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**KENYA POPULATION AND  
HOUSING CENSUS  
1999**

**THE LABOUR FORCE  
MONOGRAPH**

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# Contents

	Pg No
List of Tables .....	iii
List of Figures .....	iv
List of Acronyms .....	v
Foreword .....	vi
Minister for Planning .....	vi
Ministry of Finance and Planning .....	vi
Acknowledgement .....	vii
Executive Summary .....	viii
Chapter 1: Introduction .....	1
1.1 Background .....	1
1.2 Scope and Coverage .....	1
1.3 Analytical Framework .....	2
Chapter 2: Activity Status of the Kenyan Population .....	5
2.1 Activity Status of the Population .....	5
2.2 Economically Active Population .....	7
2.3 Participation Rates .....	13
2.4 Economically Inactive Population .....	16
Chapter 3: The Employed Population .....	21
3.1 Working Population Aged 5 Years and Above .....	21
3.2 Working Population Aged 15–64 Years .....	26
3.3 Employment Rates .....	31
3.4 Working Children .....	32
Chapter 4: The Unemployed Population .....	38
4.1 Unemployment Trends .....	38
4.2 Characteristics of the Unemployed .....	38
4.3 Unemployment Rates .....	41
Chapter 5: Conclusions and Recommendations .....	46
5.1 Conclusions .....	46
5.2 Data Quality .....	46
5.3 Recommendations .....	47
References .....	48

Appendix 1 The Kenya 1999 Population and Housing Census Questionnaire .....	50
Appendix 2 Annex Tables.....	52
Appendix 5: List of Contributors.....	58

## List of Tables

	Pg. No
Table 2.1: Distribution of Population aged 5 Years and Above by Activity Status, 1999 .....	7
Table 2.2: Age Distribution of the Economically Active Population Aged 5 Years and Above, 1989 and 1999 .....	8
Table 2.3: Percentage Distribution of the Economically Active Population Aged 15–64 Years, 1989 and 1999 .....	9
Table 2.4: Sex Ratio and Percentage Distribution of Economically Active Population Aged 15-64 Years, 1989 and 1999 .....	11
Table 2.5 Percentage Distribution of the Labour Force by Educational Attainment, 1989 and 1999 .....	13
Table 2.6: Labour Force Participation Rates for Population Aged 15–64 Years by Sex and Age Group, 1989 and 1999 .....	14
Table 2.7 Labour Force Participation Rates for Persons Aged 15–64 years by Region and Sex, 1999 .....	16
Table 2.9 Distribution of Inactive Population Aged 5 Years and Above by Age Group, 1999 .....	18
Table 2.10 Percentage Distribution of Inactive Population Aged 5 Years and Above, 1999 .....	20
Table 3.1: Employed Persons aged 10 Years and Above by Sex and Rural-Urban Residence, 1989 and 1999 .....	21
Table 3.2 Working Persons Aged 5 Years and above by Sex and Rural-Urban Residence, 1999 .....	22
Table 3.3 Distribution of Employed Persons Aged 5 Years and Above by Province and Sex, 1999 .....	23
Table 3.4: Percentage Distribution of the Employed Population Aged 5 Years and Above by Type of Work, 1999.....	25
Table 3.5 Gender Proportions of Employed Persons Aged 5 Years and Above by Type of Work, 1999 .....	26
Table 3.6: Distribution of Working Population Aged 15–64 by Sex and Rural-Urban Residence, 1989 and 1999.....	27
Table 3.7: Percentage Distribution of Employed Persons aged 15–64 years by Sex and Provinces, 1999 .....	28
Table 3.8 Percentage Distribution of Employed Persons Aged 15–64 Years by Type of Work, 1999.....	29
Table 3.9 Percentage Distribution of the Working Population Aged 15–64 Years by Age Group, 1989 and 1999 .....	30
Table 3.10 Working Population Aged 15–64 Years by Educational Attainment, 1999 .....	31
Table 3.11: Wage and Non-wage Employment Rates (%) for the Working Population Aged 15–64 Years by Rural-Urban Residence, 1999.....	32
Table 3.12: Working Children Aged 5–17 Years by Rural-Urban Residence, 1999.....	33
Table 3.13: Provincial Distribution of Working Children Aged 5–17 Years by Sex, 1999 .....	34
Table 3.15: Schooling Status of the Working Children Aged 5–17 Years by Sex, 1999.....	36
Table 4.1: Age Distribution of the Unemployed Population Aged 15–64 Years, 1999 .....	40
Table 4.2: Distribution of the Unemployed Population Aged 15–64 Years by Sex and Rural-Urban Residence, 1999 .....	41
Table 4.3: Unemployed Population Aged 15–64 Years by Educational Attainment, 1999.....	41
Table 4.4 Unemployment Rates for Population Aged 15–64 Years by Region and Sex, 1989 and 1999.....	42
Table 4.5 Unemployment Rates for Population Aged 15–64 Years by Age and Sex, 1989 and 1999 .....	44
Table 4.6 Unemployment Rates for Population Aged 15–64 years by Educational Attainment, 1999 .....	45
Table 2-1: Employed Population Aged 15-64 by Sex, District and Rural-Urban Residence, 1999 .....	52
Table 2-2: Unemployed Population Aged 15-64 by Sex, District and Rural-Urban Residence, 1999 .....	54
Table 2-3: Unemployment Rates for Population Aged 15-64 by Sex, District and Rural-Urban Residence, 1999 .....	56

## List of Figures

	Pg No.
Figure 1: Labour Force Framework – The 1982 International Conference Of Labour Statisticians (Icls 1982).....	4
Figure 2.1: Activity Status Of The Population Aged 5 Years And Above, 1999 .....	6
Figure 2.2: Distribution Of Economically Active Population, 1989 And 1999 .....	10
Figure 2.3: Distribution Of The Labour Force By Province, 1989 And 1999 .....	11
Figure 2.4: Participation Rates By Age Group, 1989 And 1999 .....	15
Figure 3.1: Distribution Of Working Population By Age, 1989 And 1999 .....	30
Figure 4.1: Unemployment Rates By Province, 1989 And 1999 .....	43
Figure 4.2: Unemployment Rates By Age Group, 1989 And 1999.....	44

## List of Acronyms

CBS	Central Bureau of Statistics
DFID	Department for International Development
ICLS	International Conference of Labour Statisticians
ICEG	International Centre for Economic Growth
ILO	International Labour Organization
MICS	Multiple Indicator Cluster Survey
MSE	Micro and Small Enterprise
SNA	System of National Accounts
UN-ECA	United Nations Economic Commission of Africa
UNFPA	United Nations Fund for Population
UNICEF	United Nations Children's Fund

## 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 emphasized 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 urbanization, 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 analyzing 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 the labour force data collected by the 1999 Population and Housing Census. The analysis shows that urban unemployment problem in Kenya has worsened, rising from 13.0% in 1989 to 17.7% in 1999. Similarly, 36.5% of the children aged 5-17 years were working, reflecting a presence of child labour in a country with high unemployment levels. Other main findings include increased participation of females in the labour force, and the declining share of wage employment in the total workforce.

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## 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**  
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*Central Bureau of Statistics*

## Executive Summary

Programmes and strategies geared towards poverty reduction must of necessity focus on the production of goods and the provision of services. Human resources, whose planning and mobilisation require timely and reliable statistics on the labour force characteristics, are central in the production process.

In this respect, the Kenya Population and Housing Census of 1999 collected labour force information that is analysed in this volume. In addition to providing benchmark data, the results update available labour force data. They also provide basis for constructing trends and making projections of employment and unemployment.

The census results show that 15.7 million (65.1%) out of the 23.8 million persons aged 5 years and above in 1999 were economically active. The age-group 20-24 years absorbed the largest proportion (10.1%) of the economically active population, with the proportion declining along the age spectrum.

The economically active population aged 15-64 years expanded by 58.2% within a span of 10 years, from 7.8 million in 1989 to 12.4 million in 1999. Overall, there were slightly more males; but females slightly outnumbered males in the earlier ages of 15-24 years. Majority of the economically active population (77.3%) were residing in rural areas. Rift Valley Province contributed the highest share (21.4%) of the active population, while North Eastern Province had the lowest share of 1.4%.

Educational achievement of the economically active population aged 15-64 years improved over the ten-year period, with the proportion with no formal education declining from 33.6% in 1989 to 16.9% in 1999. Also, the proportion with university level of education improved from 0.7% to 1.3% over the same period. Overall, majority of the economically active population were primary school leavers, and their proportion rose from 47.1% in 1989 to 55.0% in 1999.

The overall participation rate for the population aged 15-64 years increased from 75.7% in 1989 to 82.6% in 1999. The age distribution shows that participation rates were lowest for the largely school-going ages of 15-19 years, but increased along the age spectrum to a peak of 91.6% in 1999 for the age group 45-49.

Labour force participation rates for females were generally lower than those for males in both 1989 and 1999. However between 1989 and 1999, participation rates for females increased faster than those for males across all age groups.

The number of employed persons aged 5 years and over was 14.5 million in 1999, majority (74.7%) being in self-employment. About 83.0% of the working persons were residing in rural areas. Rift Valley Province had the highest proportion of working population at 23.7%.

The employed population aged 15-64 years was 11.1 million persons, giving a national employment rate of 89.9%. About 52.4% of the employed persons in this age bracket were males. Rural areas, which hosted over 70.0% of the Kenyan population, absorbed 79.2% of the employed persons. There were slightly more working females (50.2%) than males in rural areas. Conversely, the proportion of working females in urban areas was lower at 37.6% compared to 62.4% for working males. The provinces of Rift Valley, Eastern and Central accounted for the highest share of employed persons aged 15-64 years.

Majority (69.0%) of the working population aged 15-64 years were self-employed, out of which 54.4% were engaged in family agricultural holdings, mainly in rural areas. Paid employees accounted for only 31.0% of the workforce and were largely in urban areas. Only 2.2% of the working population aged 15-64 years were either on leave or sick-off

An estimated 36.5% of the 10.0 million children aged 5-17 years were working in 1999. Overall, 53.1% of the working children were boys, but girls contributed the highest proportion of working children in urban areas, mainly as paid employees. Majority of the working children (41.7%) were in the age bracket 10-14 years, while 26.8% were aged 5-9 years. About 81.9% of the working children were not attending school.

Working children were largely engaged as unpaid family workers, where 84.0% worked in family farms or agricultural holdings in the rural areas. About 8.3% of the working children were in wage employment, mainly in urban areas. Girls contributed the highest proportion of wage employees in urban areas, indicating a high incidence of girl domestic servants in urban households.

The overall unemployment rate for the population aged 15-64 years increased from 6.5% in 1989 to 10.1% in 1999. Like wise, urban unemployment rate increased from 13.0% in 1989 to 17.7% in 1999. Unemployment rate in rural areas was less acute, but rose from 4.9% in 1989 to 7.9% in 1999. Majority of the unemployed population (31.8%) was youth aged 15-24 years.

Females accounted for 57.1% of the unemployed. Accordingly, their unemployment rate was higher than for males at the national level. The differentials are more pronounced in urban areas, where female unemployment rate was 23.6%, which was 10.0 percentage points above that for males. This is a reflection of increased female participation in the labour market, especially in the urban areas.

There were significant disparities in unemployment rates across the provinces. In 1999, provinces with large urban populations such as Nairobi, North Eastern and Coast, had high unemployment rates of 22.0%, 19.6% and 17.2%, respectively.

The majority of the unemployed population (51.7%) had attained primary level of education. Although only 2.0% of persons with university level education were unemployed in 1999, their unemployment rate was high at 11.2%.

Lessons learnt in collecting and analysing the labour force data indicate that the quality of labour force data can be improved in future censuses by:

- i. Including at least four labour force questions, that is: (a) economic activity, (b) occupation, (c) industry, and (d) hours worked. This will facilitate full analysis of the labour force data and provide indicators that would fully identify phenomena such as under-employment and child labour.
- ii. Domesticating some global labour force concepts for ease of administration of labour force questions. Of special concern is the concept of "work" that is based on the definition of "economic activity" according to the System of National Accounts (SNA) frontiers of production. Application of this concept arbitrarily tends to classify all homemakers and housewives under the economically inactive population.
- iii. Modifying the concept of "active job search", which does not make much sense in the case of persons seeking self-employment in developing countries. Its application tends to restrict job

searchers to wage employment, and hence underestimates the level of under employment. Also active job search is minimal in countries without developed job-search systems.

- iv. Extending capacity building to include training, especially in the use of the scanning method of data capture.

# **Chapter 1**

## **Introduction**

### **1.1 Background**

Statistics on the labour force characteristics of the population are some of the indicators required for measuring the extent of available human resources and for the purpose of human resource planning, formulating and monitoring employment policies and programmes, income-generating activities, vocational training and other similar programmes. Such statistics also facilitate the measurement of the relationships between employment, income and other social and economic characteristics.

Comprehensive statistics of the economically active population (labour force) are traditionally collected through labour force sample surveys. In Kenya, two household-based labour force sample surveys were conducted in 1986 and 1988/9 covering urban and rural areas, respectively. The latest household-based labour force sample survey, which covered both urban and rural areas of the country, was conducted between December 1998 and January 1999. The timing was opportune for comparability of these survey data with the labour force data collected through the Kenya 1999 Population and Housing Census.

However, the precision of sample survey results is reduced by sampling errors. This calls for periodic censuses (an enumeration taken for the entire population at or about the same time) to provide benchmark information for updating data generated by sample surveys, and also for facilitating projections. In this regard, the Kenya 1989 Population and Housing Census collected labour force data for the first time in the history of census taking in the country. Again, the Kenya 1999 Population and Housing Census included a question on labour force participation in its questionnaire (see Appendix 1) with the key objectives of updating available information on the labour force of Kenya and providing a basis for making projections.

### **1.2 Scope and Coverage**

Three questions on the labour force were asked from all persons aged 10 years and above during the Kenya 1989 Population and Housing Census. They sought information on type of activity the respondent was involved in during the 7 days preceding the census night, respondent's occupation and employment status. However, some problems encountered in processing labour force data necessitated analysing only the activity status of the population.

Lessons learned from analysing the 1989 census data helped in simplifying the labour force question in the 1999 census, whereby only one question pertaining to labour force activity status was asked. Thus, all household members aged 5 years and above were asked what they were mainly doing during the previous 7 days. Responses to this question (column P30) were coded under the following options:

Code 01	Worked for pay
Code 02	On leave/sick leave
Code 03	Worked on own/family business
Code 04	Worked on own/family agricultural holding
Code 05	Seeking work
Code 06	No work available
Code 07	Full-time student
Code 08	Retired
Code 09	Incapacitated
Code 10	Homemaker
Code 11	Other

### 1.3 Analytical Framework

The method used in analysing the results presented in this monograph is the labour force framework adopted by the 1982 International Conference of Labour Statisticians (ICLS) (Hussman et al 1982:5). The framework (Figure 1.1) categorises the population into two mutually exclusive classes: the economically active and the economically inactive. The economically active population (the labour force) consists of employed as well as unemployed persons. For this analysis, the employed were persons who reported to have worked during the 7 days preceding the census night under any of the following conditions:

- Worked for pay (option 01),
- Was on leave or sick off (option 02),
- Worked on own/family business (option 03),
- Worked on own/family agricultural holding (option 04).

The unemployed were persons who reported that they had no work but were looking for work (option 05), plus persons who were neither working nor looking for work because no work was forthcoming (option 06). This latter group is also referred to as "discouraged workers".

The inactive population covered those members of the population who were not available for work because they were full-time students (option 07), retired (option 08), incapacitated (option 09), homemakers (option 10) or had other reasons (option 11).

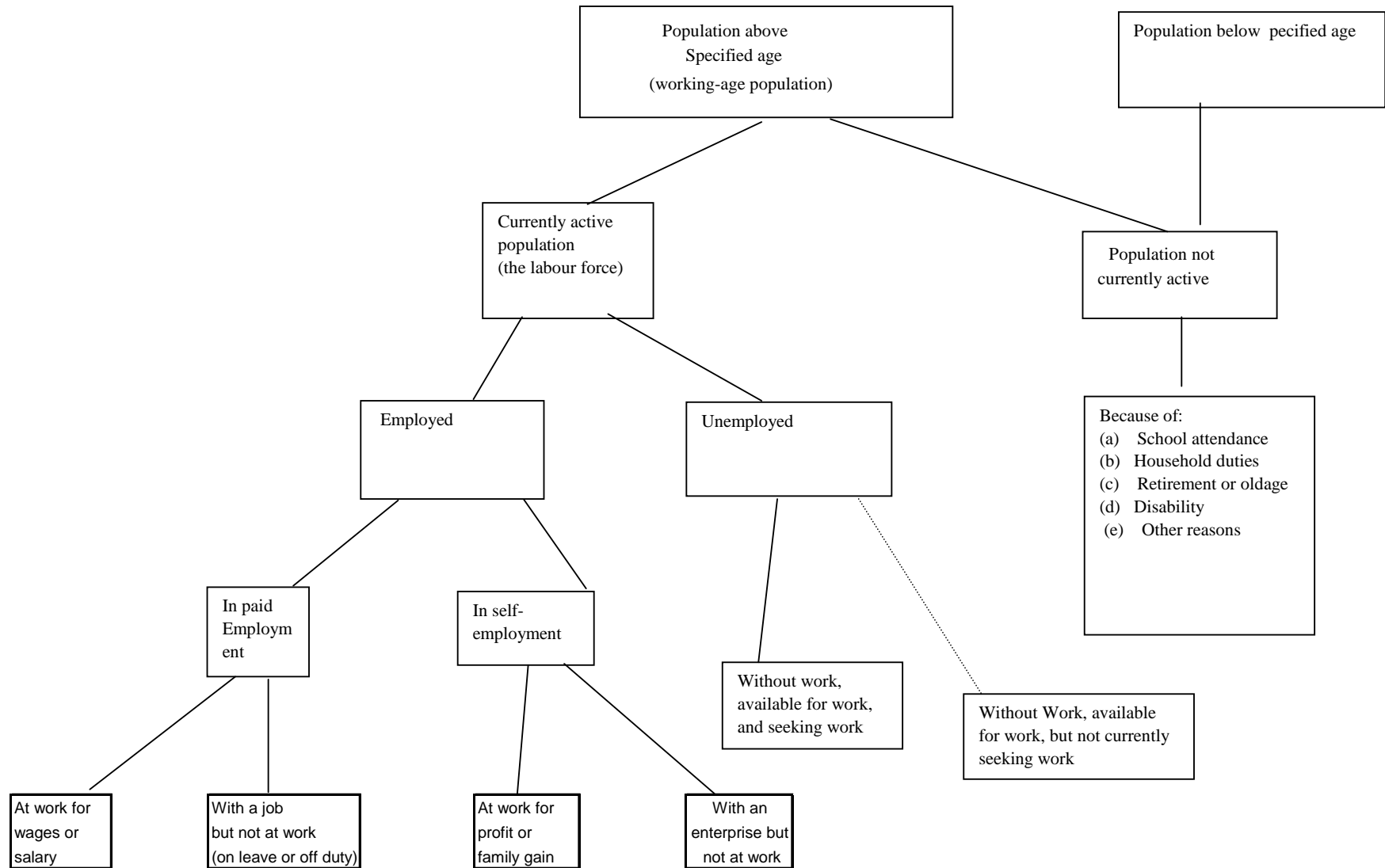
Responses for options 01-06 are analysed in this monograph to determine the size and composition of the labour force. The analysis is enriched by cross-tabulating responses to the labour force question with information on age, sex and educational attainment. The spatial domains of presentation are rural/urban, province and district. The activity status of the population is determined with respect to a one-week reference period (currently active population).

Age is a crucial determinant of the size of the labour force. The Kenya 1989 Population and Housing Census took persons aged 10 years and above to constitute the labour force. However,

the age limit for the Kenya 1999 Population and Housing Census was lowered to include persons aged 5 years and above with a view to estimating the size and extent of child labour. It should be noted that the census set no upper age limit in collecting labour force particulars. Nonetheless, most of the analysis in this volume is based on the standard working-age population aged 15–64 years so as to facilitate international comparisons, as well as comparison with labour force data previously collected in Kenya. A short analysis of the working children aged 5–17 years is made with a view to estimating the child labour situation in Kenya.

This was the second time to collect labour force data through population censuses. Therefore, where compatible data are readily available, trends have been constructed by using results of the 1989 census. Comparisons are also made with labour force data collected by other recent surveys.

**Figure 1: Labour Force Framework - The International Conference of Labour Statisticians (ICLS 1982)**





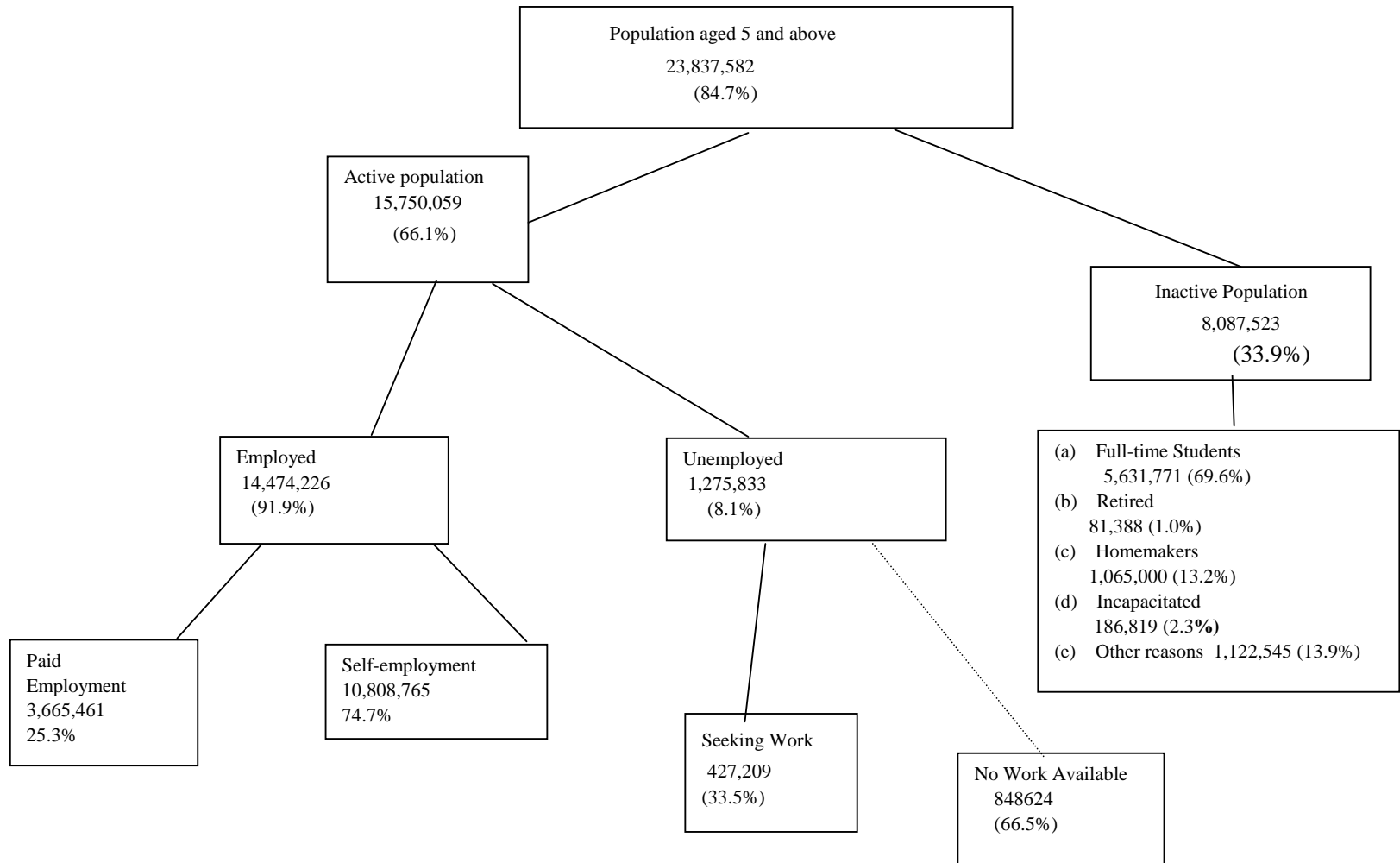
## Chapter 2: Activity Status of the Kenyan Population

This chapter presents the activity status of the population by analysing responses to the 11 options of the labour force question posed in column P30 of the Kenya 1999 Population and Housing Census questionnaire. The analysis first presents the labour force particulars for the target population who responded to the labour force question during the census, that is the population aged 5 years and above. The analysis then focuses on the standard working age population - those aged 15–64 years - by presenting labour force participation rates. Emphasis is put on the economically inactive population, since this category is not analysed in the subsequent chapters.

### 2.1 Activity Status of the Population

Figure 2.1 shows that 15.8 million persons or 66.4% of the 23.8 million persons aged 5 years and above were reported to be economically active. The economically active population was composed of 14.5 million employed and 1.3 million unemployed persons. Most of the employed persons (74.7%) were self-employed, i.e., working for profit or family gain and receiving no salaries or wages in either family businesses or family agricultural holdings. Only 33.5% of the unemployed population reported to have actively sought work during the reference week. The rest of the population (33.9%) were economically inactive, where the majority were full-time students.

**Figure 2.1: Activity Status of the Population Aged 5 Years and Above, 1999**



As a reflection of the overall age distribution, Table 2.1 shows a high concentration of the employed population in ages 5-39 years. The same was observed for the inactive population, because the majority were fulltime students. No children in the age groups 5–9 and 10–14 years were reported to be unemployed. The significant number of employed persons in the age groups 5–9 and 10–14 years gives an indication of the presence of child labour in Kenya. With the exception of the open age group 65 years and above, a declining trend of the employed and unemployed persons from the peak at age group 20–24 is observed through the older population. This approximates the age structure of the population enumerated in 1999.

**Table 2.1: Distribution of Population aged 5 Years and Above by Activity Status, 1999**

Age	Total	Employed	Unemployed	Inactive
Total	23,837,582	14,474,226	1,275,833	8,087,523
5 - 9	3,929,784	1,153,154	0	2,776,630
10 - 14	3,971,601	1,525,189	0	2,446,412
15 - 19	3,369,652	1,700,482	410,165	1,259,005
20 - 24	2,808,446	1,976,136	374,217	458,093
25 - 29	2,313,452	1,859,312	193,735	260,405
30 - 34	1,674,316	1,428,014	85,687	160,615
35 - 39	1,413,907	1,229,281	55,322	129,304
40 - 44	1,028,817	900,547	36,543	91,727
45 - 49	837,894	737,795	29,535	70,564
50 - 54	683,029	590,886	31,413	60,730
55 - 59	460,666	388,502	18,353	53,811
60 - 64	409,309	333,816	15,862	59,631
65+	936,709	651,112	25,001	260,596

## 2.2 Economically Active Population

The economically active population, or the labour force, consists of the employed and the unemployed persons. The employed were persons who reported to have worked and those holding jobs but absent from their jobs (on leave or sick) during the 7 days preceding the census night. The unemployed were persons who reported to be without work but available and looking for work and those available for work but not looking for work, either because they had tried in vain to secure work during the recent past (discouraged workers) or they had been temporarily laid off and had no formal job attachment.

### 2.2.1 Population Aged 5 Years and Above

As shown in Table 2.2, the economically active population aged 5 years and above was concentrated within the youthful population aged 15–29 years, with the age group 20–24 years absorbing the largest share of 14.9%, followed by the neighbouring age groups of 15–19 and 25–29 years. A declining trend in the percentage of the labour force was observed from the peak at age group 20–24 years down through the older population. Comparison with the 1989 census results shows concentration in the same ages and a gradual decline along the age spectrum. There was, however, a slight shift across the age cohorts with respect to proportions of the active

population over the 10-year period. Thus, the shares of the population aged 10–19 years in the labour force increased in 1999 but declined for other age groups.

**Table 2.2: Age Distribution of the Economically Active Population Aged 5 Years and Above, 1989 and 1999**

Age Group	1989		1999	
	Number	% of total	Number	% of total
Total	9,290,969	100.0	15,750,059	100.0
5-9	-	-	1,153,154	7.3
10 - 14	896,569	9.6	1,525,189	9.7
15 - 19	1,047,903	11.3	2,110,647	13.4
20 - 24	1,411,519	15.2	2,350,353	14.9
25 - 29	1,383,273	14.9	2,053,047	13.0
30 - 34	1,016,515	10.9	1,513,701	9.6
35 - 39	815,936	8.8	1,284,603	8.2
40 - 44	651,114	7.0	937,090	5.9
45 - 49	505,361	5.4	767,330	4.9
50 - 54	423,292	4.6	622,299	4.0
55 - 59	313,297	3.4	406,855	2.6
60 - 64	265,961	2.9	349,678	2.2
65+	560,229	6.0	676,113	4.3

- Indicates that information for the age group 5-9 years was not collected by the 1989 census.

## 2.2.2 Population Aged 15–64 Years

As shown in Table 2.3 and Figure 2.2, the economically active population aged 15–64 years was estimated at 12.4 million persons, quite above the 7.8 million persons recorded during the 1989 census. The total labour force was composed of slightly more males (51.4%) than females (48.6%). The corresponding proportions for 1989 were 52.1% and 47.9%, respectively. This shows some increase in female participation in the labour force over the last 10 years.

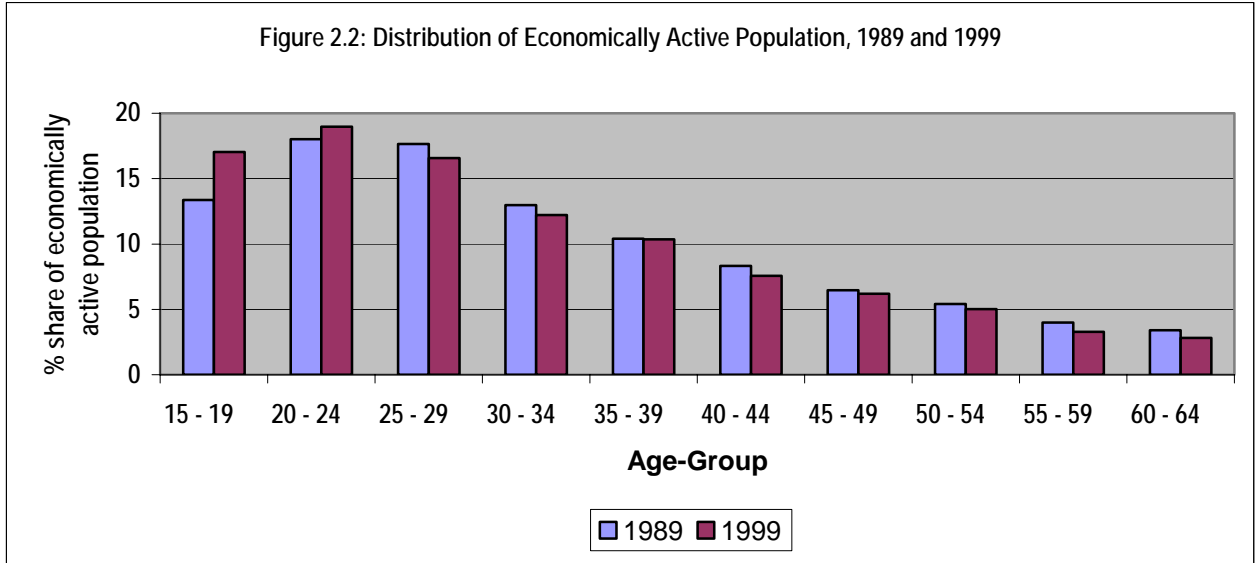
Analysis of sex ratios reveals gender differentials in labour force participation across the age cohorts. The tabulated sex ratios (ratios of males to females) are computed by simply dividing the number of males by number of females and multiplying by 100. A ratio greater than 100 indicates males exceeded females while a ratio less than 100 show that females outnumbered males.

Females outnumbered males in the labour force at the ages of 15–24 years in both 1989 and 1999. Also, the census revealed that females slightly outnumbered males in the last age group 60–64 years, with sex ratios of 99.9 in 1999. Sex ratios for the other age cohorts were above equality in both 1989 and 1999. These findings explain the noted increase in female participation in the labour force, indicating that females are bridging the gap in labour force participation.

**Table 2.3: Percentage Distribution of the Economically Active Population Aged 15–64 Years, 1989 and 1999**

Age	Sex	1989			1999		
		Number	%	Sex Ratio*	Number	%	Sex Ratio*
Total	Total	7,834,171	100.0	109.0	12,395,603	100.0	105.9
	Male	4,084,963	52.1		6,375,496	51.4	
	Female	3,749,208	47.9		6,020,107	48.6	
15 – 19	Total	1,047,903	13.4	97.9	2,110,647	17.0	96.4
	Male	518,265	12.7		1,035,974	16.2	
	Female	529,638	14.1		1,074,673	17.9	
20 – 24	Total	1,411,519	18.0	97.8	2,350,353	19.0	98.0
	Male	697,821	17.1		1,163,376	18.2	
	Female	713,698	19.0		1,186,977	19.7	
25 – 29	Total	1,383,273	17.7	112.2	2,053,047	16.6	109.7
	Male	731,521	17.9		1,073,928	16.8	
	Female	651,752	17.4		979,119	16.3	
30 – 34	Total	1,016,515	13.0	120.6	1,513,701	12.2	115.0
	Male	555,794	13.6		809,693	12.7	
	Female	460,721	12.3		704,008	11.7	
35 – 39	Total	815,936	10.4	117.8	1,284,603	10.4	109.7
	Male	441,366	10.8		671,990	10.5	
	Female	374,570	10.0		612,613	10.2	
40 – 44	Total	651,114	8.3	117.3	937,090	7.6	113.9
	Male	351,458	8.6		498,968	7.8	
	Female	299,656	8.0		438,122	7.3	
45 – 49	Total	505,361	6.5	110.8	767,330	6.2	113.0
	Male	265,637	6.5		407,099	6.4	
	Female	239,724	6.4		360,231	6.0	
50 – 54	Total	423,292	5.4	113.2	622,299	5.0	114.9
	Male	224,770	5.5		332,744	5.2	
	Female	198,522	5.3		289,555	4.8	
55 – 59	Total	313,297	4.0	109.1	406,855	3.3	103.6
	Male	163,469	4.0		206,978	3.2	
	Female	149,828	4.0		199,877	3.3	
60 – 64	Total	265,961	3.4	102.9	349,678	2.8	99.9
	Male	134,862	3.3		174,746	2.7	
	Female	131,099	3.5		174,932	2.9	

\*Males per 100 Females



### 2.2.3 Spatial Distribution

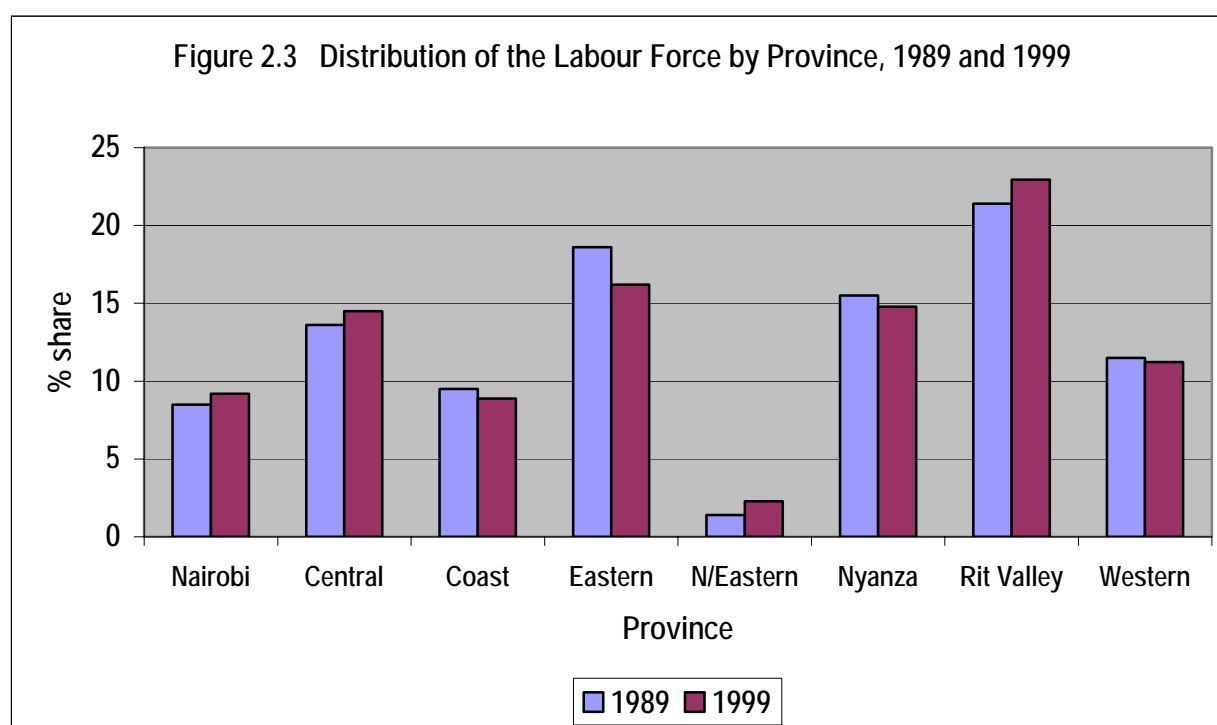
Table 2.4 and Figure 2.2 show that the economically active population aged 15-64 years expanded by 58.2% between 1989 and 1999. The growth was higher in urban areas (75.0%) than in rural areas (53.9%). Consequently, the proportion of the economically active population in rural areas declined from 79.4% in 1989 to 77.3% in 1999. This implies that either there has been a gradual shift of the economically active population from rural to urban areas during the intervening period, or the definition of urban areas used in analysing the 1989 population and housing census data was changed in 1999.

There was also a notable variation between the rural and urban areas with respect to gender participation, as indicated by labour force sex ratios. In rural areas, the sex ratios rose from 94.0 in 1989 to 96.3 in 1999. The converse held for urban areas where the ratios declined from 195.0 in 1989 to 146.8 in 1999. These trends indicate that females are bridging the gender imbalance in rural-urban migration in search of better opportunities despite the observed male domination in search of job opportunities. These findings are consistent with earlier studies on migration and urbanisation (Oucho 1988).

**Table 2.4: Sex Ratio and Percentage Distribution of Economically Active Population Aged 15-64 Years, 1989 and 1999**

Region	1989			1999			% Change 1989-99
	Number	Sex Ratio*	% Share	Number	Sex Ratio*	% Share	
Kenya	7,834,171	109.0	100.0	12,395,603	105.9	100.0	58.2
Rural	6,223,891	94.0	79.4	9,577,895	96.3	77.3	53.9
Urban	1,610,280	195.0	20.6	2,817,708	146.8	22.7	75.0
Nairobi	665,905	219.0	8.5	1,140,342	162.4	9.2	71.2
Central	1,065,447	104.0	13.6	1,796,266	99.3	14.5	68.6
Coast	744,246	127.0	9.5	1,100,080	118.0	8.9	47.8
Eastern	1,457,156	92.0	18.6	2,008,225	96.8	16.2	37.8
N/Eastern	109,678	357.0	1.4	283,320	202.1	2.3	158.3
Nyanza	1,214,297	80.0	15.5	1,832,084	83.8	14.8	50.9
Rift Valley	1,676,512	122.0	21.4	2,844,305	114.4	22.9	69.7
Western	900,930	89.0	11.5	1,390,981	87.5	11.2	54.4

\* Males per 100 Females



As the most populous province, Rift Valley had the highest number of economically active population aged 15–64 years; its share increased from 21.4% in 1989 to 22.9% in 1999. Eastern and Nyanza provinces followed, but with declining shares, with the former declining from 18.6% in 1989 to 16.2% in 1999, and the latter from 15.5% in 1989 to 14.8% in 1999. Eastern Province also recorded the smallest growth of labour force among the eight provinces of 37.8% between 1989 and 1999. At the other extreme, the sparsely populated North Eastern province absorbed the smallest share of the total labour force but with an improvement from 1.4% in 1989 to 2.3% in 1999. Also, its labour force registered the highest growth among the eight provinces of 158.3%

between 1989 and 1999. Other provinces with small shares in the total labour force included Coast (8.9% against 9.5% in 1989) and Nairobi (9.2% against 8.5% in 1989).

There were gender disparities in labour force participation. Provinces with large urban populations had more males than females in the labour force in both 1999 and 1989 as indicated by their high sex ratios. However, the male participation in the labour force in these provinces declined over the two periods. In particular, the sex ratio for Nairobi province declined from 219.0 to 162.4, Coast province from 127.0 to 118.0 and Rift Valley province from 122.0 to 114.4. This underscores the earlier observation on the increasing rural-urban migration by females. The labour force sex ratio for North Eastern province was the highest but declined from 357.0 in 1989 to 202.1 in 1999. Female participation in the labour force in Central province improved from a sex ratio of 104.0 in 1989 to 99.3 in 1999. The rest of the provinces had more females than males in the labour force in both 1989 and 1999, mainly working in family agricultural farms.

#### **2.2.4 Educational Attainment of the Labour Force**

It is important to study the educational achievement or skills of the labour force so as to facilitate the matching of supply and demand regarding human resources in the labour market. In the absence of data on occupations and vocational training, this analysis uses information collected on the highest level of formal education completed. A comparison of educational achievement of the economically active population aged 10 years and above for 1989, and that aged 15–64 years in 1999 shows a general improvement over the last 10 years.

As shown in Table 2.5, the proportion of economically active population without formal education declined from 33.6% in 1989 to 16.9% in 1999. A majority of the economically active population aged 15–64 were primary school leavers, their proportion rising from 47.1% in 1989 to 55.0% in 1999. Of the primary school leavers, the proportion of the economically active population that had completed lower primary, i.e., Standard 1 to 4, decreased from 15.4% in 1989 to 14.3% in 1999. On the other hand, the proportion that had completed upper primary, i.e., Standard 5 to 8 increased from 31.7% in 1989 to 40.7% in 1999.

The proportion of the economically active population that had completed Form 1 to 4 of secondary education rose by 8.2 percentage points in a span of 10 years to 25.0%. However, the proportion completing Form 5-6 of secondary education declined marginally from 1.3% in 1989 to 1.2% in 1999. The decline is largely explained by the discontinuation of the Form 5–6 level after the introduction of the 8-4-4 system of education. The proportion of the economically active population with university level of education improved from 0.7% in 1989 to 1.3% in 1999.



**Table 2.5: Percentage Distribution of the Labour Force by Educational Attainment, 1989 and 1999**

Highest Educational Attainment	1989 Census (10+ years)		1999 Census (15-64 years)	
	Number	% Share	Number	% Share
<b>Total</b>	<b>9,290,970</b>	<b>100.0</b>	<b>12,395,603</b>	<b>100.0</b>
None	3,121,766	33.6	2,088,888	16.9
Pre-Primary	-	-	30,541	0.2
Standard 1 Incomplete	-	-	49,947	0.4
Standard 1-4	1,430,809	15.4	1,771,111	14.3
Standard 5-8	2,945,237	31.7	5,043,886	40.7
Form 1-4	1,560,883	16.8	3,096,705	25.0
Form 5-6	120,783	1.3	151,964	1.2
University	65,037	0.7	162,552	1.3
Not Stated	46455	0.5	-	-

- Figures not available

## 2.3 Participation Rates

One of the most commonly used summary measures of a population's participation in the labour market is the labour force participation rate. It is the ratio of the labour force in a given age or age group to the total population in the same age or age group. A low rate indicates low participation of the target population in the production of goods and services for the nation.

Although all persons aged 5 years and above were asked about their labour force particulars, participation rates presented here are computed for persons aged 15–64 years for two main reasons. First, the population aged 15–64 years is broadly defined as the productive population in most social and economic systems and is used as the denominator in computing dependency ratios (Kpedekpo 1982:22). Therefore presentation of the participation rates for the “standard” working-age facilitates international comparisons. Secondly, classifying children aged 5–14 years as unemployed distorts the numerator in computing participation rates, since many countries have labour laws regulating the minimum age for entering the labour market, especially in some risky sectors.

The main domains of age, educational level, province and rural-urban residence are used to present labour force participation rates in this section. Each domain is cross-tabulated with gender in order to assess sex disparities where they exist.

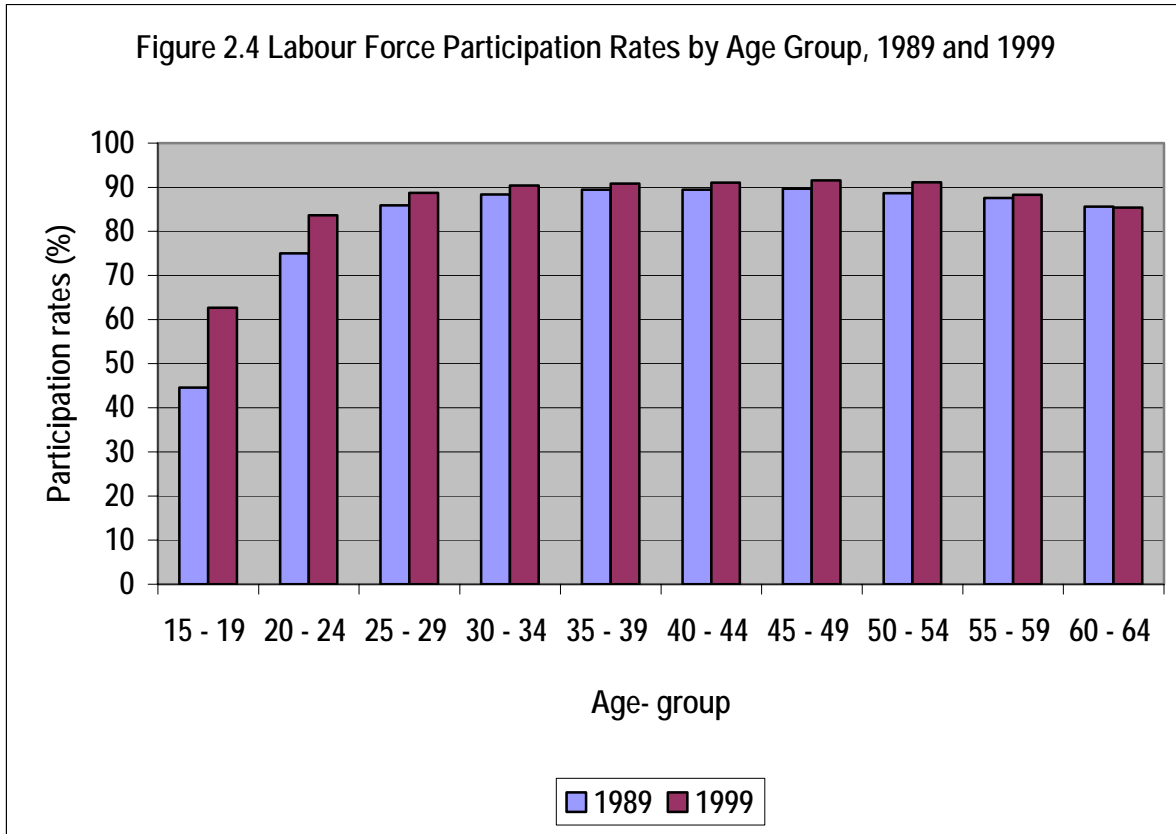
### 2.3.1 Age and Sex

Table 2.6 and Figure 2.4 give age-specific labour force participation rates for the 1989 and 1999 census data. The overall labour force participation rate increased from 75.7% in 1989 to 82.6% in 1999. The rates improved for both males and females. The age distribution shows that there was a general increase in participation rates over the 10-year period. The rates were lowest for the 15–19 age group in the two periods but increased along the age spectrum to peak at the age group 45–49 years for both 1989 (89.7%) and 1999 (91.6%) before declining gradually to 85.6% in 1989 and 85.4% in 1999 in the cohort aged 60–64 years. The low participation rates in the 15–19 age group resulted from the fact that persons in this age cohort were still in school, mainly at secondary level.

Labour force participation rates for females were generally lower than those for males in both 1989 and 1999. Overall, 78.0% of females aged 15–64 years were in the labour force compared to a higher percentage of 87.5% for the corresponding males in 1999. The census results of 1989 depict a similar pattern, with 70.7% participation rate for females compared to 81.1% for males. This pattern of participation rates is common in all age cohorts. However, in absolute terms there were more females than males in the labour force for youth aged 15–24 and the elderly aged 60–64 years in both 1989 and 1999

**Table 2.6: Labour Force Participation Rates for Population Aged 15–64 Years by Sex and Age Group, 1989 and 1999**

Age	Sex	Participation Rates (%)	
		1989	1999
Total	Total	75.7	82.6
	Male	81.1	87.5
	Female	70.7	78.0
15 – 19	Total	44.6	62.6
	Male	44.6	62.3
	Female	44.7	62.9
20 – 24	Total	75.0	83.7
	Male	79.7	89.0
	Female	70.9	79.1
25 – 29	Total	85.9	88.7
	Male	94.6	96.5
	Female	77.9	81.6
30 – 34	Total	88.4	90.4
	Male	96.5	97.7
	Female	80.3	83.3
35 – 39	Total	89.5	90.9
	Male	97.0	97.7
	Female	82.1	84.3
40 – 44	Total	89.5	91.1
	Male	96.8	97.7
	Female	82.2	84.5
45 - 49	Total	89.7	91.6
	Male	96.8	97.7
	Female	83.1	85.5
50 - 54	Total	88.7	91.1
	Male	95.8	97.4
	Female	81.8	84.8
55 - 59	Total	87.6	88.3
	Male	92.9	93.0
	Female	82.3	84.0
60 - 64	Total	85.6	85.4
	Male	92.3	90.4
	Female	79.6	81.0



### 2.3.2 Spatial Distribution

It is not possible to compare participation rates by region for the two census periods since the 1989 census data did not present the rates for the productive population aged 15–64 years. Nevertheless, the 1999 results reveal notable variations in participation rates between the rural and urban areas and across the eight provinces of Kenya. Table 2.7 shows that labour force participation rates were higher in rural areas (83.7%) compared to urban areas (79.2%). This may be explained by the fact that about 70% of the Kenyan population resided in rural areas where the majority were engaged in agricultural activities, specifically crop production and livestock husbandry.

Among the eight provinces, Central had the highest participation rate (86.4%) followed by Western (85.5%), Eastern (84.8%) and Nyanza (82.4%). The labour force participation rate for North Eastern province was lowest at 68.6%. Other provinces had participation rates below the national average of 82.6%.

Labour force participation rates for females were lower than for males in both urban and rural areas. A similar pattern is reflected across all the provinces. In particular, there was a serious gender gap in North Eastern province where the labour force participation rate for males was almost double that of females. Only in Nyanza province was there an almost gender equality in labour force participation.

**Table 2.7: Labour Force Participation Rates for Persons Aged 15–64 years by Region and Sex, 1999**

Region/ Province	Sex	Active Popn. (Labour Force)	Popn. Aged 15-64	Participation Rate %
Kenya	Total	12,395,603	14,999,488	82.6
	Male	6,375,496	7,283,671	87.5
	Female	6,020,107	7,715,817	78.0
Rural	Total	9,577,895	11,441,162	83.7
	Male	4,699,360	5,384,852	87.3
	Female	4,878,535	6,056,310	80.6
Urban	Total	2,817,708	3,558,326	79.2
	Male	1,676,136	1,898,819	88.3
	Female	1,141,572	1,659,507	68.8
Nairobi	Total	1,140,342	1,437,408	79.3
	Male	705,705	797,776	88.5
	Female	434,637	639,632	68.0
Central	Total	1,796,266	2,078,714	86.4
	Male	894,833	1,005,316	89.0
	Female	901,433	1,073,398	84.0
Coast	Total	1,100,080	1,352,426	81.3
	Male	595,407	672,294	88.6
	Female	504,673	680,132	74.2
Eastern	Total	2,008,225	2,369,355	84.8
	Male	987,758	1,108,390	89.1
	Female	1,020,467	1,260,965	80.9
N/Eastern	Total	283,320	412,939	68.6
	Male	189,547	214,675	88.3
	Female	93,773	198,264	47.3
Nyanza	Total	1,832,084	2,223,078	82.4
	Male	835,263	1,014,648	82.3
	Female	996,821	1,208,430	82.5
Rift Valley	Total	2,844,305	3,498,350	81.3
	Male	1,517,819	1,726,171	87.9
	Female	1,326,486	1,772,179	74.9
Western	Total	1,390,981	1,627,218	85.5
	Male	649,164	744,401	87.2
	Female	741,817	882,817	84.0

## 2.4 Economically Inactive Population

There are two ways of classifying the economically inactive population: Classification by reason of inactivity (e.g., attendance at educational institution, engagement in household duties, etc) and classification by usual inactivity status (e.g. student, homemaker, etc). The former refers to currently inactive population, while the latter refers to the usually inactive population. Classification by reason of inactivity is preferred as it avoids under-reporting of economic activity, especially with respect to women, young and elderly people.

Nevertheless, the Kenya 1999 Population and Housing Census recorded the usual inactivity status classification. In this case, persons not in the labour market were asked whether they were (a) full-time students, (b) retired, (c) home-makers (d) incapacitated or (e) had other reasons which could not be identified with any of the four listed options. The ambiguities associated with this approach, especially underreporting of economic activity with respect to women, young and elderly people, were minimised by:

- Clearly stating the reference period as the 7 days prior to the census night, and hence retaining the “currently inactive” concept.
- Following the priority rules of classifying persons by current activity (Hussman et al 1990:85). In this manner, students, retired and incapacitated persons who reported to have worked during the reference week were classified as employed. Likewise, those who were not working but were available for work were classified as unemployed. Only those students, retired and incapacitated persons who reported no economic activity at all were classified as belonging to the economically inactive population.
- Explaining in detail, during training and also in the Enumerator’s Reference Manual, concepts that would have brought some confusion. For instance, “homemaker” was explained to refer to persons who were only performing household duties, while “full-time student” was understood to refer to persons who were not available for work because they were attending an educational institution on full-time basis during the 7 days preceding the census night.

### 2.4.1 Inactivity Status

Information on the inactive persons collected by the 1989 census was not fully analysed in 1989. However, a table has been constructed from information contained in Table 2.2 of the Labour Force volume of the Kenya Population Census 1989. The resultant Table 2.8 here shows that the inactive population aged 10 years and over increased by 12.0% between 1989 and 1999. The majority of the inactive population during the two censuses were females, with their number growing by 15.4% and their share increasing from 57.2% in 1989 to 59.0% in 1999.

As shown in Table 2.9, the economically inactive population aged 5 years and above in 1999 was composed of 8.1 million persons, or 33.9% of the population aged 5 years and above. The majority (69.6%) of the inactive population were full-time students. Homemakers, largely comprising females aged 15 years and above, constituted 13.2% of the inactive population.

**Table 2.8: Inactive Population Aged 5 Years and Above by Age Group, 1999**

Sex	1989		1999		% Change
	Number	% Share	Number	% Share	
Total	4,742,811	100	5,310,893	100	12
Males	2,028,173	42.8	2,178,306	41	7.4
Females	2,714,638	57.2	3,132,587	59	15.4

The “Other” category comprised persons who did not specify why they were not in the labour market during the reference 7 days; the category constituted a significant proportion (13.9%) of the inactive population. The vast majority of persons in this category (82.1%) were children aged 5–14 years.

The age distribution shows high concentration of inactive populations during the young ages (5–9 years accounting for 34.3% and 10–14 years accounting for 30.2%) with the levels gradually declining among the higher age groups. The concentration of the inactive population in young cohorts is largely attributed to the presence of full-time students, mainly at primary and

secondary school levels. Only persons aged 55 years and above reported that they were not available for work due to retirement, the majority being in the open age group of 65 years and above.

Females constituted 56.1% of the inactive population, and also made up a higher share of all homemakers (96.3%) and a lower share of retirees (36.5%)

**Table 2.9: Distribution of Inactive Population Aged 5 Years and Above by Age Group, 1999**

Age Group	Sex	Total Number	%	Full-time Student	Retired	Incapacitated	Home-maker	Other
Total	Total	8,087,523	100.0	5,631,771	81,388	186,819	1,065,000	1,122,545
	Male	3,550,134	43.9	2,846,392	51,707	81,254	39,350	531,431
	Female	4,537,389	56.1	2,785,379	29,681	105,565	1,025,650	591,114
Activity Share		100.0	100.0	69.6	1.0	2.3	13.2	13.9
5-9	Total	2,776,630	34.3	2,091,509	0	30,581	0	654,540
	Male	1,371,828	17.0	1,035,342	0	15,920	0	320,566
	Female	1,404,802	17.4	1,056,167	0	14,661	0	333,974
10 - 14	Total	2,446,412	30.2	2,163,197	0	15,858	0	267,357
	Male	1,186,906	14.7	1,067,517	0	8,565	0	110,824
	Female	1,259,506	15.6	1,095,680	0	7,293	0	156,533
15 - 19	Total	1,259,005	15.6	1,106,851	0	10,831	75,507	65,816
	Male	625,609	7.7	584,266	0	5,590	2,179	33,574
	Female	633,396	7.8	522,585	0	5,241	73,328	32,242
20 - 24	Total	458,093	5.7	198,217	0	10,234	218,308	31,334
	Male	144,004	1.8	119,742	0	4,984	3,197	16,081
	Female	314,089	3.9	78,475	0	5,250	215,111	15,253
25 - 29	Total	260,405	3.2	37,040	0	7,492	195,371	20,502
	Male	39,522	0.5	21,514	0	3,639	3,719	10,650
	Female	220,883	2.7	15,526	0	3,853	191,652	9,852
30 - 34	Total	160,615	2.0	12,301	0	5,886	130,789	11,639
	Male	19,042	0.2	6,221	0	3,004	3,488	6,329
	Female	141,573	1.8	6,080	0	2,882	127,301	5,310
35 - 39	Total	129,304	1.6	9,501	0	5,509	104,924	9,370
	Male	15,610	0.2	4,747	0	2,695	3,122	5,046
	Female	113,694	1.4	4,754	0	2,814	101,802	4,324
40 - 44	Total	91,727	1.1	5,629	0	4,565	74,409	7,124
	Male	11,600	0.1	2,946	0	2,203	2,605	3,846
	Female	80,127	1.0	2,683	0	2,362	71,804	3,278
45 - 49	Total	70,564	0.9	4,089	0	4,340	56,271	5,864
	Male	9,625	0.1	2,250	0	1,975	2,340	3,060
	Female	60,939	0.8	1,839	0	2,365	53,931	2,804
50 - 54	Total	60,730	0.8	2,909	0	5,231	47,133	5,457
	Male	8,838	0.1	1,587	0	2,214	2,220	2,817
	Female	51,892	0.6	1,322	0	3,017	44,913	2,640
55 - 59	Total	53,811	0.7	528	11,424	5,020	31,294	5,545
	Male	15,664	0.2	260	8,950	1,945	1,853	2,656
	Female	38,147	0.5	268	2,474	3,075	29,441	2,889
60 - 64	Total	59,631	0.7	0	14,961	8,376	29,612	6,682
	Male	18,661	0.2	0	10,892	2,848	2,014	2,907
	Female	40,970	0.5	0	4,069	5,528	27,598	3,775
65+	Total	260,596	3.2	0	55,003	72,896	101,382	31,315
	Male	83,225	1.0	0	31,865	25,672	12,613	13,075
	Female	177,371	2.2	0	23,138	47,224	88,769	18,240

## 2.4.2 Spatial Distribution

Table 2.10 presents the percentage distribution of the inactive population. Rural areas, which are inhabited by over two thirds of the population, had 77.7% of the inactive population aged 5 years and above. Most of the inactive population enumerated in rural areas were full-time students (70.5%) and homemakers performing household duties (11.5%). A significant proportion of the inactive population in rural areas (14.4%) were classified under the category "other" since the reasons they gave for not being in the labour market were outside the options given for the question. Analysis of inactive status in urban areas shows a high proportion of homemakers (19.0%) relative to the modest urban population size.

Rift Valley being the most populous among the eight provinces had the largest share (24.7%) of inactive population. Nyanza and Eastern provinces followed with 17.3% and 14.9% of the total inactive population, respectively. Reflecting its modest population size, North Eastern province had the lowest share of the inactive population of 3.7%, while Nairobi province was second lowest with 8.0%.

Gender analysis shows that 56.1% of the economically inactive population were female. There was, however, near gender equality for full-time students, with the exception of North Eastern province where about two thirds of the full-time students were male. This situation may largely be attributed to cultural bias against female education within that province. Other major gender differentials were observed in the categories of retired persons and homemakers. The majority of retired persons were males, while majority of homemakers in all the provinces were females.

**Table 2.10: Percentage Distribution of Inactive Population Aged 5 Years and Above, 1999**

Area	Sex	Total Number	%	Full-time Student	Retired	Incapa- citated	Home- maker	Other
Kenya	Total	8,087,523	100.0	69.6	1.0	2.3	13.2	13.9
	Male	3,550,134	100.0	80.2	1.5	2.3	1.1	15.0
	Female	4,537,389	100.0	61.4	0.7	2.3	22.6	13.0
Rural	Total	6,281,134	100.0	70.5	1.0	2.6	11.5	14.4
	Male	2,813,164	100.0	79.6	1.4	2.5	1.1	15.3
	Female	3,467,970	100.0	63.1	0.7	2.7	19.9	13.6
Urban	Total	1,806,389	100.0	66.7	1.0	1.2	19.0	12.1
	Male	736,970	100.0	82.2	1.7	1.4	1.1	13.7
	Female	1,069,419	100.0	56.0	0.6	1.2	31.3	11.0
Nairobi	Total	648,120	100.0	67.3	1.1	1.1	19.7	10.8
	Male	261,043	100.0	83.8	1.8	1.2	0.9	12.3
	Female	387,077	100.0	56.2	0.7	0.9	32.3	9.9
Central	Total	942,681	100.0	79.6	1.5	2.5	8.5	7.9
	Male	432,354	100.0	86.5	2.0	2.3	0.6	8.6
	Female	510,327	100.0	73.8	1.1	2.6	15.2	7.3
Coast	Total	721,449	100.0	59.0	1.1	2.0	18.2	19.7
	Male	308,082	100.0	73.6	2.1	2.0	1.1	21.1
	Female	413,367	100.0	48.2	0.4	1.9	30.9	18.6
Eastern	Total	1,202,678	100.0	69.1	1.3	2.5	13.8	13.2
	Male	519,277	100.0	78.8	1.7	2.6	1.8	15.2
	Female	683,401	100.0	61.8	0.9	2.5	23.0	11.7
N/Eastern	Total	295,622	100.0	24.2	0.6	2.3	32.5	40.4
	Male	107,154	100.0	43.6	0.9	3.1	1.5	51.0
	Female	188,468	100.0	13.1	0.4	1.9	50.2	34.4
Nyanza	Total	1,396,253	100.0	81.2	0.6	2.7	6.1	9.4
	Male	672,126	100.0	86.3	0.9	2.3	0.9	9.5
	Female	724,127	100.0	76.4	0.4	3.0	10.9	9.3
Rift Valley	Total	1,997,498	100.0	66.2	0.9	2.0	15.4	15.5
	Male	844,867	100.0	78.9	1.2	2.1	1.1	16.7
	Female	1,152,631	100.0	56.9	0.7	1.9	25.9	14.6
Western	Total	883,222	100.0	74.7	0.8	3.1	8.1	13.3
	Male	405,231	100.0	80.0	1.3	2.9	1.1	14.6
	Female	477,991	100.0	70.2	0.3	3.3	14.0	12.2



## Chapter 3: The Employed Population

### 3.1 Working Population Aged 5 Years and Above

This chapter presents characteristics of the working population, i.e., all persons who reported to have either performed some work or were on leave or sick-off during the 7 days prior to the census night

#### 3.1.1 Comparison with Results of the 1989 Census

It is not possible to construct a trend in employment for the working population aged 5 years and above since the Kenya 1989 Population and Housing Census sought labour force particulars from persons aged 10 years and above. However, a general trend can be established for the working population aged 10 years and above which was covered by both the 1989 and 1999 censuses.

The comparisons presented in Table 3.1 show some consistency in the overall trends. In particular, the proportion of working males to the total workforce did not change much over the 10-year period as indicated by close sex ratios for both 1989 and 1999. However, the gender gap in urban employment seems to have narrowed over the same period. Thus, the sex ratio for the urban working population aged 10 years and above declined from 206.4 in 1989 to 162.4 in 1999. The share of the urban workforce also increased slightly at the expense of rural areas; indicating increased rural-urban migration for workers within the 10-year period.

**Table 3.1: Employed Persons aged 10 Years and Above by Sex and Rural-Urban Residence, 1989 and 1999**

Sex	Kenya		Urban		Rural	
	1989	1999	1989	1999	1989	1999
Total	8,558,880	13,321,072	7,096,656	10,902,531	1,462,224	2,418,541
Males	4,485,999	6,993,669	3,501,048	5,496,726	984,951	1,496,943
Females	4,072,881	6,327,403	3,595,608	5,405,805	477,273	921,598
Sex Ratio*	110.1	110.5	97.4	101.7	206.4	162.4
Rural-Urban Share	100.0	100.0	82.9	81.8	17.1	18.2

\*Males per 100 Females

#### 3.1.2 Spatial Distribution

Table 3.2 shows that of the 14 million working persons aged 5 years and above, 52.4% were males. Rural areas, being inhabited by the majority of Kenyans, accounted for 83.0% of the working population. Rural areas had near gender equality in employment. However, gender inequality existed in urban areas, as 38.3% of the working population were females.

**Table 3.2: Working Persons Aged 5 Years and above by Sex and Rural-Urban Residence, 1999**

Area/Sex	Total Employment	
	% Share	Number
<b>Kenya</b>		
<b>Total</b>	<b>100.0</b>	<b>14,474,226</b>
Males	52.4	7,605,003
Females	47.6	6,869,223
<b>Rural</b>		
<b>Total</b>	<b>100.0</b>	<b>12,013,707</b>
Males	50.7	6,086,557
Females	49.3	5,927,150
<b>Urban</b>		
<b>Total</b>	<b>100.0</b>	<b>2,460,519</b>
Males	61.7	1,518,446
Females	38.3	942,073

Provincial distribution of employed persons presented in Table 3.3 shows that Rift Valley province, with the largest share of the total population, had the highest share of employed persons at 23.7% (the 1989 share for the population aged 10 years and above was 20.9%). Eastern province, with the second largest share of the total population, was second with 17.5% of the working population (21.1% in 1989). Third was Central province, with a share of 14.7% (13.1% in 1989). North Eastern, Nairobi and Coast provinces had the lowest shares at 2.5%, 6.6% and 8.1%, respectively; their respective shares in 1989 for the working population aged 10 years and above were 1.4%, 6.8% and 9.5%. The three provinces were the least inhabited with respective provincial shares of the population aged 5 years and above of 3.0%, 7.6% and 8.7%.

The gender bias prevailing in urban areas was reflected at the provincial level, especially where the provinces have a high proportion of urban populations. Thus Nairobi, Coast, North Eastern and to a certain extent Rift Valley provinces reported more male than female workers. Conversely, the proportion of working females was higher than that for males in the other provinces; mainly because the population in these provinces is largely engaged in agro-based activities with a workforce dominated by females (see Table 3.5). This situation was also observed in the 1989 census where Nairobi, Coast, North Eastern and Rift Valley provinces reported more male than female workers aged 10 years and above (RoK and CBS 1996: Table 3.2).

**Table 3.3: Distribution of Employed Persons Aged 5 Years and Above by Province and Sex, 1999**

Area	Sex	Total Employment	
		% Share	Number
Kenya	Total	100.0	14,474,226
	Male	52.4	7,605,003
	Female	47.6	6,869,223
Nairobi	Total	6.6	959,184
	Male	4.3	617,887
	Female	2.4	341,297
Central	Total	14.7	2,132,362
	Male	7.4	1,067,123
	Female	7.4	1,065,239
Coast	Total	8.1	1,168,757
	Male	4.5	648,503
	Female	3.6	520,254
Eastern	Total	17.5	2,531,870
	Male	8.9	1,288,630
	Female	8.6	1,243,240
N/Eastern	Total	2.5	357,269
	Male	1.7	246,404
	Female	0.8	110,865
Nyanza	Total	14.6	2,119,136
	Male	6.9	995,847
	Female	7.8	1,123,289
Rift Valley	Total	23.7	3,429,579
	Male	13.0	1,881,373
	Female	10.7	1,548,206
Western	Total	12.3	1,776,069
	Male	5.9	859,236
	Female	6.3	916,833

### 3.1.3 Status in Employment

The working population is classified as being in wage employment (paid employees) or self-employment. The former category comprises persons who received payment from employers for their work. The latter category comprises persons who reported to have been working in family businesses or family agricultural holdings without pay. This category includes working employers, own-account workers and unpaid family workers.

As shown in Table 3.4, the working population aged 5 years and above was largely composed of self-employed persons (74.7%), of which 61.7% were engaged in family agricultural holdings and 13.0% in family business undertakings. The rest (25.3%) of the working population was in wage employment. Only 1.9% of the working population aged 5 years and above, who were classified as paid employees, was on leave or sick-off.

It is not possible to construct a trend by comparing results of 1999 and 1989 censuses since data on employment status collected in the 1989 census was not analysed (RoK and CBS 1996). The Labour Force Analytical Report states that information on employment status was not analysed because most (92.3%) respondents did not state their work status.

The labour force question in the Kenya 1999 Population and Housing Census did not directly seek information about which sectors the workers were engaged in. Even though, the responses given may be used to distribute the employed persons into three non-overlapping

sectors of the economy, i.e., (a) modern sector, (b) informal sector, and (c) small-scale farming and pastoralist activities. Therefore, employment figures presented in Table 3.4 may be distributed among the three sectors of the economy.

### **Small-scale farming and pastoralist activities**

The 8.9 million non-wage workers in family agricultural holdings were engaged in small-scale farming and pastoralist activities, largely based in rural areas. Noting that the number excludes wage employees, the results are consistent with the 1998/99 Integrated Labour Force Survey results that gave total employment (both wage and non-wage) for this sector as 8.1 million persons.

### **Informal sector**

Similarly, the 1.9 million unpaid workers in family businesses were largely in the informal sector, which is defined as non-corporate household sector businesses, excluding crop production and animal husbandry. If we add wage employees, the resultant figure would be consistent with data from the Micro and Small-scale Enterprise (MSE) Survey which gave employment of 2.4 million persons (RoK, CBS and ICEG 1999). The MSE survey used a concept close to the global definition of informal sector activities. Also, the Integrated Labour Force Survey of 1999 gave an employment figure of 3.3 million persons for this sector. Finally, the 2000 edition of the Economic Survey estimated employment in the informal sector at 3.7 million persons.

### **Modern sector**

The 3.7 million persons in wage employment fell under any of the three sectors, thereby increasing employment in the affected sectors. Nonetheless, the majority were in the modern sector where employment was given by the 2000 edition of the Economic Survey as 1.7 million persons. The Integrated Labour Force Survey came up with an employment figure of 1.9 million persons for the sector.

These findings are consistent across the quoted sources, the variations being attributed to differences in survey coverage, application of concepts and differences in the time the surveys were undertaken.

**Table 3.4: Percentage Distribution of the Employed Population Aged 5 Years and Above by Type of Work, 1999**

Area	Total Employment		Paid Employees			Self-employed*		
	Number	%	Total	At Work	On Leave	Total	In Family Business	In Family Farm
Kenya	14,474,226	100.0	25.3	23.4	1.9	74.7	13.0	61.7
Rural	12,013,707	100.0	17.5	15.7	1.8	82.5	10.4	72.1
Urban	2,460,519	100.0	63.4	61.0	2.4	36.6	25.7	10.9
Nairobi	959,184	100.0	73.2	71.0	2.2	26.8	22.7	4.1
Central	2,132,362	100.0	26.5	24.7	1.8	73.5	9.9	63.6
Coast	1,168,757	100.0	32.0	30.4	1.6	68.0	15.5	52.5
Eastern	2,531,870	100.0	21.3	19.2	2.2	78.7	11.5	67.2
N/Eastern	357,269	100.0	10.0	9.3	0.7	90.0	18.5	71.5
Nyanza	2,119,136	100.0	17.2	14.7	2.4	82.8	14.0	68.8
Rift Valley	3,429,579	100.0	23.9	22.2	1.7	76.1	12.5	63.6
Western	1,776,069	100.0	15.0	13.3	1.7	85.0	10.6	74.5

\*Includes unpaid family workers

Gender analysis of status in employment presented in Table 3.5 shows that despite their low share in total employment, females constituted 54.6% of the self-employed in family agricultural holdings. The same situation was reflected in all areas, apart from North Eastern province where the proportion of women engaged in family holdings was lower than that of males. This contrasting situation may be explained by the aridity of the province, which limits activities on family agricultural holdings to male-dominated pastoral activities. Also, there were more females than males engaged in family businesses in Eastern, Nyanza and Western provinces.

On the other hand, the proportion of females in wage employment at the national level was very low at 29.2%. The low proportion in wage employment was reflected in both rural and urban areas and also across the provinces. This has serious implications on gender differentials in income since paid employment generates more stable incomes than work on family agricultural holdings that is characterised by under-employment.

**Table 3.5: Gender Proportions of Employed Persons Aged 5 Years and Above by Type of Work, 1999**

Area	Sex	Total Employment		Paid Employees			Self-employed*		
		Number	%	Total	At Work	On Leave	Total	In Family Business	In Family Farm
Kenya	Total	14,474,226	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Male	7,605,003	52.5	70.8	72.3	52.9	46.3	50.6	45.4
	Female	6,869,223	47.5	29.2	27.7	47.1	53.7	49.4	54.6
Rural	Total	12,013,707	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Male	6,086,557	50.7	72.3	74.4	53.9	46.1	50.1	45.5
	Female	5,927,150	49.3	27.7	25.6	46.1	53.9	49.9	54.5
Urban	Total	2,460,519	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Male	1,518,446	61.7	68.9	69.6	49.2	49.3	51.5	44.1
	Female	942,073	38.3	31.1	30.4	50.8	50.7	48.5	55.9
Nairobi	Total	959,184	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Male	617,887	64.4	68.3	68.8	49.7	54.0	55.5	45.2
	Female	341,297	35.6	31.7	31.2	50.3	46.0	44.5	54.8
Central	Total	2,132,362	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Male	1,067,123	50.0	66.3	67.5	49.3	44.2	50.7	43.2
	Female	1,065,239	50.0	33.7	32.5	50.7	55.8	49.3	56.8
Coast	Total	1,168,757	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Male	648,503	55.5	76.7	77.8	56.6	45.5	54.9	42.7
	Female	520,254	44.5	23.3	22.2	43.4	54.5	45.1	57.3
Eastern	Total	2,531,870	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Male	1,288,630	50.9	69.8	71.7	53.0	45.8	49.6	45.1
	Female	1,243,240	49.1	30.2	28.3	47.0	54.2	50.4	54.9
N/Eastern	Total	357,269	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Male	246,404	69.0	82.2	83.1	69.1	67.5	62.5	68.8
	Female	110,865	31.0	17.8	16.9	30.9	32.5	37.5	31.2
Nyanza	Total	2,119,136	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Male	995,847	47.0	72.6	75.7	53.3	41.7	42.9	41.5
	Female	1,123,289	53.0	27.4	24.3	46.7	58.3	57.1	58.5
Rift Valley	Total	3,429,579	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Male	1,881,373	54.9	72.1	73.5	54.8	49.4	51.5	49.0
	Female	1,548,206	45.1	27.9	26.5	45.2	50.6	48.5	51.0
Western	Total	1,776,069	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Male	859,236	48.4	73.0	75.7	51.7	44.0	48.0	43.5
	Female	916,833	51.6	27.0	24.3	48.3	56.0	52.0	56.5

\*Includes unpaid family workers

### 3.2 Working Population Aged 15–64 Years

This section analyses employment characteristics of the population falling in the 15–64 age group. This segment of the population, defined in Section 1.3 as the “standard working age”, is crucial in studying the employment and unemployment situation of a country. It is the productive segment of the population providing goods and services in the economy. As such it is used as the denominator in computing dependency ratio - defined as the ratio of children less than 15 years of age plus persons aged 65 and over to adults aged 15-64 years. Also, in the absence of current data on the labour force, the population in this age group is used for estimating a country's labour force (after adjusting for the inactive population). Finally, it facilitates global and local comparisons of other sets of labour force data.

### 3.2.1 Comparison of 1989 and 1999 Census Results

Table 3.6 shows that the working population aged 15–64 years increased by 52.2% from 7.3 million in 1989 to 11.1 million in 1999. Also, the share of urban workforce increased slightly at the expense of rural areas, reflecting some rural-urban migration. The share of working males to the total workforce increased slightly over the 10-year period as indicated by a rise of sex ratios from 109.0 in 1989 to 110.0 in 1999. Nonetheless, the gender gap in urban employment seems to have narrowed over the same period as the sex ratio for the urban working population aged 15–64 years declined from 213.2 in 1989 to 166.0 in 1999.

**Table 3.6: Distribution of Working Population Aged 15–64 by Sex and Rural-Urban Residence, 1989 and 1999**

Sex	Kenya		Rural		Urban	
	1989	1999	1989	1999	1989	1999
Total	7,321,473	11,144,771	5,920,009	8,824,978	1,401,464	2,319,793
Males	3,818,650	5,838,353	2,864,711	4,390,779	953,939	1,447,574
Females	3,502,823	5,306,418	3,055,298	4,434,199	447,525	872,219
Sex Ratio*	109.0	110.0	93.8	99.0	213.2	166.0
Rural-Urban Share	100.0	100.0	80.9	79.2	19.1	20.8

\*Males per 100 Females

### 3.2.1 Spatial Distribution

Table 3.7 presents provincial distribution of the working population aged 15–64 years. Rift Valley and Eastern provinces had the highest share of employed persons. However, the share in Rift Valley province declined slightly from 23.7% for the working population aged 5 years and above to 23.1% for working population aged 15–64 years, while the share for Eastern province declined from 17.5% to 16.5% for the respective age groups. On the other hand, the shares of provinces with low shares of working population edged up slightly above those for the working population aged 5 years and above. Thus the share for Nairobi province improved from 6.6% for working population aged 5 and above to 8.3% for population aged 15–64 years, while that for Coast province improved slightly from 8.1% to 8.3%. Other provinces with slightly improved shares over that for the working population aged 5 years and above included Nyanza and Central.

There was also notable gender bias in the metropolitan Nairobi province, where males accounted for 64.9% of the working population. This imbalance is largely attributed to gender selective rural-urban migration where males migrate to urban areas in search of jobs, leaving females in rural areas to take care of children and agricultural holdings. This is particularly true for males aged 15–64 years.

**Table 3.7: Percentage Distribution of Employed Persons aged 15–64 years by Sex and Provinces, 1999**

Province	Total		Males (%)	Females (%)
	Number	% Share		
Kenya	11,144,771	100.0	52.4	47.6
Nairobi	929,358	8.3	64.9	35.1
Central	1,669,533	15.0	49.9	50.1
Coast	928,170	8.3	56.2	43.8
Eastern	1,841,062	16.5	50.1	49.9
North Eastern	229,551	2.1	73.7	26.3
Nyanza	1,679,701	15.1	45.7	54.3
Rift Valley	2,573,423	23.1	54.9	45.1
Western	1,293,973	11.6	47.0	53.0

### 3.2.2 Status in Employment

Table 3.8 shows that 69.0% of the working population aged 15–64 were self-employed, with 54.4% of the self-employed persons engaged in family agricultural holdings, mainly in rural areas. The high incidence of self-employment is common in developing countries and arises from many factors, the main ones being lack of wage jobs and the absence of unemployment benefits such as unemployment insurance and public relief schemes. Paid employees were the next most popular category of workers, constituting 31.0% of the workforce and largely residing in urban areas. About 14.6% of the employed persons were self-employed in family business undertakings, mainly in urban areas. Only 2.2% of the working population aged 15–64 years were either on leave or sick-off.

Among the eight provinces, the metropolitan Nairobi province had the highest proportion of wage employees (73.5%) and workers in family business (22.7%). The next highest proportion of wage employees was in Coast province (38.4%), while North Eastern province absorbed a high proportion of workers in family business (21.9%) which was only next to Nairobi province. These two provinces have a large proportion of urban populations. A high proportion of workers engaged in family agricultural holdings was observed in Western province (69.4%), North Eastern province (64.9%) and Nyanza Province (64.6%).

Gender analysis shows that, with the exception of North Eastern province, females dominated self-employment in family holdings across all the regions in Kenya. On the other hand, males dominated wage employment in all regions. Apart from Central and Western provinces, more females than males worked in family businesses as self-employed and unpaid family workers in all other regions.



**Table 3.8: Percentage Distribution of Employed Persons Aged 15–64 Years by Type of Work, 1999**

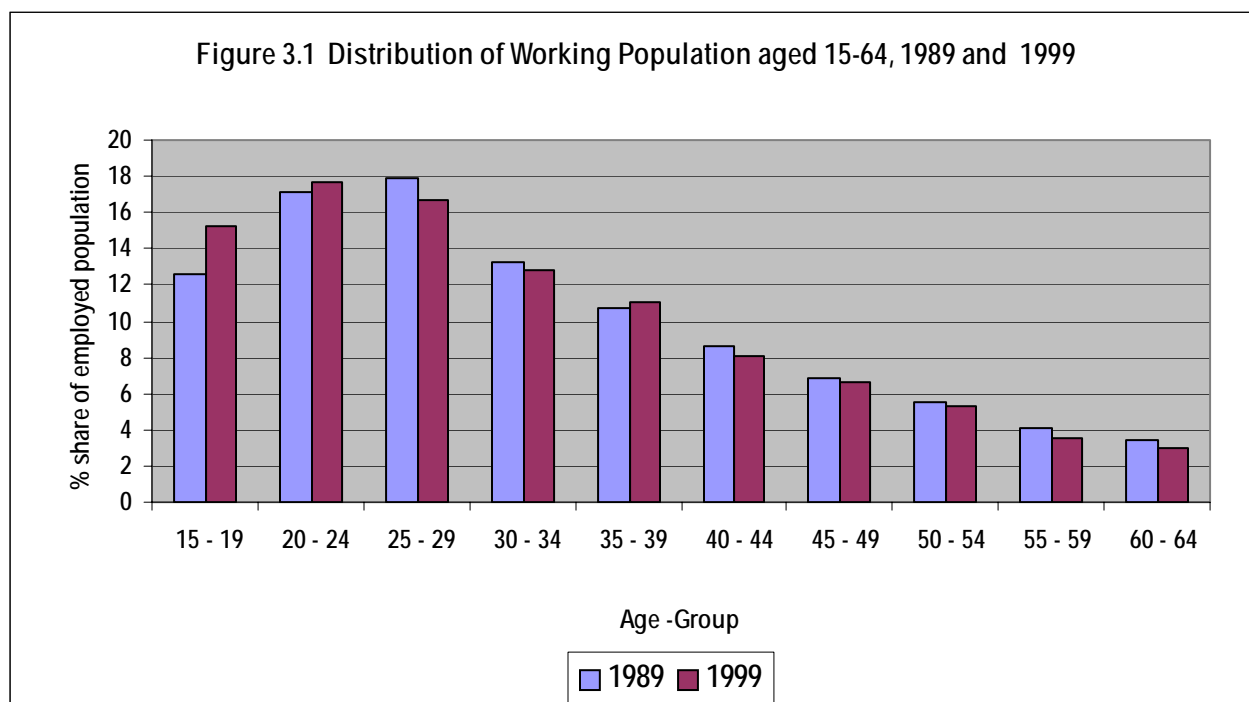
Area	Sex	Total Employment		Paid Employees			Self-employed		
		Number	% Share	Total	At Work	On Leave	Total	In Family Business	In Family Farm
Kenya	Total	11,144,771	100.0	31.0	28.8	2.2	69.0	14.6	54.4
	Male	5,838,353	52.4	42.3	40.1	2.2	57.7	13.9	43.7
	Female	5,306,418	47.6	18.6	16.4	2.2	81.4	15.3	66.2
Rural	Total	8,824,978	79.2	22.0	19.9	2.1	78.0	11.6	66.4
	Male	4,390,779	39.4	32.3	30.0	2.4	67.7	11.5	56.2
	Female	4,434,199	39.8	11.8	9.9	1.9	88.2	11.7	76.5
Urban	Total	2,319,793	20.8	65.3	62.9	2.4	34.7	25.9	8.8
	Male	1,447,574	13.0	72.8	70.8	1.9	27.2	21.3	5.9
	Female	872,219	7.8	52.9	49.7	3.3	47.1	33.5	13.5
Nairobi	Total	929,358	8.3	73.5	71.3	2.2	26.5	22.7	3.8
	Male	603,181	5.4	77.9	76.3	1.7	22.1	19.4	2.7
	Female	326,177	2.9	65.3	62.2	3.1	34.7	28.8	6.0
Central	Total	1,669,533	15.0	32.0	30.0	2.0	68.0	11.3	56.7
	Male	833,926	7.5	42.8	40.8	2.0	57.2	11.3	45.8
	Female	835,607	7.5	21.2	19.2	2.0	78.8	11.2	67.6
Coast	Total	928,170	8.3	38.4	36.7	1.8	61.6	17.2	44.4
	Male	521,214	4.7	53.1	51.3	1.8	46.9	16.8	30.1
	Female	406,956	3.7	19.7	17.9	1.7	80.3	17.7	62.6
Eastern	Total	1,841,062	16.5	26.9	24.2	2.7	73.1	13.0	60.1
	Male	922,679	8.3	37.7	34.9	2.9	62.3	12.7	49.6
	Female	918,383	8.2	16.0	13.5	2.5	84.0	13.3	70.6
N/Eastern	Total	229,551	2.1	14.1	13.3	0.8	85.9	21.9	64.1
	Male	169,209	1.5	16.1	15.3	0.8	83.9	18.8	65.1
	Female	60,342	0.5	8.3	7.4	0.9	91.7	30.5	61.3
Nyanza	Total	1,679,701	15.1	20.2	17.5	2.7	79.8	15.4	64.3
	Male	768,400	6.9	32.5	29.3	3.2	67.5	14.1	53.4
	Female	911,301	8.2	9.8	7.6	2.3	90.2	16.6	73.6
Rift Valley	Total	2,573,423	23.1	29.9	27.9	2.1	70.1	14.1	56.0
	Male	1,411,686	12.7	39.7	37.6	2.1	60.3	13.1	47.1
	Female	1,161,737	10.4	18.1	16.0	2.1	81.9	15.3	66.7
Western	Total	1,293,973	11.6	19.0	17.0	2.0	81.0	11.7	69.3
	Male	608,058	5.5	30.0	27.7	2.2	70.0	11.7	58.3
	Female	685,915	6.2	9.3	7.5	1.8	90.7	11.7	79.0

### 3.2.3 Age Structure

Table 3.9 show that the total working population was concentrated within the age group 15–34 years. The age group 20–24 accounting for the highest share with 17.7% in 1999, whereas the adjacent age group 25–29 had the highest share of 17.9% in 1989. In rural areas, the age group 20–24 had the highest share in both 1989 and 1999, with 16.5% and 17.4% of the country's working population respectively. In urban areas, the age group 25–29 had the highest share of the working population in 1999, whereas the adjacent age group 20–24 had the highest share of 17.4% in 1989. These structural changes are best displayed in Figure 3.1, where the 1989 shares for the age groups 15-19, 20-24 and 35-39 are lower than those observed in 1999 but higher than the 1999 shares for the other age groups.

**Table 3.9: Percentage Distribution of the Working Population Aged 15–64 Years by Age Group, 1989 and 1999**

Age Group	Kenya		Rural		Urban	
	1989	1999	1989	1999	1989	1999
Total	100.0	100.0	100.0	100.0	100.0	100.0
15 - 19	12.6	15.3	13.9	17.1	7.0	8.1
20 - 24	17.1	17.7	16.5	17.4	19.4	19.0
25 - 29	17.9	16.7	16.2	15.2	24.2	22.3
30 - 34	13.3	12.8	12.5	11.7	16.9	17.0
35 - 39	10.7	11.0	10.4	10.6	12.0	12.8
40 - 44	8.6	8.1	8.6	8.0	8.3	8.3
45 - 49	6.8	6.6	7.1	6.8	5.4	5.8
50 - 54	5.5	5.3	6.0	5.7	3.8	3.9
55 - 59	4.1	3.5	4.7	3.9	1.9	1.7
60 - 64	3.4	3.0	4.1	3.5	1.1	1.1



### 3.2.4 Educational Achievement

All persons were asked about their highest educational attainment. The results presented in Table 3.10 show that the majority of the employed persons aged 15–64 years (54.7%) had attained primary level education, with 14.0% having completed Standard 1 to 4 and 40.7% having completed Standard 5 to 8. About a quarter had secondary level education. Only 1.3% of the employed had university level education.

Of the working population, 17.0% had no formal education, a situation that limits their opportunities in wage employment. Thus, the majority of the working population with no formal education (86.1%) were self-employed. Also, the proportion of self-employed workers declined with increase in level of education. The trend reverses for persons in wage employment, where the

proportion of persons in wage employment increased with increase in level of education to peak at university education with a share of 81.2%.

**Table 3.10: Working Population Aged 15–64 Years by Educational Attainment, 1999**

Highest Educational Attainment	Total Employed		Paid Employees	Self Employed
	Number	% Share		
Total	11,144,771	100.0	31.0	69.0
None	1,890,569	17.0	13.9	86.1
Pre-primary	26,316	0.2	20.8	79.2
Standard 1 Incomplete	45,161	0.4	24.3	75.7
Standard 1-4	1,625,820	14.6	23.2	76.8
Standard 5-8	4,548,028	40.8	28.0	72.0
Form 1-4	2,724,400	24.4	47.9	52.1
Form 5-6	140,126	1.3	74.8	25.2
University	144,351	1.3	81.2	18.8

### 3.3 Employment Rates

The employment rate is computed as the proportion of employed persons to the total labour force (economically active population). The standard working age 15–64 years is usually preferred in computing the employment rate and its complement, the unemployment rate. This preference is based on the fact that persons aged 15–64 years constitute the economically productive population whose employment level or rate gives an indication of the dependency burden. Also, many countries have labour laws regulating the minimum age for entering the labour market.

The employment figures presented in this chapter have revealed that a majority of the working population were engaged in family agricultural holdings as self-employed and unpaid family workers. Self-employment, particularly in the small-scale agriculture and pastoralist activities, is known to conceal high levels of under-employment, which could not be captured by the Kenya 1999 Population and Housing Census. It is therefore prudent to compute separate employment or unemployment rates based on wage employment. The rate based on wage employment throws light on the magnitude of the under-employment problem, while that for total employment, though seemingly misleading, indicates that “people are busy doing something”.

In this regard, the two types of employment rates are presented in Table 3.11 for the working age group 15–64. Employment rates for wage employment were low at 27.9% compared to the overall employment rate of 88.9%. The former translates into an unemployment rate of 72.1%, while the latter translates into an unemployment rate of 10.1%, thus understating the unemployment situation in Kenya. Analysis by rural-urban residence confirms the earlier finding in this chapter that wage employees were mainly in the urban areas, whereas self-employed persons, the majority of whom were engaged in family small-scale agricultural holdings, were based in rural areas.

**Table 3.11: Wage and Non-wage Employment Rates (%) for the Working Population Aged 15–64 Years by Rural-Urban Residence, 1999**

Age Group	Kenya			Rural			Urban		
	Overall	Wage	Non-Wage	Overall	Wage	Non-Wage	Overall	Wage	Non-Wage
Total	89.9	27.9	62.0	92.1	20.4	71.7	82.3	53.8	28.6
15 - 19	80.6	16.0	64.5	84.4	12.5	71.9	58.6	35.8	22.8
20 - 24	84.1	26.9	57.2	88.1	19.7	68.3	72.5	47.7	24.7
25 - 29	90.6	33.8	56.7	92.6	24.1	68.5	85.6	57.4	28.2
30 - 34	94.3	36.0	58.3	95.6	26.2	69.4	91.2	61.1	30.1
35 - 39	95.7	34.3	61.4	96.7	25.3	71.3	92.7	61.4	31.2
40 - 44	96.1	32.8	63.3	97.0	24.5	72.5	92.8	62.4	30.4
45 - 49	96.2	30.1	66.1	97.1	23.0	74.1	92.0	60.3	31.7
50 - 54	95.0	25.0	70.0	96.2	19.3	76.9	88.4	54.4	34.0
55 - 59	95.5	16.7	78.8	96.6	13.5	83.1	86.9	42.2	44.7
60 - 64	95.5	12.7	82.7	96.3	10.7	85.7	86.1	34.8	51.3

### 3.4 Working Children

This section presents a short analysis of working children aged 5–17 years with a view to estimating the child labour situation in Kenya. However, the census questionnaire did not capture the main indicators that differentiate working children from child labour, such as activities in which children were working, number of hours worked, and salaries and wages paid.

Working children are defined in this analysis as persons aged 5–17 years who reported to have performed some work either as paid workers or self-employed during the 7 days prior to the census night. On the other hand, child labour is defined as “work undertaken by children aged 5–17 years, which prevents them from attending school, and is exploitative, hazardous or inappropriate for their age” (ILO 1998). Therefore, not all children who reported to have worked were necessarily engaged in child labour.

#### 3.4.1 Age-sex Structure

As shown in Table 3.12, about 3.7 million out of 10.0 million (36.5%) of children aged 5–17 years reported to have worked during the reference period. This proportion is consistent with the 36.4% observed in a recent sample survey (RoK and UNICEF 2000). Also further analysis of the results presented in the Labour Force Analytical Report shows that 25.5% of children aged 10–14 years were working in 1989 (RoK 1996). The proportion is definitely higher if we consider the population aged 5–17 years. The child labour module of the 1998/9 Integrated Labour Force Survey came up with a lower proportion of 17.4% largely because the main data were collected in January 1999, when children were in school.

At the national level, the proportion of working children increased with age. Thus, 46.5% of the older children aged 14-17 years were working, while 25.6% of the younger children aged 5–9 reported working. Gender analysis depicts some gender disparities. The proportion of boys aged 5–17 years who worked was 38.6%, about 4.1 percentage points above that for girls. The differential gap increased over ages from 3.0 percentage points for age group 5–9 years to peak at 5.4 percentage points for age group 15–17 years.

The majority of working children (95.1%) were residing in rural areas. Likewise, 40.6% of the children age 5–17 years in rural areas reported to have worked compared to 12.8% in urban areas. The age pattern for the working children in rural and urban areas followed that observed at national level, i.e., the proportion of working children increased with age. However, the proportion of working girls in urban areas was higher than that for boys, especially in the older age groups 10–14 and 15–17 years. The reverse held in rural where the proportion of working boys was higher than for girls across the age groups. This contrasting situation indicated high employment of young maids and domestic help in urban areas.

**Table 3.12: Working Children Aged 5–17 Years by Rural-Urban Residence, 1999**

Age/Sex	Kenya			Rural			Urban		
	Total Working	Total Popn	% Working	Total Working	Total Popn	% Working	Total Working	Total Popn	% Working
Total	3,658,042	10,010,503	36.5	3,470,086	8,546,462	40.6	187,956	1,464,041	12.8
Boys	1,943,227	5,035,575	38.6	1,861,581	4,342,975	42.9	81,646	692,600	11.8
Girls	1,714,815	4,974,928	34.5	1,608,505	4,203,487	38.3	106,310	771,441	13.8
5-9									
Total	1,153,154	3,929,784	29.3	1,113,412	3,351,142	33.2	39,742	578,642	6.9
Boys	611,334	1,983,162	30.8	591,279	1,696,547	34.9	20,055	286,615	7.0
Girls	541,820	1,946,622	27.8	522,133	1,654,595	31.6	19,687	292,027	6.7
10-14									
Total	1,525,189	3,971,601	38.4	1,463,711	3,428,012	42.7	61,478	543,589	11.3
Boys	815,603	2,002,509	40.7	789,667	1,745,516	45.2	25,936	256,993	10.1
Girls	709,586	1,969,092	36.0	674,044	1,682,496	40.1	35,542	286,596	12.4
15-17									
Total	979,699	2,109,118	46.5	892,963	1,767,308	50.5	86,736	341,810	25.4
Boys	516,290	1,049,904	49.2	480,635	900,912	53.3	35,655	148,992	23.9
Girls	463,409	1,059,214	43.8	412,328	866,396	47.6	51,081	192,818	26.5

### 3.4.2 Spatial Distribution

Table 3.13 shows that among the eight provinces, Rift Valley province had the largest share of working children (26.5%), followed by Eastern (20.7%) and Western (14.5%) provinces. Nairobi (1.2%), North Eastern (4.2%) and Coast (7.3%) provinces had the lowest incidence of working children. Their small populations mainly explain this situation. With the exception of Nairobi province, the tabulated sex ratios show that there were more working boys than girls. The presence of more working girls than boys in Nairobi province reflects the urban situation shown in Table 3.10. Also, Coast province had almost equal gender equality as reflected by a close sex ratio of 104.8.

**Table 3.13: Provincial Distribution of Working Children Aged 5–17 Years by Sex, 1999**

Province	Total Working		Boys	Girls	Sex Ratio*
	Number	Share (%)			
Kenya	3,658,042	100.0	1,943,227	1,714,815	113.3
Nairobi	44,059	1.2	15,130	28,929	52.3
Central	474,704	13.0	247,951	226,753	109.3
Coast	266,133	7.3	136,176	129,957	104.8
Eastern	756,231	20.7	402,494	353,737	113.8
North-Eastern	155,216	4.2	93,279	61,937	150.6
Nyanza	463,481	12.7	241,978	221,503	109.2
Rift Valley	967,928	26.5	529,001	438,927	120.5
Western	530,290	14.5	277,218	253,072	109.5

\* Boys per 100 Girls

### 3.4.3 Status in Employment

Table 3.14 shows that majority of the working children (84.0%) worked as unpaid family workers in family farms or agricultural holdings. About 8.3% of the children worked for pay while 7.7% worked in family businesses.

Although the majority of children worked in family holdings, analysis by age shows a shift through the ages, where the proportion of working children in paid employment and family businesses increased at the expense of the proportion of working children working in family agricultural holdings. In particular, the proportion in paid employment increased from 3.5% for age group 5–9 years to peak at 17.2% for children aged 15–17 years, while that of children working in family agricultural holdings declined from 89.0% for the age group 5–9 to 74.1% for the age group 15–17 years.

Overall, boys constituted 53.1% of the working children, and their proportions were slightly higher than for girls working in both family holdings and as paid employees. However, the proportion of girls working in family businesses (8.0%) was slightly higher than that for boys (7.5%).

Urban children engaged in work different from rural children. The majority of the working children in rural areas (88.6%) were unpaid family workers in agricultural holdings. Only 6.3% of the children working in rural areas were wage employees, while 7.1% were working in family businesses. On the other hand, 44.9% of the working children in urban areas were in wage employment, while 19.0% were in family businesses. About 36.1% of children working in urban areas were engaged in unpaid work in agricultural holdings and farms. This emergence of urban agricultural activities may be explained by the demarcation of urban boundaries during the 1999 census.

Girls contributed the highest proportion of children working in urban areas as paid employees, indicating a high incidence of girl domestic servants in urban households. For the rural areas, the proportion of girls working in family holdings (87.4%) and businesses (7.4%) was higher than that for boys (86.9% and 6.9%, respectively). However, the proportion of boys working in rural areas as wage employees was higher at 7.2% compared to that for girls at 5.3%.

**Table 3.14: Distribution of Working Children Aged 5–17 Years by Work Status, Age Group and Rural-Urban Residence, 1999**

Area Of Residence	Age/Sex	Total Employment		Paid Employees	Self-employed*		
		Number	% Share		Total	In Family Business	In Family Farm
Kenya	Total	3,658,042	100.0	8.3	91.7	7.7	84.0
	Boys	1,943,227	100.0	8.4	91.6	7.5	84.1
	Girls	1,714,815	100.0	8.2	91.8	8.0	83.9
	5-9						
	Total	1,153,154	100.0	3.5	96.5	7.5	89.0
	Boys	611,334	100.0	3.4	96.6	7.3	89.3
	Girls	541,820	100.0	3.5	96.5	7.8	88.7
	10-14						
	Total	1,525,189	100.0	6.2	93.8	7.2	86.6
	Boys	815,603	100.0	6.0	94.0	7.0	86.9
	Girls	709,586	100.0	6.5	93.5	7.4	86.1
	15-17						
	Total	979,699	100.0	17.2	82.8	8.7	74.1
	Boys	516,290	100.0	18.0	82.0	8.4	73.6
	Girls	463,409	100.0	16.3	83.7	9.0	74.7
<b>Rural</b>							
Total	3,470,086	100.0	6.3	93.7	7.1	86.6	
Boys	1,861,581	100.0	7.2	92.8	6.9	85.9	
Girls	1,608,505	100.0	5.3	94.7	7.4	87.4	
5-9							
Total	1,113,412	100.0	2.7	97.3	7.1	90.3	
Boys	591,279	100.0	2.7	97.3	6.9	90.4	
Girls	522,133	100.0	2.6	97.4	7.3	90.1	
10-14							
Total	1,463,711	100.0	5.0	95.0	6.8	88.3	
Boys	789,667	100.0	5.5	94.5	6.6	87.9	
Girls	674,044	100.0	4.4	95.6	7.0	88.6	
15-17							
Total	892,963	100.0	13.0	87.0	7.6	79.3	
Boys	480,635	100.0	15.6	84.4	7.3	77.2	
Girls	412,328	100.0	10.1	89.9	8.1	81.9	
<b>Urban</b>							
Total	187,956	100.0	44.9	55.1	19.0	36.1	
Boys	81,646	100.0	35.3	64.7	21.6	43.1	
Girls	106,310	100.0	52.2	47.8	17.0	30.7	
9-May							
Total	39,742	100.0	25.1	74.9	20.2	54.7	
Boys	20,055	100.0	23.6	76.4	19.9	56.4	
Girls	19,687	100.0	26.6	73.4	20.5	52.9	
14-Oct							
Total	61,478	100.0	36.2	63.8	17.9	45.9	
Boys	25,936	100.0	22.9	77.1	20.5	56.6	
Girls	35,542	100.0	45.9	54.1	16.0	38.1	
15-17							
Total	86,736	100.0	60.0	40.0	19.3	20.7	
Boys	35,655	100.0	50.8	49.2	23.3	25.9	
Girls	51,081	100.0	66.5	33.5	16.4	17.1	

\* Includes unpaid family workers

### 3.4.4 Schooling Status of Working Children

Table 3.15 shows that 3.0 million or 81.9% of the working children aged 5–17 years were not schooling (out of school) in 1999. At the national level, the sex ratio of 115.7 shows that boys constituted majority of the out of school working children. The non-schooling criterion, which is embedded in the definition of child labour, gives an indication of the size of child labour and is investigated further in the following analysis.

Schooling status of the working children in rural areas was different from those in urban areas. In rural areas, 83.4% of the working children were out of school, while the corresponding proportion for urban areas was low at 54.1%. Also, the sex ratio of 116.5 for working children who were not schooling shows that boys contributed the highest share of the out of school children working in rural areas, while the low sex ratio of 95.0 indicates that girls contributed the highest proportion of out of school working children in urban areas.

**Table 3.15: Schooling Status of the Working Children Aged 5–17 Years by Sex, 1999**

Area of Residence	Schooling Status	Total Employment		Sex Ratio*
		Number	Share (%)	
Kenya	Total	3,658,042	100.0	113.3
	In School	663,735	18.1	103.3
	Not in School	2,994,307	81.9	115.7
Rural	Total	3,470,086	100.0	115.7
	In School	577,405	16.6	112.0
	Not in School	2,892,681	83.4	116.5
Urban	Total	187,956	100.0	76.8
	In School	86,330	45.9	59.3
	Not in School	101,626	54.1	95.0
Nairobi	Total	44,059	100.0	52.3
	In School	29,823	67.7	43.1
	Not in School	14,236	32.3	75.9
Central	Total	474,704	100.0	109.3
	In School	95,684	20.2	115.9
	Not in School	379,020	79.8	107.8
Coast	Total	266,133	100.0	104.8
	In School	50,797	19.1	100.7
	Not in School	215,336	80.9	105.8
Eastern	Total	756,231	100.0	113.8
	In School	137,304	18.2	126.3
	Not in School	618,927	81.8	111.2
North-Eastern	Total	155,216	100.0	150.6
	In School	6,129	3.9	173.5
	Not in School	149,087	96.1	149.7
Nyanza	Total	463,481	100.0	109.2
	In School	101,142	21.8	80.8
	Not in School	362,339	78.2	118.8
Rift Valley	Total	967,928	100.0	120.5
	In School	155,793	16.1	114.7
	Not in School	812,135	83.9	121.7
Western	Total	530,290	100.0	109.5
	In School	87,063	16.4	95.3
	Not in School	443,227	83.6	112.6

\* Boys per 100 Girls



Across the provinces, North Eastern province had the highest proportion (96.1%) of the out of school working children, implying that only 3.9% worked while they were also in school. It was followed by Rift Valley province with 83.9% and Western province with 83.6%. Girls in Nairobi province contributed the highest proportion among all provinces of out of school working children as reflected by a low sex ratio of 75.9, followed by Nyanza with a sex ratio of 80.8.

## Chapter 4

### The Unemployed Population

#### 4.1 Unemployment Trends

Interest in the unemployment problem in Kenya is not new. Since the 1970s, the Government has expressed its concern about the structure of employment and the rate of unemployment in Kenya. The problem has been addressed in a variety of ways, including tripartite arrangements where employers were persuaded to employ additional workers to lessen the unemployment problem.

Despite concerted efforts by the authorities, estimates show that unemployment has persisted over the last three decades. The 1978 Urban Labour Force Survey came up with an urban unemployment rate of about 7% but acknowledged the existence of a significant amount of under-employment. The 1986 Urban Labour Force Survey gave an urban unemployment rate of 14.8%. Further, the 1989 census gave an overall unemployment rate of 6.5% for the population aged 15–64 years, with an urban unemployment rate of 13.0%.

The 1999 Integrated Labour Force Survey showed that unemployment in the country had risen to 14.6%, with an urban unemployment rate of 25.1% and rural unemployment rate of 9.4%. The 1999 census results underscore the unemployment problem by giving an urban unemployment rate of 17.7%. The differences in the results are largely attributed to methodologies.

Two factors have largely contributed to the prevailing high unemployment rates in the country. First is the weak performance of the economy, which has largely constrained growth in wage employment in the private sector during the last decade. Secondly, public sector reforms have led to restrictive employment, retrenchments and privatisation of non-strategic government institutions. These reforms resulted in downsizing of the Civil Service and government parastatals which used to be the biggest employers in the country.

#### 4.2 Characteristics of the Unemployed

In this analysis, the unemployed are defined as persons of working age who reported during the 1999 census that they were not working because they were looking for work during the 7 days prior to the census night, or they were available for work but had despaired in looking for any type of work during the recent past.

The standard working age 15–64 years is used in this chapter in studying characteristics of the unemployed population. As pointed out earlier, this approach is based on the fact that the population aged 15–64 years is broadly defined as the productive population in most social and economic systems, and many countries have labour laws regulating minimum age for entering the labour market, especially in some risky sectors.

Table 4.1 shows that 78.2% of the unemployed persons aged 15–64 years were the youth aged 15–29 in both urban and rural areas. In particular, 32.8% of unemployed persons were the youth in the 15–19 age group. The population aged 20–24 years contributed 29.9%, while the

population in the age group 25–29 years accounted for 15.5% of the unemployed. From this age group, there was a notable decline in the proportions of the unemployed along the age spectrum.

The overall proportion of unemployed persons who were actively looking for work (i.e., looked for work during the census week) was low at the national level at 33.9%. On the other hand, the rest of the unemployed (66.1%) were passive job seekers who reported that they were available for work and had looked for work previously but not during the week preceding the census night. This situation is largely explained by unavailability of paid jobs against a background of a prolonged economic decline and the absence of active job placement bureaus in the country. The most active job seekers were youth aged between 15 and 39 years. Conversely, the passive job seekers were mainly persons over 39 years of age.

About 44.9.0% of unemployed persons in urban areas were actively looking for work, compared to a lower proportion of 26.7% in rural areas. Inversely, a higher proportion of the unemployed in rural areas (73.3%) were passive job seekers, compared to a corresponding proportion of 55.1% in urban areas. This explains why unemployment in rural areas was less acute than in urban areas.

The age pattern of job search in rural areas was different from urban areas. In urban areas, active job seekers were spread over a wide band covering the ages 15–49 whereas the proportions for rural areas were lower over these groups and concentrated over a narrower band in the age group 15–39 years.

**Table 4.1: Age Distribution of the Unemployed Population Aged 15–64 Years, 1999**

Area/Age	Total Unemployed		Looking for Work		No work Available	
	Number	% of Total	Number	%	Number	%
<b>Kenya</b>						
<b>Total</b>	<b>1,250,832</b>	<b>100.0</b>	<b>424,096</b>	<b>33.9</b>	<b>826,736</b>	<b>66.1</b>
15 - 19	410,165	32.8	86,962	21.2	323,203	78.8
20 - 24	374,217	29.9	169,588	45.3	204,629	54.7
25 - 29	193,735	15.5	87,673	45.3	106,062	54.7
30 - 34	85,687	6.9	34,945	40.8	50,742	59.2
35 - 39	55,322	4.4	19,835	35.9	35,487	64.1
40 - 44	36,543	2.9	10,642	29.1	25,901	70.9
45 - 49	29,535	2.4	6,817	23.1	22,718	76.9
50 - 54	31,413	2.5	4,005	12.7	27,408	87.3
55 - 59	18,353	1.5	2,205	12.0	16,148	88.0
60 - 64	15,862	1.3	1,424	9.0	14,438	91.0
<b>Rural</b>						
<b>Total</b>	<b>758,601</b>	<b>60.6</b>	<b>202,872</b>	<b>26.7</b>	<b>555,729</b>	<b>73.3</b>
15 - 19	279,040	22.3	41,512	14.9	237,528	85.1
20 - 24	208,335	16.7	77,938	37.4	130,397	62.6
25 - 29	107,581	8.6	41,571	38.6	66,010	61.4
30 - 34	48,004	3.8	17,341	36.1	30,663	63.9
35 - 39	32,051	2.6	10,123	31.6	21,928	68.4
40 - 44	21,800	1.7	5,711	26.2	16,089	73.8
45 - 49	17,988	1.4	3,793	21.1	14,195	78.9
50 - 54	19,739	1.6	2,444	12.4	17,295	87.6
55 - 59	12,398	1.0	1,433	11.6	10,965	88.4
60 - 64	11,665	0.9	1,006	8.6	10,659	91.4
<b>Urban</b>						
<b>Total</b>	<b>492,231</b>	<b>39.4</b>	<b>221,224</b>	<b>44.9</b>	<b>271,007</b>	<b>55.1</b>
15 - 19	131,125	10.5	45,450	34.7	85,675	65.3
20 - 24	165,882	13.3	91,650	55.3	74,232	44.7
25 - 29	86,154	6.9	46,102	53.5	40,052	46.5
30 - 34	37,683	3.0	17,604	46.7	20,079	53.3
35 - 39	23,271	1.9	9,712	41.7	13,559	58.3
40 - 44	14,743	1.2	4,931	33.4	9,812	66.6
45 - 49	11,547	0.9	3,024	26.2	8,523	73.8
50 - 54	11,674	0.9	1,561	13.4	10,113	86.6
55 - 59	5,955	0.5	772	13.0	5,183	87.0
60 - 64	4,197	0.3	418	10.0	3,779	90.0

Gender analysis presented in Table 4.2 shows that although females contributed 57.1% of the unemployed, their share in active job search at the national level was only 34.7%, which was about half the share of active male job searchers. This is attributed to a low percentage share of active job search in rural areas. However, females' share in active job search improved slightly in urban areas.

**Table 4.2: Distribution of the Unemployed Population Aged 15–64 Years by Sex and Rural-Urban Residence, 1999**

Area/Sex	Total Unemployed		Looking for Work		No work Available	
	Number	% Share	Number	% of Total	Number	% of Total
<b>Kenya</b>						
Total	1,250,832	100.0	424,096	100.0	826,736	100.0
Males	537,143	42.9	276,931	65.3	260,212	31.5
Females	713,689	57.1	147,165	34.7	566,524	68.5
<b>Rural</b>						
Total	752,917	100.0	199,742	100.0	553,175	100.0
Males	308,581	41.0	134,925	67.5	173,656	31.4
Females	444,336	59.0	64,817	32.5	379,519	68.6
<b>Urban</b>						
Total	497,915	100.0	224,354	100.0	273,561	100.0
Males	228,562	45.9	142,006	63.3	86,556	31.6
Females	269,353	54.1	82,348	36.7	187,005	68.4

It is important to study the educational achievement or skills of the labour force so as to facilitate the matching of supply and demand for human resources in the labour market. In the absence of data on occupations and vocational training, this analysis uses information collected on the highest level of formal education attained.

As shown in Table 4.3, the majority of the unemployed were primary and secondary school leavers. The unemployed with Standard 5 to 8 level of education had the largest share (39.6%) followed by those with Form 1 to 4 level of education (29.8%). Unemployed persons with university level of education were only 1.5% of the total unemployed, and contributed 2.0 % of active job seekers.

**Table 4.3: Unemployed Population Aged 15–64 Years by Educational Attainment, 1999**

Highest Educational Attainment	Total Unemployed		Looked for Work		No Work Available	
	Number	% Share	Number	% of Total	Number	% of Total
Total	1,250,832	100.0	424,096	100.0	826,736	100.0
None	198,319	15.9	20,918	4.9	177,401	21.5
Pre-Primary	4,234	0.3	466	0.1	3,768	0.5
Standard 1 Incomplete	4,786	0.4	1,419	0.3	3,367	0.4
Standard 1-4	145,291	11.6	31,572	7.4	113,719	13.8
Standard 5-8	495,858	39.6	157,451	37.1	338,407	40.9
Form 1-4	372,305	29.8	200,008	47.2	172,297	20.8
Form 5-6	11,838	0.9	3,747	0.9	8,091	1.0
University	18,201	1.5	8,515	2.0	9,686	1.2

### 4.3 Unemployment Rates

One of the most commonly used summary measures of the unemployment situation in a country is the unemployment rate. It is computed as the proportion of the unemployed persons to the economically active population (the labour force). Although the 1999 census collected labour force particulars for persons aged 5 years and above, the unemployment rates presented in this section are for persons aged 15–64 years because of the reasons given earlier for excluding the population aged 5-14 years from the study of unemployment.

Table 4.4 and Figure 4.1 show that the urban unemployment rate increased in a span of 10 years from 13.0% in 1989 to 17.7% in 1999. Likewise, unemployment in the rural areas though less acute rose from 4.9% recorded in 1989 to 7.9% in 1999. The overall employment rate was 10.1% in 1999 and 6.5% in 1989.

There were gender differentials in the unemployment rate. Unemployment rates for females were higher than for males, and almost doubled from the 1989 position at the national level. The differentials were more pronounced in urban areas, where female unemployment rates increased from 18.0% in 1989 to 23.6% in 1999. The 1999 rate was 10.0 percentage points above that for males. This is a reflection of increased female participation in the labour market, especially in the urban areas.

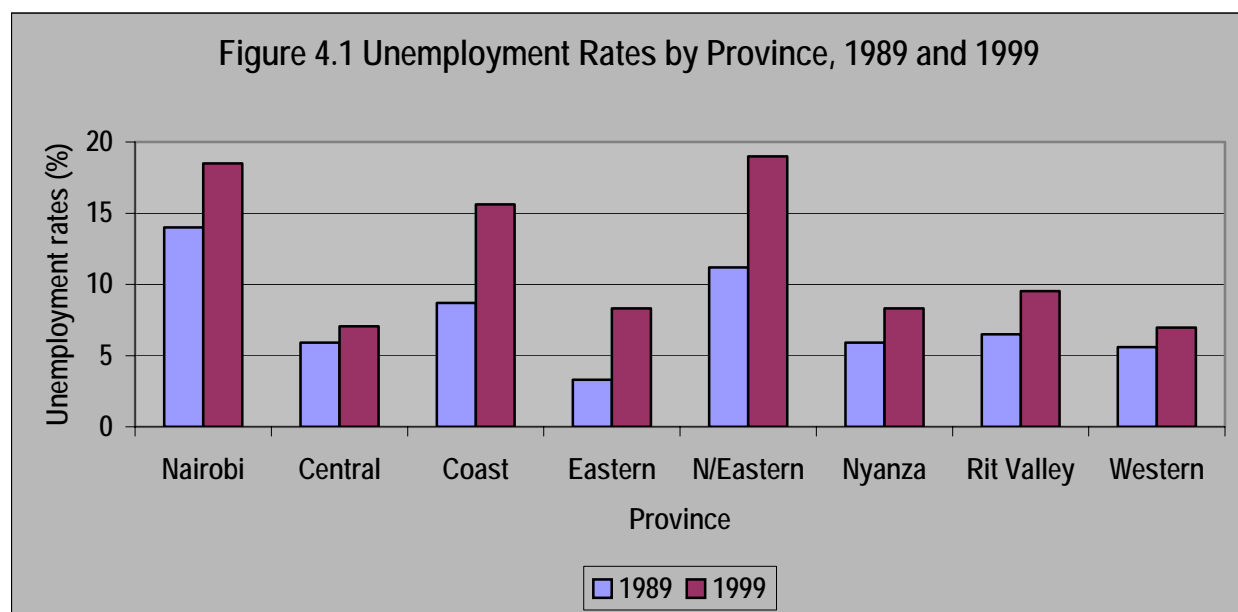
There were significant disparities in unemployment rates across the eight provinces. Provinces with large urban populations, such as Nairobi, North Eastern and Coast, had high unemployment rates in both 1989 and 1999. Their unemployment rates were also above the 1989 levels. That is, in Nairobi province the unemployment rate increased from 14.0% in 1989 to 18.5% in 1999, while the unemployment rate in North Eastern province increased from 11.2% to 19.0%. Similarly the rates in Coast province increased from 8.7% to 15.6%. As a reflection of the urban situation, unemployment rates for females in these provinces were higher than for males in both 1989 and 1999, with those for Nairobi and North Eastern provinces being above the national unemployment rate for females in urban areas. On the other hand, Western, Central, Eastern and Nyanza provinces, which have high proportions of rural populations, had unemployment rates below the national average unemployment rate in both 1989 and 1999.

**Table 4.4: Unemployment Rates for Population Aged 15–64 Years by Region and Sex, 1989 and 1999**

Area	Sex	Unemployment Rates %	
		1989	1999
Kenya	Total	6.5	10.1
	Male	6.5	8.4
	Female	6.6	11.9
Rural	Total	4.9	7.9
	Male	5.2	6.6
	Female	4.6	9.1
Urban	Total	13.0	17.7
	Male	10.4	13.6
	Female	18.0	23.6
Nairobi	Total	14.0	18.5
	Male	11.5	14.5
	Female	19.6	25.0
Central	Total	5.9	7.1
	Male	6.4	6.8
	Female	5.5	7.3
Coast	Total	8.7	15.6
	Male	8.2	12.5
	Female	9.3	19.4
Eastern	Total	3.3	8.3
	Male	3.7	6.6
	Female	3.0	10.0

Table 4.4: Contd.

Area	Sex	Unemployment Rates %	
		1989	1999
N/Eastern	Total	11.2	19.0
	Male	8.2	10.7
	Female	19.1	35.7
Nyanza	Total	5.9	8.3
	Male	6.1	8.0
	Female	5.8	8.6
Rift Valley	Total	6.5	9.5
	Male	5.9	7.0
	Female	7.2	12.4
Western	Total	5.6	7.0
	Male	5.8	6.3
	Female	5.3	7.5



Unemployment rates by age and sex for both 1989 and 1999 are presented in Figure 4.2 and Table 4.5. The age-sex structure shows that the proportion of the unemployed youth in the labour force was high, especially in the early ages of 15–24 years for both sexes during the two census years. A declining trend occurred in unemployment rates through the older ages until age group 50–54 years where increases were observed for both 1989 and 1999. This could be explained by the steep rise in the unemployment rate for females in urban areas observed in Table 4.4.

Gender analysis shows that male unemployment rates were above the rates for females for the early ages 15-29 years in 1989. However, the converse held for 1999, where unemployment rates for females in these ages were higher than those for males. The increasing unemployment

rates for females in the early ages during the 10-year period indicate increased female participation in the labour market, especially in the urban areas.

**Table 4.5: Unemployment Rates for Population Aged 15–64 Years by Age and Sex, 1989 and 1999**

Age	Total		Males		Females	
	1989	1999	1989	1999	1989	1999
Total	6.5	10.1	6.5	8.4	6.6	11.9
15 - 19	12.5	19.4	13.2	14.5	11.9	24.2
20 - 24	11.1	15.9	12.5	14.2	9.8	17.6
25 - 29	6.0	9.4	6.3	8.6	5.7	10.3
30 - 34	3.8	5.7	3.6	5.2	4.1	6.2
35 - 39	3.1	4.3	2.8	4.0	3.4	4.6
40 - 44	2.9	3.9	2.6	3.6	3.3	4.3
45 - 49	2.9	3.8	2.5	3.6	3.4	4.2
50 - 54	3.5	5.0	2.7	4.7	4.4	5.5
55 - 59	4.0	4.5	3.2	3.9	5.0	5.1
60 - 64	5.9	4.5	4.2	2.7	7.7	6.4



Unemployment rates are expected to gradually decrease through the primary, secondary and university levels of education. However, Table 4.6 does not depict this pattern. Although no clear analysis can be done, the results imply that either the school leavers are not equipped with the right type of skills demanded by the employing economic activities, or there were technological changes in the employing industries which needed updating of skills for job seekers. Such results would justify designing appropriate educational systems and human resource policies. The



importance of educational planning as an essential part of human resource planning is now widely appreciated for it facilitates matching of the supply of people receiving different kinds of education and specialised training with corresponding demand for specialised quantities of labour with certain qualifications over a long period of time in different economic activities (Datta 1991).

**Table 4.6: Unemployment Rates for Population Aged 15–64 years by Educational Attainment, 1999**

<b>Educational Attainment</b>	<b>Total</b>	<b>Males</b>	<b>Females</b>
<b>Total</b>	<b>10.1</b>	<b>8.4</b>	<b>11.9</b>
None	9.5	7.0	11.1
Pre-Primary	13.9	12.4	15.2
Standard 1 Incomplete	9.6	8.7	10.3
Standard 1-4	8.2	7.3	9.2
Standard 5-8	9.8	8.2	11.6
Form 1-4	12.0	10.2	14.5
Form 5-6	7.8	5.1	14.6
University	11.2	7.7	18.9

## **Chapter 5**

### **Conclusions and Recommendations**

#### **5.1 Conclusions**

Kenya's major economic challenges are the twin problems of poverty and unemployment. To address the unemployment problem, the Government requires comprehensive and accurate labour market information. In this respect, the Kenya 1999 Population and Housing Census collected labour force particulars to update employment and unemployment data in the country and also provide a basis for projecting labour force aggregates.

The analysis presented in this monograph proves that the census achieved these noble objectives. In particular, the census has established that the urban unemployment problem has worsened, rising from 13.0% in 1989 to 17.7% in 1999. The census has also established the presence of working children in a country where large proportions of the adult population are jobless. This information is very useful to the relevant authorities and researchers, especially now that the Children's Bill and the Child Labour Policy Paper are at advanced stages of implementation.

Other interesting findings include increased participation of females in the labour force and the gradual decline in wage employment. The latter is reflected in the decelerated growth in wage employment in the modern sector of the economy, mainly attributed to public sector reforms and poor performance of the domestic economy in the recent past.

#### **5.2 Data Quality**

The labour force information collected by the Census is consistent with results from recent sample surveys. Also, comparison with the 1989 Census results brings out realistic trends. There were, however, some weaknesses, which are also common with labour force data in other developing countries. One main problem was domestication of international labour force concepts during the design and implementation of the census. This localisation necessitated verbally translating such concepts from English into local languages when administering the questionnaire and then translating back into English the responses given in local languages without losing the original meaning or misreporting the respondents' answers to questions. Another problem was the notion of "seeking work" adopted as the basis for defining unemployment; this was understood by survey respondents as referring to search for paid employment only. Equally problematic was the existence of certain types of self-employment activities to which the very notion of seeking work may not really apply. A further problem was the high prevalence of self-employment which absorbed 74.7% of total employment in 1999. This is attributed to the absence of unemployment benefits such as unemployment insurance and public relief schemes. In such circumstances, it is difficult to fully describe the employment situation by the unemployment data alone, without

supplementing by data on under-employment. Data matching problems introduced at the data processing stage were largely attributed to the scanning method used in capturing the census data.

These problems affected the quality of the labour force data collected by the 1999 census, leading to unexpectedly low unemployment rates. The data matching problems were partially resolved by extensive editing and validation of the census results which led to some delay in releasing this analytical monograph.

### 5.3 Recommendations

This was the second time in the history of census-taking in Kenya that questions on labour force information were included in the census questionnaire. It was also the first time that data capture for the census included scanning technology, which is still undergoing trials in many countries. As such, teething problems were expected, and lessons learned will go a long way in improving the processing of census data and in perfecting the labour force module of future censuses.

As a way forward in improving the quality of labour force data, the following recommendations are made on the basis of the lessons learned in analysing the labour force data:

- The census included only one question on the activity status, that is, what one was doing during the 7 days prior to the census night. This question was not enough to adequately capture the labour force characteristics of the population. It is therefore recommended that economic activity, occupations, industry and hours worked be included in future census questionnaires. This will facilitate full analysis and provide indicators for identifying issues such as under-employment and child labour.
- The global labour force concepts should be domesticated for ease of administration of labour force questionnaires. In particular, the concepts of work and economic activity which are based on the System of National Accounts (SNA) frontiers of production should be "Africanised" so that homemakers and housewives will not be categorised as undertaking non-economic activities, and persons working few hours will not be reported to have worked. In this category also are the concepts of self-employment, where persons without gainful employment seem to fall, and those "actively seeking work" may not be applicable in countries without a developed job-search systems, or for some types of self-employment.
- Appropriate training should precede the use of the scanning method of data capture. It seems that the census team was not technically prepared for this technology.

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## Appendix 1 The Kenya 1999 Population and Housing Census Questionnaire



## Appendix 2 Annex Tables

**Table 2-1: Employed Population Aged 15-64 by Sex, District and Rural-Urban Residence, 1999**

Province/ District	Total			Rural			Urban		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Kenya</b>	<b>11,144,771</b>	<b>5,838,353</b>	<b>5,306,418</b>	<b>8,824,978</b>	<b>4,390,779</b>	<b>4,434,199</b>	<b>2,319,793</b>	<b>1,447,574</b>	<b>872,219</b>
Nairobi	929,358	603,181	326,177	0	0	0	929,358	603,181	326,177
<b>Central</b>	<b>1,669,533</b>	<b>833,926</b>	<b>835,607</b>	<b>1,433,627</b>	<b>701,480</b>	<b>732,147</b>	<b>235,906</b>	<b>132,446</b>	<b>103,460</b>
Kiambu	313,074	166,080	146,994	247,765	128,780	118,985	65,309	37,300	28,009
Kirinyaga	230,365	115,252	115,113	215,972	107,903	108,069	14,393	7,349	7,044
Murang'a	150,691	68,243	82,448	145,096	65,436	79,660	5,595	2,807	2,788
Nyandarua	210,253	100,012	110,241	183,078	86,512	96,566	27,175	13,500	13,675
Nyeri	312,227	152,743	159,484	274,412	132,985	141,427	37,815	19,758	18,057
Thika	288,072	152,992	135,080	207,779	103,884	103,895	80,293	49,108	31,185
Maragua	164,851	78,604	86,247	159,525	75,980	83,545	5,326	2,624	2,702
<b>Coast</b>	<b>928,170</b>	<b>521,214</b>	<b>406,956</b>	<b>572,445</b>	<b>281,646</b>	<b>290,799</b>	<b>355,725</b>	<b>239,568</b>	<b>116,157</b>
Kilifi	196,815	90,086	106,729	169,825	73,769	96,056	26,990	16,317	10,673
Kwale	185,483	91,483	94,000	162,286	76,783	85,503	23,197	14,700	8,497
Lamu	26,131	17,195	8,936	21,387	13,722	7,665	4,744	3,473	1,271
Mombasa	258,853	178,093	80,760	0	0	0	258,853	178,093	80,760
Taita Taveta	98,743	52,729	46,014	82,609	43,254	39,355	16,134	9,475	6,659
Tana River	60,321	36,895	23,426	55,750	33,969	21,781	4,571	2,926	1,645
Malindi	101,824	54,733	47,091	80,588	40,149	40,439	21,236	14,584	6,652
<b>Eastern</b>	<b>1,841,062</b>	<b>922,679</b>	<b>918,383</b>	<b>1,718,302</b>	<b>853,904</b>	<b>864,398</b>	<b>122,760</b>	<b>68,775</b>	<b>53,985</b>
Embu	132,943	67,743	65,200	117,228	59,334	57,894	15,715	8,409	7,306
Isiolo	34,792	21,437	13,355	23,770	15,265	8,505	11,022	6,172	4,850
Kitui	210,157	92,527	117,630	203,038	88,744	114,294	7,119	3,783	3,336
Makueni	268,448	136,221	132,227	257,515	129,965	127,550	10,933	6,256	4,677
Machakos	321,460	170,409	151,051	290,545	152,616	137,929	30,915	17,793	13,122
Marsabit	37,317	25,941	11,376	34,310	23,877	10,433	3,007	2,064	943
Mbeere	71,701	34,061	37,640	70,432	33,383	37,049	1,269	678	591
Meru Central	238,506	123,264	115,242	214,149	110,187	103,962	24,357	13,077	11,280
Moyale	14,178	9,925	4,253	11,389	8,056	3,333	2,789	1,869	920
Mwingi	115,452	49,680	65,772	110,429	46,847	63,582	5,023	2,833	2,190
Meru North	260,353	126,115	134,238	253,234	121,973	131,261	7,119	4,142	2,977
Tharaka	42,947	19,882	23,065	42,947	19,882	23,065	0	0	0
Nithi (Meru S.)	92,808	45,474	47,334	89,316	43,775	45,541	3,492	1,699	1,793
<b>NorthEastern</b>	<b>229,551</b>	<b>169,209</b>	<b>60,342</b>	<b>203,087</b>	<b>151,433</b>	<b>51,654</b>	<b>26,464</b>	<b>17,776</b>	<b>8,688</b>
Garissa	64,180	50,871	13,309	51,509	41,979	9,530	12,671	8,892	3,779
Mandera	69,867	50,915	18,952	60,272	44,617	15,655	9,595	6,298	3,297
Wajir	95,504	67,423	28,081	91,306	64,837	26,469	4,198	2,586	1,612
<b>Nyanza</b>	<b>1,679,701</b>	<b>768,400</b>	<b>911,301</b>	<b>1,511,372</b>	<b>670,921</b>	<b>840,451</b>	<b>168,329</b>	<b>97,479</b>	<b>70,850</b>
Gucha (S.Kisii)	170,845	73,907	96,938	167,143	71,955	95,188	3,702	1,952	1,750
Homa Bay	116,753	50,411	66,342	105,006	44,097	60,909	11,747	6,314	5,433
Kisii Central	188,616	83,415	105,201	178,126	77,492	100,634	10,490	5,923	4,567
Kisumu	178,983	94,745	84,238	105,153	50,506	54,647	73,830	44,239	29,591
Kuria	61,692	28,889	32,803	56,697	26,158	30,539	4,995	2,731	2,264
Migori	196,279	92,550	103,729	176,620	81,257	95,363	19,659	11,293	8,366
N.Kisii (Nyamira)	200,792	91,094	109,698	188,864	84,287	104,577	11,928	6,807	5,121
Rachuonyo	116,340	50,532	65,808	112,674	48,576	64,098	3,666	1,956	1,710
Siaya	198,065	81,931	116,134	190,132	77,864	112,268	7,933	4,067	3,866
Suba	57,367	27,855	29,512	54,231	26,105	28,126	3,136	1,750	1,386
Bondo	86,515	40,424	46,091	81,937	37,909	44,028	4,578	2,515	2,063
Nyando	107,454	52,647	54,807	94,789	44,715	50,074	12,665	7,932	4,733



Table 2-1: Contd.

Province/ District	Total			Rural			Urban		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Rift Valley</b>	<b>2,573,423</b>	<b>1,411,686</b>	<b>1,161,737</b>	<b>2,201,911</b>	<b>1,184,039</b>	<b>1,017,872</b>	<b>371,512</b>	<b>227,647</b>	<b>143,865</b>
Baringo	96,639	50,237	46,402	90,566	46,617	43,949	6,073	3,620	2,453
Bomet	145,163	67,767	77,396	142,825	66,240	76,585	2,338	1,527	811
Keiyo	55,347	30,279	25,068	53,434	29,243	24,191	1,913	1,036	877
Kajiado	145,512	85,838	59,674	112,740	66,073	46,667	32,772	19,765	13,007
Kericho	195,171	104,116	91,055	179,633	94,574	85,059	15,538	9,542	5,996
Koibatek	52,895	28,454	24,441	43,905	23,453	20,452	8,990	5,001	3,989
Laikipia	127,021	67,524	59,497	100,053	51,802	48,251	26,968	15,722	11,246
Marakwet	58,729	28,730	29,999	58,729	28,730	29,999	0	0	0
Nakuru	484,525	262,916	221,609	340,939	175,043	165,896	143,586	87,873	55,713
Nandi	207,456	117,668	89,788	197,310	111,769	85,541	10,146	5,899	4,247
Narok	120,732	69,065	51,667	111,289	63,116	48,173	9,443	5,949	3,494
Samburu	39,580	23,792	15,788	31,638	19,166	12,472	7,942	4,626	3,316
Trans Mara	62,083	31,253	30,830	59,255	29,648	29,607	2,828	1,605	1,223
Trans Nzoia	198,236	108,580	89,656	182,010	98,362	83,648	16,226	10,218	6,008
Turkana	136,202	82,318	53,884	128,205	77,221	50,984	7,997	5,097	2,900
Uasin Gishu	210,332	126,064	84,268	138,999	80,338	58,661	71,333	45,726	25,607
West Pokot	106,447	56,624	49,823	101,655	53,774	47,881	4,792	2,850	1,942
Buret	131,353	70,461	60,892	128,726	68,870	59,856	2,627	1,591	1,036
<b>Western</b>	<b>1,293,973</b>	<b>608,058</b>	<b>685,915</b>	<b>1,184,234</b>	<b>547,356</b>	<b>636,878</b>	<b>109,739</b>	<b>60,702</b>	<b>49,037</b>
Bungoma	330,715	161,158	169,557	293,835	140,618	153,217	36,880	20,540	16,340
Busia	147,990	65,194	82,796	137,317	59,512	77,805	10,673	5,682	4,991
Mt. Elgon	55,445	27,629	27,816	53,117	26,415	26,702	2,328	1,214	1,114
Kakamega	238,670	112,446	126,224	216,339	100,004	116,335	22,331	12,442	9,889
Lugari	83,381	41,413	41,968	79,614	39,378	40,236	3,767	2,035	1,732
Teso	74,939	36,061	38,878	66,607	31,466	35,141	8,332	4,595	3,737
Vihiga	177,367	78,792	98,575	167,478	74,003	93,475	9,889	4,789	5,100
Butere/Mumias	185,466	85,365	100,101	169,927	75,960	93,967	15,539	9,405	6,134

**Table 2-2: Unemployed Population Aged 15-64 by Sex, District and Rural-Urban Residence, 1999**

Province/ District	Total			Rural			Urban		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Kenya</b>	<b>1,250,832</b>	<b>537,143</b>	<b>713,689</b>	<b>752,917</b>	<b>308,581</b>	<b>444,336</b>	<b>499,604</b>	<b>229,372</b>	<b>270,232</b>
Nairobi	210,984	102,524	108,460	0	0	0	210,984	102,524	108,460
<b>Central</b>	<b>126,733</b>	<b>60,907</b>	<b>65,826</b>	<b>90,522</b>	<b>44,612</b>	<b>45,910</b>	<b>37,900</b>	<b>17,105</b>	<b>20,795</b>
Kiambu	46,442	23,445	22,997	31,945	16,497	15,448	14,497	6,948	7,549
Kirinyaga	9,175	3,994	5,181	8,020	3,651	4,369	1,155	343	812
Murang'a	6,641	3,228	3,413	6,002	2,976	3,026	639	252	387
Nyandarua	6,383	3,116	3,267	5,358	2,670	2,688	1,025	446	579
Nyeri	17,611	7,678	9,933	13,326	6,109	7,217	4,285	1,569	2,716
Thika	30,465	14,559	15,906	16,499	8,052	8,447	13,966	6,507	7,459
Maragua	10,016	4,887	5,129	9,372	4,657	4,715	644	230	414
<b>Coast</b>	<b>171,910</b>	<b>74,193</b>	<b>97,717</b>	<b>70,541</b>	<b>26,944</b>	<b>43,597</b>	<b>101,369</b>	<b>47,249</b>	<b>54,120</b>
Kilifi	28,290	11,962	16,328	21,872	9,254	12,618	6,418	2,708	3,710
Kwale	27,495	11,572	15,923	20,942	8,624	12,318	6,553	2,948	3,605
Lamu	4,819	1,058	3,761	3,094	620	2,474	1,725	438	1,287
Mombasa	76,651	37,346	39,305	0	0	0	76,651	37,346	39,305
Taita Taveta	10,297	4,282	6,015	7,433	3,114	4,319	2,864	1,168	1,696
Tana River	8,702	2,499	6,203	7,437	2,085	5,352	1,265	414	851
Malindi	15,656	5,474	10,182	9,763	3,247	6,516	5,893	2,227	3,666
<b>Eastern</b>	<b>167,163</b>	<b>65,079</b>	<b>102,084</b>	<b>148,648</b>	<b>57,414</b>	<b>91,234</b>	<b>18,515</b>	<b>7,665</b>	<b>10,850</b>
Embu	8,015	3,105	4,910	6,063	2,359	3,704	1,952	746	1,206
Isiolo	5,191	2,026	3,165	3,040	1,115	1,925	2,151	911	1,240
Kitui	10,269	4,341	5,928	9,360	3,961	5,399	909	380	529
Makueni	35,095	13,206	21,889	33,660	12,598	21,062	1,435	608	827
Machakos	51,703	20,029	31,674	45,898	17,436	28,462	5,805	2,593	3,212
Marsabit	4,272	1,319	2,953	3,343	972	2,371	929	347	582
Mbeere	5,397	2,274	3,123	5,354	2,255	3,099	43	19	24
Meru Central	13,767	5,646	8,121	10,933	4,454	6,479	2,834	1,192	1,642
Moyale	3,146	992	2,154	2,096	606	1,490	1,050	386	664
Mwingi	6,678	2,460	4,218	6,126	2,278	3,848	552	182	370
Meru North	15,410	6,246	9,164	14,964	6,082	8,882	446	164	282
Tharaka	2,978	1,146	1,832	2,978	1,146	1,832	0	0	0
Nithi (Meru S.)	5,242	2,289	2,953	4,833	2,152	2,681	409	137	272
<b>NorthEastern</b>	<b>53,769</b>	<b>20,338</b>	<b>33,431</b>	<b>38,822</b>	<b>13,999</b>	<b>24,823</b>	<b>14,947</b>	<b>6,339</b>	<b>8,608</b>
Garissa	25,462	10,117	15,345	17,641	6,683	10,958	7,821	3,434	4,387
Mandera	10,573	3,736	6,837	6,272	2,067	4,205	4,301	1,669	2,632
Wajir	17,734	6,485	11,249	14,909	5,249	9,660	2,825	1,236	1,589
<b>Nyanza</b>	<b>152,383</b>	<b>66,863</b>	<b>85,520</b>	<b>121,637</b>	<b>54,241</b>	<b>67,396</b>	<b>30,746</b>	<b>12,622</b>	<b>18,124</b>
Gucha (S.Kisii)	10,465	5,394	5,071	10,029	5,190	4,839	436	204	232
Homa Bay	8,881	4,234	4,647	6,428	3,191	3,237	2,453	1,043	1,410
Kisii Central	14,308	6,994	7,314	12,513	6,256	6,257	1,795	738	1,057
Kisumu	32,635	14,092	18,543	16,070	7,022	9,048	16,565	7,070	9,495
Kuria	2,365	876	1,489	1,854	722	1,132	511	154	357
Migori	17,828	6,929	10,899	14,426	5,676	8,750	3,402	1,253	2,149
N.Kisii (Nyamira)	13,377	6,292	7,085	12,186	5,793	6,393	1,191	499	692
Rachuonyo	10,785	4,927	5,858	10,313	4,757	5,556	472	170	302
Siaya	11,440	4,594	6,846	10,241	4,211	6,030	1,199	383	816
Suba	6,154	2,308	3,846	5,806	2,194	3,612	348	114	234
Bondo	10,846	4,238	6,608	10,151	3,983	6,168	695	255	440
Nyando	13,299	5,985	7,314	11,620	5,246	6,374	1,679	739	940

Table 2-2: Contd.

Province/ District	Total			Rural			Urban		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Rift Valley</b>	<b>270,882</b>	<b>106,133</b>	<b>164,749</b>	<b>202,703</b>	<b>77,080</b>	<b>125,623</b>	<b>68,179</b>	<b>29,053</b>	<b>39,126</b>
Baringo	8,486	2,938	5,548	7,409	2,570	4,839	1,077	368	709
Bomet	7,507	3,662	3,845	7,222	3,567	3,655	285	95	190
Keiyo	4,289	1,355	2,934	4,116	1,293	2,823	173	62	111
Kajiado	20,232	8,514	11,718	13,407	5,403	8,004	6,825	3,111	3,714
Kericho	12,982	5,315	7,667	11,096	4,629	6,467	1,886	686	1,200
Koibatek	5,345	1,885	3,460	4,110	1,404	2,706	1,235	481	754
Laikipia	11,192	5,052	6,140	6,896	3,128	3,768	4,296	1,924	2,372
Marakwet	2,697	1,173	1,524	2,697	1,173	1,524	0	0	0
Nakuru	53,694	24,016	29,678	27,611	12,811	14,800	26,083	11,205	14,878
Nandi	20,069	6,350	13,719	18,826	5,897	12,929	1,243	453	790
Narok	10,838	3,389	7,449	9,308	2,752	6,556	1,530	637	893
Samburu	6,799	2,554	4,245	4,558	1,650	2,908	2,241	904	1,337
Trans Mara	4,581	1,850	2,731	4,265	1,721	2,544	316	129	187
Trans Nzoia	22,130	8,934	13,196	19,232	7,791	11,441	2,898	1,143	1,755
Turkana	26,384	6,713	19,671	23,170	5,260	17,910	3,214	1,453	1,761
Uasin Gishu	35,644	14,616	21,028	22,126	8,727	13,399	13,518	5,889	7,629
West Pokot	9,754	3,707	6,047	8,733	3,313	5,420	1,021	394	627
Buret	8,259	4,110	4,149	7,921	3,991	3,930	338	119	219
<b>Western</b>	<b>97,008</b>	<b>41,106</b>	<b>55,902</b>	<b>80,044</b>	<b>34,291</b>	<b>45,753</b>	<b>16,964</b>	<b>6,815</b>	<b>10,149</b>
Bungoma	19,551	8,123	11,428	15,026	6,349	8,677	4,525	1,774	2,751
Busia	9,484	4,094	5,390	7,536	3,321	4,215	1,948	773	1,175
Mt. Elgon	1,909	741	1,168	1,753	681	1,072	156	60	96
Kakamega	19,801	8,738	11,063	15,371	6,871	8,500	4,430	1,867	2,563
Lugari	7,575	3,083	4,492	7,128	2,925	4,203	447	158	289
Teso	3,783	1,404	2,379	2,803	1,078	1,725	980	326	654
Vihiga	22,205	9,398	12,807	20,114	8,474	11,640	2,091	924	1,167
Butere/Mumias	12,700	5,525	7,175	10,313	4,592	5,721	2,387	933	1,454

**Table 2-3: Unemployment Rates for Population Aged 15-64 by Sex, District and Rural-Urban Residence, 1999**

Province/ District	Total			Rural			Urban		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Kenya</b>	<b>10.1</b>	<b>8.4</b>	<b>11.9</b>	<b>7.9</b>	<b>6.6</b>	<b>9.1</b>	<b>17.7</b>	<b>13.7</b>	<b>23.7</b>
Nairobi	18.5	14.5	25.0	0	0	0	18.5	14.5	25.0
<b>Central</b>	<b>7.1</b>	<b>6.8</b>	<b>7.3</b>	<b>5.9</b>	<b>6.0</b>	<b>5.9</b>	<b>13.8</b>	<b>11.4</b>	<b>16.7</b>
Kiambu	12.9	12.4	13.5	11.4	11.4	11.5	18.2	15.7	21.2
Kirinyaga	3.8	3.3	4.3	3.6	3.3	3.9	7.4	4.5	10.3
Murang'a	4.2	4.5	4.0	4.0	4.4	3.7	10.3	8.2	12.2
Nyandarua	2.9	3.0	2.9	2.8	3.0	2.7	3.6	3.2	4.1
Nyeri	5.3	4.8	5.9	4.6	4.4	4.9	10.2	7.4	13.1
Thika	9.6	8.7	10.5	7.4	7.2	7.5	14.8	11.7	19.3
Maragua	5.7	5.9	5.6	5.5	5.8	5.3	10.8	8.1	13.3
<b>Coast</b>	<b>15.6</b>	<b>12.5</b>	<b>19.4</b>	<b>11.0</b>	<b>8.7</b>	<b>13.0</b>	<b>22.2</b>	<b>16.5</b>	<b>31.8</b>
Kilifi	12.6	11.7	13.3	11.4	11.1	11.6	19.2	14.2	25.8
Kwale	12.9	11.2	14.5	11.4	10.1	12.6	22.0	16.7	29.8
Lamu	15.6	5.8	29.6	12.6	4.3	24.4	26.7	11.2	50.3
Mombasa	22.8	17.3	32.7	0	0	0	22.8	17.3	32.7
Taita Taveta	9.4	7.5	11.6	8.3	6.7	9.9	15.1	11.0	20.3
Tana River	12.6	6.3	20.9	11.8	5.8	19.7	21.7	12.4	34.1
Malindi	13.3	9.1	17.8	10.8	7.5	13.9	21.7	13.2	35.5
<b>Eastern</b>	<b>8.3</b>	<b>6.6</b>	<b>10.0</b>	<b>8.0</b>	<b>6.3</b>	<b>9.5</b>	<b>13.1</b>	<b>10.0</b>	<b>16.7</b>
Embu	5.7	4.4	7.0	4.9	3.8	6.0	11.0	8.1	14.2
Isiolo	13.0	8.6	19.2	11.3	6.8	18.5	16.3	12.9	20.4
Kitui	4.7	4.5	4.8	4.4	4.3	4.5	11.3	9.1	13.7
Makueni	11.6	8.8	14.2	11.6	8.8	14.2	11.6	8.9	15.0
Machakos	13.9	10.5	17.3	13.6	10.3	17.1	15.8	12.7	19.7
Marsabit	10.3	4.8	20.6	8.9	3.9	18.5	23.6	14.4	38.2
Mbeere	7.0	6.3	7.7	7.1	6.3	7.7	3.3	2.7	3.9
Meru Central	5.5	4.4	6.6	4.9	3.9	5.9	10.4	8.4	12.7
Moyale	18.2	9.1	33.6	15.5	7.0	30.9	27.4	17.1	41.9
Mwingi	5.5	4.7	6.0	5.3	4.6	5.7	9.9	6.0	14.5
Meru North	5.6	4.7	6.4	5.6	4.7	6.3	5.9	3.8	8.7
Tharaka	6.5	5.4	7.4	6.5	5.4	7.4	0	0	0
Nithi (Meru S.)	5.3	4.8	5.9	5.1	4.7	5.6	10.5	7.5	13.2
<b>NorthEastern</b>	<b>19.0</b>	<b>10.7</b>	<b>35.7</b>	<b>16.0</b>	<b>8.5</b>	<b>32.5</b>	<b>36.1</b>	<b>26.3</b>	<b>49.8</b>
Garissa	28.4	16.6	53.6	25.5	13.7	53.5	38.2	27.9	53.7
Mandera	13.1	6.8	26.5	9.4	4.4	21.2	31.0	20.9	44.4
Wajir	15.7	8.8	28.6	14.0	7.5	26.7	40.2	32.3	49.6
<b>Nyanza</b>	<b>8.3</b>	<b>8.0</b>	<b>8.6</b>	<b>7.4</b>	<b>7.5</b>	<b>7.4</b>	<b>15.4</b>	<b>11.5</b>	<b>20.4</b>
Gucha (S.Kisii)	5.8	6.8	5.0	5.7	6.7	4.8	10.5	9.5	11.7
Homa Bay	7.1	7.7	6.5	5.8	6.7	5.0	17.3	14.2	20.6
Kisii Central	7.1	7.7	6.5	6.6	7.5	5.9	14.6	11.1	18.8
Kisumu	15.4	12.9	18.0	13.3	12.2	14.2	18.3	13.8	24.3
Kuria	3.7	2.9	4.3	3.2	2.7	3.6	9.3	5.3	13.6
Migori	8.3	7.0	9.5	7.6	6.5	8.4	14.8	10.0	20.4
N.Kisii (Nyamira)	6.2	6.5	6.1	6.1	6.4	5.8	9.1	6.8	11.9
Rachuonyo	8.5	8.9	8.2	8.4	8.9	8.0	11.4	8.0	15.0
Siaya	5.5	5.3	5.6	5.1	5.1	5.1	13.1	8.6	17.4
Suba	9.7	7.7	11.5	9.7	7.8	11.4	10.0	6.1	14.4
Bondo	11.1	9.5	12.5	11.0	9.5	12.3	13.2	9.2	17.6
Nyando	11.0	10.2	11.8	10.9	10.5	11.3	11.7	8.5	16.6

Table 2-3: Contd.

Province/ District	Total			Rural			Urban		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Rift Valley</b>	<b>9.5</b>	<b>7.0</b>	<b>12.4</b>	<b>8.4</b>	<b>6.1</b>	<b>11.0</b>	<b>15.5</b>	<b>11.3</b>	<b>21.4</b>
Baringo	8.1	5.5	10.7	7.6	5.2	9.9	15.1	9.2	22.4
Bomet	4.9	5.1	4.7	4.8	5.1	4.6	10.9	5.9	19.0
Keiyo	7.2	4.3	10.5	7.2	4.2	10.5	8.3	5.6	11.2
Kajiado	12.2	9.0	16.4	10.6	7.6	14.6	17.2	13.6	22.2
Kericho	6.2	4.9	7.8	5.8	4.7	7.1	10.8	6.7	16.7
Koibatek	9.2	6.2	12.4	8.6	5.6	11.7	12.1	8.8	15.9
Laikipia	8.1	7.0	9.4	6.4	5.7	7.2	13.7	10.9	17.4
Marakwet	4.4	3.9	4.8	4.4	3.9	4.8	0	0	0
Nakuru	10.0	8.4	11.8	7.5	6.8	8.2	15.4	11.3	21.1
Nandi	8.8	5.1	13.3	8.7	5.0	13.1	10.9	7.1	15.7
Narok	8.2	4.7	12.6	7.7	4.2	12.0	13.9	9.7	20.4
Samburu	14.7	9.7	21.2	12.6	7.9	18.9	22.0	16.3	28.7
Trans Mara	6.9	5.6	8.1	6.7	5.5	7.9	10.1	7.4	13.3
Trans Nzoia	10.0	7.6	12.8	9.6	7.3	12.0	15.2	10.1	22.6
Turkana	16.2	7.5	26.7	15.3	6.4	26.0	28.7	22.2	37.8
Uasin Gishu	14.5	10.4	20.0	13.7	9.8	18.6	15.9	11.4	23.0
West Pokot	8.4	6.1	10.8	7.9	5.8	10.2	17.6	12.1	24.4
Buret	5.9	5.5	6.4	5.8	5.5	6.2	11.4	7.0	17.5
<b>Western</b>	<b>7.0</b>	<b>6.3</b>	<b>7.5</b>	<b>6.3</b>	<b>5.9</b>	<b>6.7</b>	<b>13.4</b>	<b>10.1</b>	<b>17.1</b>
Bungoma	5.6	4.8	6.3	4.9	4.3	5.4	10.9	8.0	14.4
Busia	6.0	5.9	6.1	5.2	5.3	5.1	15.4	12.0	19.1
Mt. Elgon	3.3	2.6	4.0	3.2	2.5	3.9	6.3	4.7	7.9
Kakamega	7.7	7.2	8.1	6.6	6.4	6.8	16.6	13.0	20.6
Lugari	8.3	6.9	9.7	8.2	6.9	9.5	10.6	7.2	14.3
Teso	4.8	3.7	5.8	4.0	3.3	4.7	10.5	6.6	14.9
Vihiga	11.1	10.7	11.5	10.7	10.3	11.1	17.5	16.2	18.6
Butere/Mumias	6.4	6.1	6.7	5.7	5.7	5.7	13.3	9.0	19.2

## Appendix 5: 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
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