 1999 is presented in Table 4.8. The age distribution depicts a relatively higher proportion of the population (55.2%) in the 15-19 years age group as having completed Std 5-8. This could be because large numbers of the primary school population drop out after Std 8. The same trend was depicted in the 1989 census where those aged 15-19 years who had completed Std 5-8 accounted for 59% cent. The proportion of population with the highest level of education completed as Std 5-8 increases with age up to the primary school going age. For lower age groups, the proportion of females with this level of educational attainment is higher than that of the males in both rural and urban areas.

In the older age cohorts (35 years and above), the proportion of males with Std 5-8 education was higher than the females in both rural and urban areas which indicates that females are disadvantaged with age. The relative better performance for females aged 35 years and below could be attributed to positive results gained from intensive campaign efforts on female education over the last decade.

Table 4.8 Percentage Distribution of Persons with Std 58 Education by Age Group, Sex and Rural-Urban Residence

Age Group	Male	Total Female	Total	Male	Rural Female	Total	Male	Urban Female	Total
5-9	3.0	2.6	2.8	3.2	2.7	3.0	1.9	1.8	1.9
10-14	23.3	27.2	35.2	21.4	25.2	23.3	36.1	38.7	37.5
15-19	53.7	56.6	55.2	54.1	57.4	55.7	51.9	53.6	52.8
20-24	45.8	49.8	47.9	48.3	53.0	50.9	39.8	40.9	40.4
25-29	41.8	44.8	43.4	47.1	48.9	48.1	31.5	33.8	32.5
30-34	37.7	39.2	38.4	42.6	42.1	42.3	27.9	29.8	28.7
35-39	35.0	32.8	33.9	38.3	34.2	36.0	27.5	27.5	27.5
40-44	31.6	25.9	28.7	33.2	26.1	29.4	27.2	24.9	26.3
45-49	33.4	23.8	28.6	34.2	23.4	28.5	31.0	26.3	29.2
50-54	34.6	17.8	26.2	35.0	17.1	25.6	33.2	22.9	29.5
55-59	28.9	10.4	19.3	28.8	9.6	18.6	29.4	17.5	24.7
60+	16.2	5.2	10.3	15.7	4.7	9.8	21.2	11.3	16.4
Total	30.9	31.0	31.0	31.0	30.7	30.9	30.8	32.3	31.5

4.4 Population with Secondary Level of Education

4.4.1 National Level Analysis of Population with Form 1-4

The proportion of the population with secondary Form 1-4 level of education completed is a good index for advancement in higher education. The proportion increased from 7.3% in 1979 to 12.5% in 1989 and 16.1% in 1999, implying an improvement of over 3.6 percentage points and taking into account that 1979 figures are over-estimates. Table 4.9 shows the percentage of the population with Form 1-4 as the highest level attained by age group and sex. It also gives % changes for the period 1979-1999.

Table 4.9 Percentage Distribution of Persons with Form 1-4 Education by Age Group and Sex, 1979-99

Age Group	1979	Male 1989	1999	% Change	1979	Female 1989	1999	% Change	1979	Total 1989	1999	% Change
10-14	1.3	0.4	1.4	241.5	1.5	0.5	1.2	160.9	1.4	0.4	1.3	202.3
15-19	22.2	17.6	16.4	-6.8	19.7	16.5	17.8	7.9	20.9	17.0	17.1	0.4
20-24	32.9	34.3	34.2	-0.2	18.3	27.5	30.0	9.0	25.3	30.7	31.9	4.0
25-29	26.1	36.2	37.9	4.8	9.6	25.2	30.6	21.4	17.6	30.4	34.1	12.0
30-34	20.3	32.8	36.7	12.0	4.3	16.7	27.9	67.0	12.2	24.8	32.3	30.5
35-39	12.0	25.9	36.1	39.4	2.1	9.7	24.3	150.0	6.8	17.8	30.0	68.5
40-44	7.9	19.3	32.2	66.8	1.3	4.5	16.5	269.1	4.5	11.9	24.3	104.2
45-49	5.6	11.3	25.5	126.7	0.8	2.2	10.0	356.6	3.2	6.6	17.7	167.8
50-54	3.3	7.2	19.4	171.3	0.5	1.4	5.2	266.2	1.8	4.3	12.3	189.4
55+	1.2	3.6	1.9	-46.8	0.3	0.6	4.6	625.6	0.8	2.1	7.6	264.0
Total	9.4	15.0	18.1	21.1	5.2	10.1	14.2	40.2	7.3	12.5	16.1	28.8

Table 4.10 shows the percentage distribution of the population with secondary Form 1-4 level of education completed in 1999 by age group, sex and rural-urban areas of residence. With the exception of age group 15-19 years, the data clearly show that females were disadvantaged for all age groups. The 1989 census figures indicated that females were more disadvantaged than males in all age groups.

Table 4.10 Percentage Distribution of Population with Form 1-4 Education by Age Group, Sex and Rural-Urban Residence

Age Group	Male	Total Female	Total	Male	Rural Female	Total	Male	Urban Female	Total
10-14	1.4	1.2	1.3	1.4	1.1	1.3	1.6	1.7	1.6
15-19	16.4	17.8	17.1	13.5	15.0	14.2	31.5	29.2	30.2
20-24	34.2	30.0	31.9	28.3	23.9	25.9	48.5	46.5	47.5
25-29	37.9	30.6	34.1	29.7	23.6	26.4	54.0	49.5	51.9
30-34	36.7	27.9	32.3	29.9	22.4	25.8	50.2	45.5	48.2
35-39	36.1	24.3	30.0	30.3	19.6	24.5	49.3	42.8	46.6
40-44	32.2	16.5	24.3	27.3	12.7	19.4	45.4	35.6	41.6
45-49	25.5	10.0	17.7	21.5	7.1	13.8	38.1	27.5	34.1
50-54	19.4	5.2	12.3	16.2	3.4	9.4	31.4	18.8	26.8
55-59	12.1	2.8	7.3	10.3	1.9	5.8	22.4	11.9	18.3
60+	6.0	1.6	3.6	4.9	1.1	2.9	15.6	7.7	11.8
Total	18.1	14.2	16.1	13.7	10.7	12.1	35.0	29.6	32.4

The proportion of population with secondary level of education increased with age up to age group 25-29 and then started declining. The same trend is observed for both national and rural-urban residence data. The 1999 figures also indicate that there has been a general increase in the proportion with this level completed as compared to the 1989 figures. When comparison is made based on rural-urban residence, a higher proportion of population with Form 1-4 as the highest level completed was in urban areas rather than rural areas. This can probably be explained by better schooling opportunities in the urban areas. Rural-urban migration patterns might also have some impact on the rural-urban differentials due to migrants selecting urban schools for education.

4.4.2 Provincial and District Level Analysis of Population with Form 1-4

The proportion of the population aged 20-24 years with Form 1-4 as the highest level of education completed was used in past censuses to measure progress made in secondary and higher education. Table 4.11 gives the distribution of the population aged 20-24 years with Form 1-4 educational attainment by sex, province and district for the years 1979, 1989 and 1999.

Table 4.11 Percentage Distribution of the Population Aged 20-24 with Form 1-4 Education by Sex and District, 1979-99

Province / District	1979	Male 1989	1999	1979	Female 1989	1999	1989	Total 1999
Nairobi	47.6	47.5	53.0	41.7	47.9	51.0	47.7	52.0
Central	39.0	39.6	37.8	28.2	37.9	37.4	38.8	37.6
Kiambu	40.7	43.3	44.2	31.7	41.9	44.9	42.6	44.6
Kirinyaga	34.9	34.6	30.2	26.3	33.5	30.6	34.0	30.4
Muranga	36.3	35.6	34.5	25.2	32.4	33.9	33.8	34.2
Thika	-	-	42.1	-	-	39.2	-	40.6
Maragua	-	-	32.4	-	-	29.7	-	31.0
Nyeri	43.4	44.0	39.8	33.9	45.0	42.3	45.0	41.1
Nyandarua	35.6	34.2	29.4	19.2	30.0	28.2	31.9	28.8
Coast	28.4	31.2	30.1	11.6	19.5	22.7	25.1	26.1
Kilifi	20.0	24.1	24.7	4.3	9.8	13.5	15.8	18.1
Kwale	19.2	20.8	18.8	4.8	10.5	12.9	14.9	15.4
Lamu	20.6	31.2	21.3	5.2	14.7	15.1	23.1	18.0
Mombasa	39.6	40.0	41.2	26.3	34.1	38.6	37.4	39.9
Taita Taveta	29.2	31.7	30.8	28.2	27.8	28.5	29.7	29.6
Tana River	14.6	32.2	16.3	3.6	9.3	9.5	15.2	12.7
Malindi	-	-	20.5	-	-	12.1	-	15.8

Table 4.11 cont.

Province / District	1979	Male 1989	1999	1979	Female 1989	1999	1989	Total 1999
Eastern	30.1	30.1	27.1	18.0	24.0	25.0	26.7	26.0
Embu	34.4	32.1	33.6	23.3	28	38.1	30.2	36.0
Isiolo	17.3	25.9	28.7	5.3	14	19.1	20.0	19.1
Marsabit	8.5	14.9	15.7	1.7	5.4	7.1	9.9	11.5
Kitui	28.9	28.4	23.6	10.6	17.1	19.0	21.7	20.8
Mwingi	-	-	22.5	-	-	15.4	-	18.1
Machakos	38.2	36.3	34.8	21.7	28.6	32.5	32.1	33.6
Mbeere	-	-	27.8	-	-	23.2	-	25.3
Makueni	-	-	29.7	-	-	25.8	-	27.6
Moyale	-	-	18.7	-	-	6.5	-	12.4
Meru Central	24.0	24.9	29.2	18.2	23.4	34.8	24.1	32.1
Meru North	-	-	14.6	-	-	13.4	-	13.9
Tharaka	-	-	18.3	-	-	13.7	-	15.6
Nithi (Meru S.)	-	-	28.4	-	-	30.2	-	29.4
North Eastern	7.3	11.9	12.9	1.1	4.7	5.3	8.4	9.4
Garissa	8.1	14.9	17.9	3.8	7.9	8.5	11.4	13.3
Mandera	7.5	10.6	10.0	1.0	2.6	2.8	6.8	6.7
Wajir	6.5	10.3	10.7	1.1	3.5	3.9	7.0	7.6
Nyanza	35.4	31.9	34.6	15.0	23.3	28.4	26.9	31.1
Kisumu	34.7	37.9	40.6	16.5	26.8	35.1	31.9	37.7
Nyando	-	-	33.3	-	-	25.3	-	29.1
Siaya	29.5	26.8	24.1	10.7	17.6	18.7	21.3	20.9
Bondo	-	-	26.1	-	-	20.8	-	23.1
Homa Bay	31.0	27.1	25.3	10.8	15.7	16.9	20.4	20.4
Migori	-	-	23.5	-	-	17.0	-	19.9
Suba	-	-	25.3	-	-	16.0	-	20.3
Rachuonyo	-	-	31.5	-	-	21.6	-	25.8
Kuria	-	-	19.4	-	-	10.7	-	14.5
Kisii Central	41.6	34.8	44.0	20.0	31.2	39.5	32.7	41.4
Nyamira (Kisii N.)	-	-	46.9	-	-	42.4	-	44.3
Gucha (Kisii S.)	-	-	45.3	-	-	39.3	-	41.9
Rift Valley	24.8	31.5	31.5	11.5	23.1	26.3	27.3	28.7
Baringo	19.5	33.0	34.7	8.7	23.1	27.5	27.5	30.8
Koibatek	-	-	38.4	-	-	37.0	-	37.7
Keiyo	-	-	37.8	-	-	34.1	-	35.9
Marakwet	22.3	33.5	35.2	9.2	22.0	23.8	27.1	28.9
Kajiado	20.8	24.8	31.2	9.8	20.0	26.2	23.2	28.5
Kericho	26.8	34.1	34.3	11.5	22.5	28.5	28.2	31.3
Bomet	-	-	32.1	-	-	19.6	-	25.2
Laikipia	30.2	33.5	31.9	15.5	28.8	29.3	31.0	30.5
Nakuru	33.9	38.9	38.6	20.0	31.7	34.8	35.1	36.6
Nandi	24.3	30.7	28.5	11.2	23.3	24.7	26.9	26.6
Narok	13.1	18.5	20.7	4.0	10.0	11.5	13.9	15.8
Trans Mara	-	-	20.4	-	-	10.7	-	15.2
Samburu	10.4	13.7	19.0	3.3	6.9	9.0	9.9	13.4
Trans Nzoia	27.3	31.5	29.7	13.8	25.4	27.4	28.2	28.5
Turkana	5.6	11.3	10.1	1.1	4.2	5.0	7.3	7.4
Uasin Gishu	32.3	39.4	40.0	16.2	33.8	39.1	36.6	39.5
West Pokot	9.1	17.5	14.5	3.0	8.5	8.7	12.6	11.3
Bureti	-	-	34.7	-	-	28.2	-	31.4
Western	36.9	31.8	30.8	19.2	26.2	27.7	28.6	29.1
Bungoma	42.9	36.8	34.9	22.1	29.8	32.2	32.7	33.5
Mt. Elgon	-	-	32.1	-	-	23.9	-	27.9
Busia	31.3	26.7	26.2	11.8	16.6	18.0	20.6	21.5
Teso	-	-	26.9	-	-	20.0	-	23.2
Kakamega	34.8	30.4	30.6	19.9	27.3	29.8	28.6	30.1
Butere / Mumias	-	-	27.2	-	-	22.8	-	24.7
Lugari	-	-	28.4	-	-	30.2	-	29.4
Vihiga	-	-	32.5	-	-	32.1	-	32.3

The 1999 provincial data show that Nairobi had the highest percentage (52.0%) followed by Central (37.6%) and Nyanza (31.1%). Eastern and Coast had 26% while Rift Valley and Western provinces each had 29%, North Eastern province had the lowest percentage of the population who had completed Form 1-4 (9%). The same trend was seen in the 1989 census. However, Nairobi and Nyanza provinces indicated a level of improvement of more than 2 percentage points between the two intercensal years, 1989 and 1999. Central and Eastern provinces recorded a drop in the percentage of population with this level of educational attainment. The marginal changes in the percentage of population aged 20-24 with Form 1-4 as the highest level completed between 1989 and 1999 indicate some stabilisation.

The 1999 figures indicate wide disparities in higher education among provinces. Differences in educational opportunities among provinces are a result of other socio-economic and socio-cultural factors. In terms of gender, the data indicate that in 1999 a higher proportion of males aged 20-24 years in all the provinces had attained Form 1-4 education compared to females in all the provinces. Wide disparities of more than 3 percentage points between males and females were recorded in North Eastern, Coast, Nyanza and Rift Valley provinces. Between 1989 and 1999, there was a decline in the percentage of males with Form 1-4 education in Central and Eastern provinces while the females recorded an improvement in the same period in all provinces.

District-level analysis gave results that revealed wide disparities, Districts with high percentage of population aged 20-24 with Form 1-4 education are Nairobi (52%), Kiambu (45%), Thika (41%), Nyeri (41%), Kisii Central (41%), Nyamira (44%) and Gucha (42%). Districts with less than 10% were Mandera (7%), Wajir (8%) and Turkana (7%). There were no major changes in the percentages of population aged 20-24 with Form 1-4 education between 1989 and 1999 in most districts.

4.5 Population with Form 5-6

Percentage distribution of population with Form 5-6 as the highest level of education completed by age group and sex is shown in Table 4.12. The table indicates that the proportion of the population that reported Form 5-6 as their highest level of education declined significantly from 1.49% in 1989 to 0.91% in 1999. The drop may be attributed to the fact that the country discontinued Form 5 and 6 level of education (commonly known as A-level) after the introduction of the 8-4-4 education system in 1985. Only a few private schools continued to offer A-level education. The male population recorded higher percentage (1.13%) of those who had Form 5-6 as the highest level of education completed compared to the female population (0.69%). This confirms that males are ahead of females in education attainment at this level.

Table 4.12 Percentage Distribution of Population with Form 5-6 Education by Age Group and Sex, 1979-99

Age Group	Male				Female				Total			
	1979	1989	1999	% Change	1979	1989	1999	% Change	1979	1989	1999	% Change
15-19	0.78	0.78	0.04	-95.09	0.56	0.63	0.04	-93.80	0.67	0.70	0.04	-94.48
20-24	3.17	5.92	2.09	-64.70	1.15	2.60	2.73	5.00	2.12	3.97	2.43	-38.74
25-29	3.25	5.48	0.82	-85.01	0.92	2.04	0.60	-70.46	2.05	3.68	0.71	-80.76
30-34	2.87	4.86	4.17	-14.18	0.74	1.47	1.86	26.57	1.79	3.18	3.00	-5.53
35-39	2.38	4.33	3.97	-8.22	0.62	1.07	1.33	24.44	1.45	2.70	2.62	-3.09
40-44	1.70	3.53	3.05	-13.47	0.43	0.76	0.81	6.20	1.05	2.14	1.92	-10.17
45-49	1.22	2.56	2.48	-3.10	0.37	0.53	0.56	5.46	0.79	1.52	1.51	-0.35
50-54	0.92	1.71	1.89	10.36	0.34	0.39	0.36	-8.91	0.63	1.04	1.12	7.82
55+	0.49	0.86	0.70	-18.92	0.27	0.23	0.15	-32.69	0.38	0.36	0.41	13.96
Total	0.97	2.17	1.13	-48.15	0.35	0.83	0.69	-16.49	0.65	1.49	0.91	-39.26

Table 4.12 further shows that the population in age group 30-34 recorded the highest percentage (3.0%) of those with Form 5-6 as their highest level of education completed followed by those in age group 35-39 with 2.6%. The population in age group 15-19 exhibited the highest drop of the percentage of those who reported to have attained Form 5-6 as their highest level of education of 94.5% between 1989 and 1999 followed by those in age group 25-29 who recorded a decline of 80.8% in the same period.

4.6 Population with University Level of Education

Table 4.13 gives the percentage distribution of population with highest level of education completed as university by age group, sex and rural-urban residence. The table shows that only 0.7% of the Kenyan population reported to have completed university education in 1999 with males recording a proportion of 1.0% and females 0.4%. This shows that the country still needs to improve access to higher education in order to improve education achievement at this level. However, the figure is a significant improvement by 48.0% from that recorded in 1989 (0.5%). The highest proportion (2.3%) of the population who had completed university level of education was reported in age group 30-34 followed by age group 25-29 with a proportion of 1.9%. The lowest percentage of the population with university education was recorded in age group 60 years.

Table 4.13 Percentage Distribution of Population with University as Highest Level of Education Completed by Age Group, Sex and Rural-Urban Residence

Age Group	Male	Total Female	Total	Male	Rural Female	Total	Male	Urban Female	Total
20-24	1.04	0.69	0.85	1.04	0.69	0.85	2.34	1.66	2.01
25-29	2.70	1.27	1.96	2.71	1.28	1.97	5.59	3.08	4.39
30-34	3.31	1.40	2.34	3.31	1.41	2.35	6.90	3.64	5.43
35-39	2.47	0.99	1.71	2.47	0.99	1.71	5.51	2.82	4.29
40-44	2.49	0.97	1.72	2.50	0.97	1.73	5.92	3.01	4.65
45-49	2.39	0.75	1.57	2.40	0.75	1.57	6.12	2.54	4.56
50-54	2.11	0.60	1.36	2.12	0.60	1.36	5.85	2.18	0.94
55-59	1.73	0.42	1.05	1.73	0.42	1.05	5.59	1.66	3.75
60+	0.74	0.18	0.44	0.75	0.18	0.45	2.91	0.75	1.78
Total	1.03	0.46	0.74	1.03	0.46	0.74	2.14	1.08	1.62

Analysis by rural-urban residence indicates that the majority of the population with university level of education were found in the urban areas. Urban areas recorded a proportion of 1.6% compared to 0.7% registered in rural area. The wide disparity may be as a result of the migration of university graduates from the rural areas to urban areas in search of employment. In both urban and rural areas, more males than females had attained university level of education.

Chapter 5

Projections of School Age Population

5.1 Introduction

This chapter presents the results of the projections of the population of school age in Kenya for the period 2000-2005 and 2005-2010. The school age population presented in this chapter is divided into three categories. Category one is the projections of the pre-primary school age corresponding to age group 3-5 years. Category two is the projection of the primary school age which corresponds to the age group 6-13 years while the third category is for the secondary school age that corresponds to the age group 14-17 years. The other school age group which corresponds to the university level could not be projected because there are no age restrictions for admissions. The projections are in line with those reported in Volume VII, Population Projections, and assume declining trends of fertility and take into account the effects of HIV/AIDS on mortality rates. Details of the methodologies applied are discussed in Volume VII of this series. There has been an attempt to make projections to provincial level.

5.2 Projections of Pre-Primary School Age Population

The projected pre-primary school age population (3-5 years) assuming declining fertility and including the effect of HIV/AIDS, for the years 2000, 2005 and 2010 is presented in Table 5.1. The population in this age group is expected to increase from about 2.80 million in 2000 to 2.84 million in 2005 and further to 3.01 million in the year 2010. The table further presents the sex distribution for the pre-primary school age population by province,

Table 5.1 Projections of Pre-Primary School Age (3-5 years) Population by Sex and Province

Province	2000			2005			2010		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Nairobi	212,289	113,305	98,984	233,567	120,503	113,064	267,694	132,966	134,728
Central	359,866	176,479	183,387	342,764	167,973	174,791	340,793	166,889	173,904
Coast	243,135	122,260	120,875	248,456	124,862	123,593	266,109	133,656	132,454
Eastern	448,759	217,566	231,193	434,628	210,798	223,830	440,264	213,616	226,648
N/Eastern	97,768	51,712	46,056	122,130	65,102	57,027	154,230	82,841	71,389
Nyanza	426,283	203,875	222,408	417,299	199,509	217,790	427,648	204,386	223,262
Rift Valley	684,730	342,314	342,416	710,080	353,540	356,540	771,458	382,515	388,943
Western	327,507	156,952	170,555	329,768	158,322	171,446	348,029	167,391	180,639
Kenya	2,800,338	1,384,550	1,415,788	2,838,693	1,401,767	1,436,926	3,016,226	1,487,574	1,528,652

Kenya 1999 Population and Housing Census

The 2000-05 and 2005-10 projected percentage increases for pre-primary school age population are provided in Table 5.2. The projections indicate that in the 200-05 period, the pre-primary school age population is expected to increase by 1.3% and 6.2% for the period 2005-10.

Province	2000-05 % increase	2005-10 % increase
Nairobi	10.02	14.61
Central	-4.75	-0.58
Coast	2.19	7.11
Eastern	-3.15	1.30
North Eastern	24.92	26.28
Nyanza	-2.11	2.48
Rift Valley	3.70	8.64
Western	0.69	5.54
Kenya	1.37	6.25

5.3 Projections of Primary School Age Population

The projected numbers of primary school age group (6-13 years) is expected to increase from 6.7 million in 2000 to 7.1 million in 2005 and to 7.4 million in the year 2010 as presented in Table 5.3. The table also indicates the projected primary school age population by sex and province.

Table 5.3 Projection of Primary School Age (6-13 years) Population by Sex and Province

Province	Total	2000 Male	Female	Total	2005 Male	Female	Total	2010 Male	Female
Nairobi	506,510	270,339	236,171	583,637	301,113	282,524	653,462	324,580	328,882
Central	858,620	421,069	437,551	856,499	419,731	436,767	831,901	407,389	424,513
Coast	580,106	291,706	288,400	620,840	312,006	308,834	649,593	326,264	323,329
Eastern	1,070,714	519,100	551,614	1,086,047	526,742	559,305	1,074,719	521,454	553,265
N/Eastern	233,269	123,381	109,888	305,177	162,678	142,500	376,487	202,221	174,367
Nyanza	1,017,087	486,433	530,654	1,042,747	498,533	544,214	1,043,923	498,923	545,001
Rift Valley	1633,727	816,741	816,986	1,774,346	883,425	890,921	1,883,191	933,749	949,441
Western	781,412	374,479	406,933	824,025	395,615	428,409	849,567	408,614	440,954
Kenya	6,681,445	3,303,458	3,377,989	7,093,318	3,502,731	3,590,586	7,362,844	3,631,284	3,731,559

The percentage increases for the 2000-05 and 2005-10 periods for the projected primary schoo age population indicate that this segment of the population will increase by 6.16% and 3.80% during the respective two projection periods. Table 5.4 provides the percentage increase of the reported age group for the country and by Coast province.

Province	2000-05 % increase	2005-10 % increase
Nairobi	15.23	11.96
Central	-0.25	-2.87
Coast	7.02	4.63
Eastern	1.43	-1.04
North Eastern	30.83	23.37
Nyanza	2.52	0.11
Rift Valley	8.61	6.13
Western	5.45	3.10
Kenya	6.16	3.80

5.4 Projections of Secondary School Age Population

The projected population of the secondary school age group (14-17 years) is expected to increase from 29 million in 2000 to 3.2 million in 2005 and to 3.5 million in the year 2010 as presented in Table 5.5. The table also provides the projected secondary school age population by province.

Table 5.5 Projections of Secondary School Age (14-17 years) Population by Sex and Province

Province	Total	2000 Male	Female	Total	2005 Male	Female	Total	2010 Male	Female
Nairobi	506,510	270,339	236,171	583,637	301,113	282,524	653,462	324,580	328,882
Nairobi	220,627	117,755	102,872	262,751	135,560	127,191	312,687	155,314	157,373
Central	374,000	183,410	190,590	385,592	188,961	196,631	398,072	194,939	203,133
Coast	252,684	127,062	125,622	279,499	140,464	139,036	310,836	156,120	154,716
Eastern	466,384	226,111	240,274	488,934	237,137	251,797	514,262	249,520	264,742
N/Eastern	101,608	53,743	47,865	137,389	73,237	64,153	180,152	96,764	83,388
Nyanza	443,025	211,882	231,143	469,440	224,437	245,003	499,526	238,739	260,787
Rift Valley	711,623	355,758	355,865	798,802	397,714	401,088	901,122	446,807	454,315
Western	340,369	163,116	177,253	370,972	178,104	192,868	406,525	195,525	211,000
Kenya	2,910,322	1,438,928	1,471,393	3,193,379	1,576,913	1,616,465	3,523,182	1,737,600	1,785,582

The percentage increases for the 2000-05 and 2005-10 periods for the projected secondary school age population indicate that this part of the population would increase by about 9.7% and 10.3% during the respective projection periods. Table 5.6 provides the percentage increase of the reported age group for the country and by province.

Table 5.6 Projected Percentage Increases for Secondary School Age Population by Province

Province	2000-05 % increase	2005-10 % increase
Nairobi	19.1	19.0
Central	3.1	3.2
Coast	10.6	11.2
Eastern	4.8	5.2
North Eastern	35.2	31.1
Nyanza	6.0	6.4
Rift Valley	12.3	12.8
Western	9.0	9.6
Kenya	9.7	10.3

The projected large numbers and high percentage increase of the school age population presented above have important and broad implications, especially on additional resources required to maintain the current level of schooling opportunities and for future improvements. The financing of education is already a heavy burden on national and individual resources, In view of the ongoing policy of cost sharing, the projected high increase of the school age population implies greater burden to the nation and individual families unless effective programmes and resources are put in place to address the problem of financing of education.

5.5 Projections of School Enrolments

The analysis of the census results attempted to project school enrolments using the 1989 enrolment figures and the 1999 enrolment rates. The enrolment proportion of the total population (referred to as the enrolment rates in this document) was calculated as shown in Table 5.7.

Table 5.7 School Enrolment Rates and Intercensal Changes

Province	Enrolment rates (Census results)			Enr 1999	Cen 1999	Rate 1999	Rate of Change (%)	Rate of change perYear
	Enr 1989	Cen 1989	Rate 1989					
Nairobi	178,941	2,077,167	8.6	296,257	2,143,254	13.8	60.5	6.05
Centra	882,467	3,112,053	28.4	920,639	3,724,159	24.7	-12.8	-1.28
Coast	352,944	1,829,191	19.3	423,367	2,487,264	17.0	-11.8	-1.18
Eastern	1,031,318	3,768,677	27.4	1,155,681	4,631,779	25.0	-8.8	-0.88
N/Eastern	28,781	371,391	7.7	64,999	962,143	6.8	-12.8	-1.28
Nyanza	1,000,515	3,507,162	28.5	1,233,325	4,392,196	28.1	-1.6	-0.16
RiftValley	1,201,908	4,981,613	24.1	1,527,631	6,987,036	21.9	-9.4	-0.94
Western	736,175	2,544,329	28.9	882,580	3,358,776	26.3	-9.2	-0.92
Kenya	5,413,833	22,191,583	24.4	6,504,479	28,686,607	22.7	-7.1	-0.71

The rate of increase from 1989 to 1999 was determined and an annual rate of increase calculated by dividing the rate by ten to obtain the rate of increase in a single year. Assuming that the conditions remain constant and that the rate will not change over the next 10 years, the enrolment figures were projected to the year 2010. This results are presented in Table 5.8.

Table 5.8 Projections for School Enrolment by Sex and Province

Province	2000			2005			2010		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Nairobi	314,168	167,680	146,487	421,333	217,376	203,956	565,052	280,666	284,386
Central	908,835	445,694	463,141	852,047	417,550	434,497	798,808	391,182	407,625
Coast	418,378	210,381	207,997	394,302	198,158	196,144	371,611	186,645	184,966
Eastern	1,145,485	555,350	590,135	1,095,837	531,490	564,347	1,048,341	508,655	539,686
N / Eastern	64,165	33,938	30,227	60,155	32,066	28,089	56,395	302,991	26,104
Nyanza	1,231,389	588,925	642,463	1,221,754	584,115	637,638	1,212,194	579,344	632,849
RiftValley	1,513,302	756,538	756,764	1,443,647	718,774	724,873	1,377,199	682,862	694,337
Western	874,475	419,078	455,397	835,052	400,910	434,142	797,407	383,526	413,881
Kenya	6,458,577	31,933,265	3,265,312	6,233,880	3,078,335	3,155,545	6,017,001	2,967,528	3,049,473

Chapter 6

Conclusions And Recommendations

6.1 Conclusions

6.1.1 Quality of the Data

The Kenya 1999 Population and Housing Census was done during school holidays and hence might have led to some under-enumeration of students. Some students could have reported themselves as not being in school. Persons in post-primary and secondary training institutions could have been reported to be at school, especially in cases where persons other than the students provided the information. The quality of data on education was assessed by the degree of imputations done as well as by comparisons with other existing educational statistics from other sources. The data were found to be satisfactory for planning purposes as they relate closely to the data maintained by the MOEST.

6.1.2 School Attendance

The Kenya 1999 Population and Housing Census revealed that 34.9% of the total population aged 5 years and above were attending school, while 47.2% were reported to have left school and only 17.9% were reported to have never attended school. The proportion of the population attending school had declined from 37% in 1989 to 34.9% in 1999 while the proportion that left school increased from 36% to 47% over the same period. The proportion that never attended school had, however, decreased from 24% in 1989 to 17.9% in 1999. This confirms reports from MOEST which show that enrolment in schools has been declining for the last 10 years. The proportion of males reported to be attending school and that left school was higher than that of females. On the other hand, there was a significantly higher proportion of females than males reported not to have attended school. This is an indication that the male population is more educated than the female population.

Analysis of the population attending school by school going age shows that 80.3% of the population aged 6-13 years (primary school age) were attending school. Gender parity has more or less been achieved at this age, confirming the findings of MOEST as shown in annual statistics. The population aged 14-17 years (secondary school going age) currently attending school was recorded at 68.2% while that of population aged 18-24 years (post secondary school age) was 17.5%. It is evident that gender disparities in the latter two age groups were significant which confirms the fact that gender gap in school enrolment widens as children progress from one level of education to the other.

Considering the disadvantaged districts as having below 60% of the primary school age attending school, the following were considered disadvantaged: Tana River (44.0%), Isiolo (59.3%), Marsabit (33.9%), Moyale (53.6%), Garissa (23.0%), Mandera (19.9%), Wajir (18.9%), Kajiado (60.1%), Narok (60.0%), Turkana (17.3%) and West Pokot (50.0%). The advantaged districts, on the other hand, were considered to have over 90% of primary age children attending school. Some of them include Kiambu

Kenya 1999 Population and Housing Census

(91.6%), Murang'a (93.2%), Nyeri (92.9%), Kisii North (91.8%), Rachuonyo (91.7%), Suba (92.2%), Keiyo (91.0%) and Marakwet (91.0%). The census results further show that 13.3% of the primary school age population (6-13 years) had not attended school where 13.1% of them were males and 13.5% females. The proportion of those who never went to school in age group 14-17 stood at 9.2% while that of age group 18-24 was 9.0%. The figures indicate the status of non-enrolment in the school system. The non-enrolment rates were higher for females than for males. The non-enrolment situation for population aged 6-13 years was worse mostly in arid and semi-arid districts such as Turkana (78.9%), Wajir (78.1%), Mandera (78.0%), Garissa (72.3%), Marsabit (61.0%), Samburu (58.3%) and Tana River (50.7%). These districts will need special attention if the country expects to achieve universal primary education (UPE) by the year 2015.

6.1.3 School Enrolments

The Kenya 1999 Population and Housing Census indicated that 7,341,635 persons were enrolled in school. The enrolment for males was 3,766,554 (or 51.3 %) while that of females was 3,575,081 (or 48.7%). The census revealed that 88.6% (or 6,504,479) of the total enrolment was in primary school while 11.3% (or 829,641) was in secondary school. Comparing the figures with the 1989 census, they depict a drop of 6 percentage points and 2 percentage points for primary and secondary schools, respectively. The primary school enrolment was higher than that given by MOEST by 10.9% while that of secondary schools was significantly higher by 25.4%. This may be because the MOEST does not report private schools. This notwithstanding, the census data appear to have over-enumerated enrolment because the discrepancies are unexpectedly high. However, the GER for primary school declined to 101% from 106% recorded in the 1989 census. This confirms the persistent decline in enrolments reported by MOEST over the years.

Analysis of scholastic retardation (a measure of over-age school children) shows that 29.5% of children enrolled in primary school in 1999 were supposed to have completed if they had gone to school at the correct age and never repeated a class. The crude retardation rate in the 1999 census depicts a slight increase in the retardation rate from the 29% in 1989. The scholastic retardation rate for boys (31.0%) was significantly higher than that of girls (27.9%). There was a wide gap between the scholastic retardation rates in rural and urban areas. Rural areas recorded a rate of 30.6% compared with 22.6% in urban areas, indicating that more children in rural areas tend to be over-age when they enter Std 1. At the district level, Tharaka with 39.5% recorded the highest scholastic retardation rate, followed by West Pokot with 36.7010. On the other hand, Nairobi had the lowest rate of 19.9% followed by Kiambu with 22.8%.

Further analysis of the scholastic progression rate indicates that 44.5% of the children enrolled in primary school progress to secondary level, which compares favourably with the transition rates from MOEST which have been ranging between 40% and 45% for the last 5 years. However, the rate is a drop of 4 percentage points from the 1989 progression rate which stood at 49%. Possible causes of the drop in progression rate between 1989 and 1999 could be attributed to the rise in cost of education, increased population and other socio-cultural factors. The scholastic progression rate for males of 45.1% was slightly higher than that for females (44.5%). In addition, the rate for urban residence (60.0%) was markedly higher than for rural residence (41.7%). The wide gap between the urban and rural progression rates may be partly due to the financial ability of urban households to educate their children at secondary school level as opposed to the rural ones whose level of poverty is much higher. District level analysis of scholastic progression rates indicates wide disparities. Nairobi had the highest rate of 71.2% while Kitui followed by Mwingi had the lowest rates of 29.2% and 29.4%, respectively. Sex differentials in scholastic progression rates did not reveal wide disparities in most districts.

6.1.4 Education Attainment

About 75.4% of the total population aged 5 years and over had completed some level of education in 1999. This represents an increase of 8 percentage points compared to the 1989 population census figures which indicated that 67% of the total population aged 6 years and above had completed some level of education. The proportion of males who have completed some level of education stood at 79.0% while that of females was 72.0%. The proportions of persons who had completed primary school (Std 1-4 and 5-8), secondary school (Form 1-4 and 56) and university levels of education were 57.8%, 16.8% and 0.8%, respectively. This was an improvement between 1989 and 1999. Further, the people reported not to have completed any level of education dropped from 32% in 1989 to 24.6% in 1999, a marked improvement in education attainment. The percentage of persons with no education is higher in the rural areas than in the urban areas for all age groups. The lowest percentage of persons with no education falls in the age cohort 20-24 years.

6.2 Policy Recommendations

Arising from the analysis presented in this report, it is recommended that:

- 1 Since population censuses have not been found to give reliable data for measurement of literacy rates, the CBS in collaboration with MOEST, the Department of Adult Education and other stakeholders should conduct a literacy survey every 5 years.
- 2 MOEST should formulate and implement appropriate policies that would reverse the declining access, retention and transition rates of children in school. The census clearly showed that enrolment rates and scholastic progression rates have declined since 1989, especially in arid and semi-arid districts.
- 3 MOEST should implement appropriate policies that would effectively address school wastage and over-age school children. The census revealed that scholastic retardation rate has increased since 1989, especially in arid and semi-arid districts.
- 4 MOEST should look for ways and means of increasing the school data coverage, especially for private schools. This will reduce the discrepancies identified between the census data and that of the Ministry.
- 5 A gender policy in education should be formulated and implemented with immediate effect to reverse the existing gender disparities in most of the areas of education.

6.3 Recommendations for Future Census Undertaking

In order to improve education data in future census undertakings, the following recommendations need to be considered:

- 1 There is need to review the training methodology of enumerators in order to minimise under-enumeration of students and eliminate confusion between questions on the highest level of education reached and the highest level completed. Enumerators should be thoroughly trained and tested as well as supervised effectively.
- 2 The census should not limit the questions on education to persons aged 5 years and above because this does not cover all the children in early childhood development (ECD). ECD caters for children in baby class, nursery and pre-primary school who are supposed to be in age group 3-5 years.
- 3 There is need to actively involve MOEST in the census exercise, and especially in the design of the census questionnaire

References

- CBS.** (1998). Kenya Demographic and Health Survey, 1998. Nairobi, Central Bureau of Statistics and Population Council.
- CBS.** (2000). Kenya Multiple Indicator Cluster Survey. Nairobi, Central Bureau of Statistics and UNICEF.
- CBS.** (2000). Second Report on Poverty in Kenya, Vol. I and II. Nairobi, Central Bureau of Statistics. HRSSD and GTZ
- RoK.** (1996). Kenya 1989 Population and Housing Census Volume VIII Analytical Report on Education. Nairobi, Central Bureau of Statistics, Republic of Kenya.
- RoK.** (2001). Kenya 1999 Population and Housing Census Volume I and Volume II. Nairobi, Central Bureau of Statistics, Republic of Kenya.
- RoK.** (n.d). 1979 Population Census Volume II, Analytical Report. Nairobi, Central Bureau of Statistics, Republic of Kenya.
- UNESCO.** (1999) Statistical Year Book. New York: United Nations Educational, Scientific and Cultural Organization.



Population and Housing Census - 24/25 August 1999

Province	District	Household No.			
		Household Totals:	Males	Females	Total:

Serial Number of Form: 3 3 4 2 9 4 1

[illegible]

Appendix: List of Contributors

Main Contributors to the Kenya 1999 Population and Housing Census
Analytical Reports

<i>Name and Institution</i>	<i>Contribution</i>
Mr. David S. O. Nalo Director Central Bureau of Statistics	Project Administration and Coordination
Dr. Coulibaly Sidiki UNFPA Country Representative	Financial Support
Dr. John Blacker London School of Hygiene and Tropical Medicine	Technical Advisor and Co-Author of Population Dynamics Monograph
Prof. John Oucho University of Botswana	Technical Advisor and Co-Author of Population Dynamics Monograph
Dr. Michael J. Levin USAID / BUCEN	General Technical Assistance in Data Processing and Analysis
Dr. Caribert Irazi USAID / BUCEN	Trainer/Technical Adviser on Demographic Analysis Techniques
Ms Eva Ndavu AMREF	Editorial Consultant
Mr. Philip Nzioka Creative Direction	Document Formatting, Artwork and Cover Design
Mr. Jean Marc Hie UNFPA Country Support Team	Data Processing Technical Adviser
Mr. Bogale Demissie UNFPA Country Support Team	Data Processing Technical Adviser
Mr. Zablon Felix Muga Consultant	Local Area Network Maintenance
Prof. E. H. O. Ayiemba University of Nairobi	Co-Author of Fertility and Nuptiality Monograph
Mr. Collins Opiyo Central Bureau of Statistics	Co-Author of Fertility and Nuptiality Monograph and assistance with overall data editing

<i>Name and Institution</i>	<i>Contribution</i>
Ms Mary Muyonga Population Studies and Research Institute University of Nairobi	Student/Trainee Analyst and Co-Author of Fertility and Nuptiality Monograph
Mr. Ben Obonyo Consultant	Co-Author of Mortality Monograph and assistance with overall data editing
Mr. Fredrick Otieno Central Bureau of Statistics	Co-Author of Mortality Monograph
Mr. Lawrence Kanampiu Population Studies and Research Institute University of Nairobi	Student/Trainee Analyst and Co-Author of Mortality Monograph
Mr. George Odipo University of Nairobi	Co-Author of Migration and Urbanisation Monograph
Mr. Jackson Cheruiyot Central Bureau of Statistics	Co-Author of Migration and Urbanisation Monograph
Mr. Paul Ong'ayi Obino Population Studies and Research Institute University of Nairobi	Student/Trainee Analyst and Co-Author of Migration and Urbanisation Monograph
Dr. Paul Kizito National Council for Population and Development	Co-Author of Population Projections Monograph and assistance with overall data editing
Mr. Francis M. Munene Central Bureau of Statistics	Co-Author of Population Projections Monograph
Mr. Fredrick Gitahi Central Bureau of Statistics	Co-Author of Education Monograph
Mr. Joshua M. Musyimi Central Bureau of Statistics	Co-Author of Education Monograph
Mrs. Juliana Nzomo Ministry of Education	Co-Author of Education Monograph
Mr. Jimmie Katabwa Central Bureau of Statistics	Co-Author of Labour Force Monograph
Mr. Kamotho Manyara Ministry of Labour and Human Resource Development	Co-Author of Labour Force Monograph

<i>Name and Institution</i>	<i>Contribution</i>
Mr. Thomas Ogutu Housing Department Ministry of Roads and Public Works	Co-Author of Housing Monograph
Mr. Silas Opiyo Central Bureau of Statistics	Co-Author of Housing Monograph
Ms Margaret Ndwiga University of Nairobi	Co-Author of Gender Dimensions Monograph
Ms Rosemary U. Kondani Central Bureau of Statistics	Co-Author of Gender Dimensions Monograph
Mr. Mathews O. Onyango Population Studies and Research Institute University of Nairobi	Student/Trainee Analyst and Co-Author of Gender Dimensions Monograph
Mr. Titus Katembu Office of the President Efficiency Monitoring Unit	Edited Education Monograph
Mr. Peter W. Nyongesa Central Bureau of Statistics	Programming and Tabulation
Mr Edward G. Mungai Central Bureau of Statistics	Programming and Tabulation
Mr Sammy Kinyanjui Central Bureau of Statistics	Programming and Tabulation
Mr. Ohmond D. W. Omenya Central Bureau of Statistics	Programming and Tabulation
Mr. Moses Okelo Central Bureau of Statistics	Logistics
Ms Jane Kamau Central Bureau of Statistics	Secretarial Services
Ms Rose A. Owuor Central Bureau of Statistics	Secretarial Services
Mr. Manasse Kadenge Central Bureau of Statistics	Driver
Mr. Charles Onyango Ayot Central Bureau of Statistics	Driver

[illegible]

GIS and Cartography by CBS ·