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2009 Kenya Population and Housing Census

Analytical Report on Urbanization

Volume VIII
March 2012

Kenya National Bureau of Statistics
Ministry of State for Planning, National
Development and Vision 2030

i

2009 Kenya Population and Housing Census

"Counting Our People for Implementation of Vision 2030"

Volume VIII

Urbanization

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List of Abbreviations

DfID	Department for International Development
ICT	Information Communication Technology
KFI	Keying From Image
KENSUP	Kenya Slum Upgrading Programme
KNBS	Kenya national Bureau of Statistics
KPHC	Kenya Population and Housing Census
MDGs	Millennium Development Goals
NGOs	Non Governmental Organizations
SIDA	Swedish International Development Agency
UNECA	United Nations Economic Commission for Africa
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children Fund
US	United States
USAID	United States Agency for International Development

FOREWORD

The 2009 Kenya Population and Housing Census (KPHC) was conducted from the night of 24th/25th to 31st August 2009. The Census was the fifth to be undertaken in Kenya since independence and the seventh in the country's history. Previous censuses were conducted in 1948, 1962, 1969, 1979, 1989 and 1999. Planning and execution of the 2009 Census was spearheaded by the Kenya National Bureau of Statistics (KNBS) on behalf of the Government – in accordance with the Statistics Act, 2006. The theme of the Census was *"Counting our People for Implementation of Vision 2030"*, which was deemed necessary in order to respond to the greater demand for statistical information, for monitoring the implementation of Kenya's development plans and other global initiatives, such as the Millennium Development Goals (MDGs).

The main objective of the 2009 Census was to provide the Government and other stakeholders with essential information on the population, as regards demographic, social and economic characteristics, housing conditions and household amenities. By generating information at all administrative levels, it was also intended to provide a sound basis to evaluate the impact of population-related policies and programmes in the country.

The first series of the 2009 Census preliminary results were released on August, 2010, in a set of four volumes. The volumes presented census information in the following categories; Population Distribution by Administrative Units; Population Distribution by Political Units; Population Distribution by Age and Sex; and, Distribution of Households by Socio-economic Characteristics. This second set comprising thirteen analytical reports, addresses issues on Fertility and Nuptiality, Mortality, Housing Conditions, Amenities and Household Assets, Education, Household and Family Dynamics, Disability, Migration, Urbanization, Labour Force Dynamics, Gender Dimensions, Population Dynamics, Population Projections and Census Atlas.

Preparation of the analytical reports involved collaborative efforts of both local and international experts as well as various Government Ministries and Departments. The authors were recruited on competitive basis, ensuring they possessed the necessary experience and skills. The authorship was done under the supervision of two experienced lead consultants.

Data capture was done using scanning technology. The processes were highly integrated, with tight controls to guarantee accuracy of results. To achieve internal consistency and minimize errors, rigorous data editing, cleaning and validation were carried out to facilitate further analysis of the results. The information presented in these reports is therefore based on more cleaned data sets, and is preferred in case there are differences in the results published in the first set of volumes.

This monograph presents information on levels, trends and patterns of urbanization with a view of providing useful data for formulating appropriate and sustainable policies on urbanization. As is the case in other sub-Saharan countries, urbanization is inevitable and managing its emerging trends and patterns constitutes a challenge. Although the proportion of Kenya's total population living in urban centers is still relatively low within the global context, urban population has been increasing since independence. The urban population

increased from 5.4 million in 1999 to 12 million in 2009. The proportion of urban population to the total population rose from 19 percent in 1999 to 31.3 percent in 2009. Similarly, the urban growth rate rose from 3.4 percent in 1999 to 8.3 percent in 2009.

On behalf of the Government of Kenya, I wish to thank the management and staff of Kenya National Bureau of Statistics, KNBS Board of Directors and authors for their contribution towards preparation of this monograph. I also thank the US Census Bureau for the technical support. I would also like to thank our development partners, especially UNFPA, for the financial support in writing and publication of this monograph.

Hon. Wycliffe Ambetsa Oparanya, E.G.H, MP

Minister of State for Planning, National Development and Vision 2030

ACKNOWLEDGEMENT

The 2009 Kenya Population and Housing Census (KPHC), whose theme was *"Counting our People for Implementation of Vision 2030"* was the fifth to be conducted in Kenya since independence, and the seventh in the country's history. The census was carried out on a *de facto* basis, with August 24th/25th as the reference night. The first series of the 2009 Census preliminary results were released in a set of four volumes, in August, 2010. This was achieved in a record time of one year after successful enumeration. This monograph is one among a set of thirteen, which 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 2009 Census was accomplished through concerted effort of various organizations, institutions, Government Ministries and individuals who assisted in a variety of ways to prepare, collect, compile, process, analyze and publish the results. Kenya National Bureau of Statistics (KNBS), on behalf of the Government, takes this opportunity to thank all those who participated in the preparation of this monograph.

Special appreciation goes to Dr. Edward Sambili, the Permanent Secretary in the Ministry of State for Planning, National Development and Vision 2030; the KNBS Board of Directors led by the Chairman, Mr. Edwin Shisia Osundwa, staff of Population and Social Statistics Directorate and the entire KNBS staff, for their spirited efforts towards successful compilation of the monographs.

We also thank our Development Partners, namely, UNFPA, USAID, UNICEF, DfID, UNDP, SIDA, and the US Census Bureau for their material, financial and technical support, offered during various phases of implementation. Additional gratitude goes to UNFPA for coordinating donor support to the Census process.

Finally, 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.

A.K.M Kilele, MBS

DIRECTOR GENERAL

KENYA NATIONAL BUREAU OF STATISTICS

Urbanization at a Glance

Urban population (million)	12
Share of urban population to total population (percent)	31
Urban growth rate (percent)	8.3
Number of urban centers	230
Urban sex ratio	100
Proportion of urban adult population with at least secondary education (percent)	53.7
Proportion of urban adult population with no education (percent)	8.4
Proportion of economically active (working) urban population (percent)	46.5
Proportion of unemployed urban population (percent)	6.2
Proportion of urban population employed in the informal sector (percent)	53.1
Percent of urban population living in informal settlements in Kenya	15
Percent of urban households living in own house	33.8
Percent of urban households living in durable dwelling units	56.6
Percent of urban households with access to piped water in the house	14.4
Percent of urban households with access to piped water from elsewhere	38.7
Percent of urban households with access to main sewer	19.9
Population of Nairobi City (million)	3.1
Population of Mombasa	925,000
Population of Kisumu	383,000

Executive Summary

Based on the 2009 Kenya Population and Housing Census (KPHC) data, this monograph presents information on levels, trends and patterns of urbanization in the country. The monograph is divided into six chapters. Chapter 1 is a general introduction that provides an overview on Census background, urbanization in Kenya, Census methodology, concepts and definitions. Chapter 2 presents the level of urbanization in 2009 by Province, County and major urban centres; trends in urbanization over time; and Population of Municipal Councils. Chapter 3 highlights selected demographic and socio-economic characteristics of the urban population. Chapter 4 highlights selected housing and household characteristics of the urban population. Chapter 5 provides information on urban informal settlements through a comparative analysis of formal and informal settlements. Chapter 6 highlights the summary of key findings and recommendations in the context of emerging indicators, that could be relevant to existing and proposed development programmes and policies in urban Kenya.

Although the proportion of Kenya's total population living in urban centres is still relatively low within the global context, urban population has been increasing since independence. The urban population increased from 5.4 million in 1999 to 12 million people in 2009. The proportion of urban population to the total population rose from 19 percent in 1999 to 31.3 percent in 2009. Similarly, the urban growth rate rose from 3.4 percent in 1999 to 8.3 percent in 2009. The selective dominance of males in urban centres is gradually declining; proportion of the unemployed population is relatively small; and the informal sector contributes a significant proportion to the employed urban population. The proportion of urban households living in own house is gradually increasing; and more than half of the households live in durable housing made of stone, brick or wall – but with variations between the urban centers.

Although the proportion of households with access to piped water is relatively high in most urban centers, majority of these households do not have individual connections to the house. However, all the urban centers have less than 25 percent of their households connected to the main sewer. The urban population living in informal settlements is relatively small, 15 percent of total, but disproportionately concentrated in Nairobi, (62 percent), Mombasa (12 percent) and Kisumu (10 percent). Informal settlements tend to have higher proportions of unemployed population and those working in the informal sector (*jua kali*), while formal settlements have a better access to piped water in the dwelling and connection to main sewer. This monograph gives recommendations which call for a National Urban Policy to guide urban development country-wide.

Chapter 1-Introduction

1.1 Background

A Population Census is the total process of collecting, compiling, evaluating, analyzing and publishing or otherwise disseminating demographic, economic, and social data pertaining, at a specified time, to all persons in a country or in a well delimited part of a country. It is vital for effective national development planning because it provides detailed bench-mark data on all population characteristics. The United Nations recommends that national population censuses should be undertaken at regular intervals of ten years.

The 2009 KPHC was the fifth to be undertaken in Kenya since independence and the seventh since 1948. Like the previous censuses, the 2009 Census was a *de facto* census conducted on the night of 24th/25th August 2009, though the questionnaire also allowed *de jure* enumeration. The 2009 Census was implemented in accordance with the Statistics Act, 2006. The theme of the Census was *"Counting our People for the Implementation of Vision 2030"*.

Objectives of the 2009 KPHC

The main objective of the 2009 KPHC was to provide essential information at the National and sub-national levels on the demographic, social and economic characteristics of the population, as well as housing conditions and household amenities, to assist the Government of Kenya in the implementation, monitoring and evaluation of Kenya Vision 2030. The specific objectives were to ascertain the following:

1. Size, composition and spatial distribution of the population.
2. Levels of fertility, mortality and migration rates.
3. Rates and patterns of urbanization.
4. Levels of education attained by the population.
5. Size and deployment of the labour force.
6. Size, types and distribution of persons with disabilities.
7. Housing conditions and availability of household amenities.

New modules included in the 2009 Census were: disability; information, communication and technology (ICT); deaths in the household; number of livestock owned; and information on emigrants.

1.2 Overview of Urbanization in Kenya

Relevance of Providing Information on Urbanization

Most Sub-Saharan African countries are undergoing a process of rapid urbanization. In Kenya, the urban population increased from 285,000 (5.2 percent) in 1948 to about 12.5 million (32.4 percent) in 2009. Urbanization is inevitable and managing its emerging trends and patterns constitutes a challenge. The ideal scenario is to move from chaotic to sustainable cities provided that sound policies and strategies are adopted, investments mobilized, stakeholder participation secured, good governance practiced and human

development recognized. The achievement of all these is possible only with adequate, relevant data and information on urbanization. For the first time, the analytical report on urbanization is an independent volume. Previously, migration and urbanization were combined in one volume.

The main objective of the 2009 Census *Analytical Report on Urbanization* is to provide data and information on the urban population and urbanization in Kenya. The specific objectives are:

1. To determine the level of urbanization in 2009.
2. To analyze the trends of urbanization in time and space.
3. To describe the demographic, socio-economic, household and housing characteristics of the urban population in 2009.
4. To compare the characteristics of urban informal and formal settlements in 2009.
5. To provide global and national development indicators that is important for urban development.

Existing Policies and Programmes

Kenya lacks a comprehensive National Urban Policy. This presents a major challenge in achieving sustainable urban development. Policies and strategies related to urbanization have traditionally been formulated within the framework of broader national and, or, sectoral development plans and policies. For example, the spatial distribution policies adopted by the Government in the post-independence National Development Plans were aimed at reducing rapid population growth in the major urban centres, promoting the growth of small and medium-size urban centres, and encouraging rural development. There are also various Acts of Parliament that guide urban development. The Local Government Act (Cap 265) is the main legal statute that governs the operations of local authorities, including City, Municipal and Town Councils. There are currently 175 local authorities in Kenya, including one City Council, 45 Municipal Councils, 62 Town Councils and 67 County Councils (Kenya, 2008).

However, an urban development policy for Kenya is under formulation. This new policy aims to guide aspects of urban development countrywide, such as development planning, land management, urban investment and delivery of infrastructure and services. In a broader national context, Kenya's Vision 2030 aims to transform Kenya into a newly-industrialising, middle-income country providing a high quality of life to all its citizens in a clean and secure environment (Kenya 2007). Vision 2030 recognises that Kenya is moving towards a predominantly urban population and should plan for high quality urban livelihoods. In addition, the Vision aspires to meet the Millennium Development Goals (MDGs). Some of the Vision's goals during the First Medium Term Plan (2008-2012) are to achieve integrated regional and urban planning and management; increase access to safe water and sanitation in urban areas; facilitate access to adequate housing; and improve the lives of slum dwellers (Kenya 2008).

Likewise, Goal 7 of the MDGs aims to reduce the proportion of people without access to safe drinking water and basic sanitation and to achieve a significant improvement in the

lives of slum dwellers by 2015. The Government, in collaboration with UN-HABITAT, is currently implementing a countrywide Kenya Slum Upgrading Programme (KENSUP). The main objective of KENSUP is to improve the livelihoods of people living and working in slums and informal settlements in Kenya's urban areas, through provision of basic infrastructure e.g. water and sanitation with income-generating activities, pro-poor governance, housing improvement and security of tenure (UN-HABITAT, 2007).

General Trends in Urbanization in Kenya

Urbanization in Kenya is almost entirely a twentieth century phenomenon. Pre-colonial urbanization mainly developed in the coastal zone as a result of triangular trade between East Africa, India, and Arabia. As such, urbanization in Kenya has a long history in the coastal region but a short history in the interior parts of the country. A more consolidated hierarchy of urban centres developed during the colonial period. The British administration created a number of administrative centres which also doubled as market and commercial centres. The Kenya-Uganda railway also provided an opportunity for establishment of more inland urban centres along the railway line. Furthermore, the large scale European commercial cash crop farming in the White Highlands led to the development of another hierarchy of agricultural market and trading centres. The growth of urban centres both in numbers and population accelerated after independence, when Africans were allowed to migrate to towns without any legal and administrative restrictions.

The urban population grew to 1 million in 1969, increasing at a rate of 7.1 percent per year. According to the 2009 Census, the number of Kenyans living in urban areas increased to 12 million. The proportion of the urban population to the total population rose to 31.3 percent. While Nairobi continues to have the largest share of the urban population, the importance of small and medium-size urban centres is beginning to emerge in the urban hierarchy. Rural-to-urban migration continues to be the major source of urban growth in Kenya. However, urban natural increase, *in-situ* urbanization and refugees from neighbouring war torn countries, are emerging as significant contributors to urban growth in the country. Urban natural increase occurs when there are more births than deaths, while *in-situ* urbanization is the absorption of rural and peri-urban settlements in the spatial growth of a larger adjacent city.

1.3 Methodology

Data Collection Procedures

The 2009 Census, like the previous censuses, adopted the *de facto* as opposed to *de jure* approach, and the canvasser as opposed to the householder method. However, an additional question was included to identify whether each individual was a usual resident in the household of enumeration, which helped to compile the *de jure* population. Additionally, some foreign and diplomatic missions were allowed to enumerate themselves using a short questionnaire.

The target population was all persons who spent the night of 24th/25th August, 2009 in households, institutions, or outdoor locations within the administrative boundaries of Kenya or those transiting through Kenyan territory on the Census Night. The frameworks of identification were defined to cover populations in conventional households, institutions,

on transit and even those with no fixed abode (out-door sleepers). The unit of enumeration for housing characteristics was the main dwelling unit.

All persons in conventional households and institutions such as boarding schools and colleges were enumerated as scheduled within the seven days using the main (long) form, while the other categories such as hotels, travellers and out-door sleepers were strictly enumerated on the Census night using the short forms.

Data Capture Methodology

During the 2009 Census, data capture was done using the Optical Character Recognition (OCR) process commonly referred to as the scanning method just like the 1999 Census. This mode of data capture was quite effective despite a few technological hitches which were resolved with the help of the U.S. Census Bureau technical assistance. The process had several stages including: batching, scanning, Keying From Image (KFI), optical character recognition (OCR) and the library. Batching involved putting together a number of booklets from the same enumeration area and giving it a unique number for tracking purposes. Scanning was the process of electronically capturing the information from the questionnaires and maintaining it in the system for processing. Keying from image was the manual keying of the images that could not be recognized by the scanners due to various reasons. The characters that were not clear were done manually by the OCR team. All the captured data was then stored for analysis.

Measurement of Urbanization

Before the Census, Kenya was divided into small counting units called Enumeration Areas (EAs). An EA is a designated area with an average of about 100 households but may vary from 50 to 149 households depending on the population density, terrain and vastness of the area. The 2009 Census distinguished two broad types of EAs: *rural* and *urban*. The 2009 Census further distinguished between *core urban* and *peri-urban* area on the one hand and *formal* and *informal* urban settlements on the other hand (see concepts and definitions below). This analytical report will focus mainly on the urban population.

Data Quality

Demographic data collection in Kenya and elsewhere is riddled with problems of administration and logistics. These give rise to coverage and content errors, which vary both in nature and magnitude from one country to another and one region to another. Coverage errors result from omission of certain pockets of the population, while content errors pertain to misreporting or misclassification of events. The errors cause biases and distortion in the estimates based on such data.

1.4 Définition and Concepts

Core Urban: This is the central built-up area of an urban centre with intense use of land and highest concentration of service functions and activities.

Informal Settlement: This is an urban settlement characterized by at least two of the following: inadequate access to safe water; inadequate access to sanitation and other

infrastructure; poor structural quality of housing; overcrowding and insecure residential status.

Mega City: This is an urban centre with a population size of over one million people

Peri-Urban: This is the area beyond the central built-up area that forms the transition between urban and rural areas. As a result of extension of town boundaries, peri-urban areas are formerly rural and agricultural lands that are gradually turning to urban land use.

Rural: This is a large and isolated part of an open or agricultural country, including trading, market and service centres with relatively low population concentrations of less than 2,000 people.

Urban: This is a built-up and compact human settlement with a population of at least 2,000 people defined without regard to the local authority boundaries. It is normally a trading, market and service centre that provides goods and services to both the resident and surrounding population and is therefore sometimes referred to as an *urban centre*.

Urbanization: This is the process of increasing concentration of a country's national population into towns and cities.

Chapter 2-Levels and Trends in Urbanization

This chapter presents the levels and trends in urbanization in Kenya. The chapter is divided into three sections. This first section determines the level of urbanization in 2009 by Province, County and major urban centres. The second section analyses the trends in urbanization over time. The last section provides information on the population of Municipal Councils.

2.1 Level of Urbanization in 2009

Urban Population by Province

According to the 2009 Census, the number of Kenyans living in urban areas was 12 million. This represents 31.3 percent of the total population. However, demographic, social, economic and political variables have impacted greatly on urbanization process, resulting in varied provincial and county urbanization levels and trends. Being a Capital City and a Province at the same time, Nairobi is the most urbanised province in Kenya, with its entire population being urban (Table 2.1). Nairobi is followed by Coast and Central provinces with more than one-third of the population living in urban centres respectively. Nyanza, Rift Valley and Eastern provinces have between 21 and 25 percent of urban population. North Eastern and Western are the least urbanised provinces in Kenya with less than 20 percent of the population living in urban centres.

Table 2.1: Urban Population by Province, 2009

Province	Total population	Rural population	Urban population	% of urban population in province	% of total urban population
KENYA	**38,412,088**	**26,388,518**	**12,023,570**		
Nairobi	3,109,861	-	3,109,861	100	25.9
Central	4,370,124	2,868,781	1,501,343	34.4	12.5
Coast	3,291,225	1,869,714	1,421,511	43.2	11.8
Eastern	5,640,797	4,448,772	1,192,025	21.1	9.9
North Eastern	2,301,837	1,893,246	408,591	17.8	3.4
Nyanza	5,421,889	4,086,898	1,334,991	24.6	11.1
Rift Valley	9,955,646	7,599,156	2,356,490	23.7	19.6
Western	4,320,709	3,621,951	698,758	16.2	5.8

In addition, Table 2.1 shows that Nairobi Province has the largest share of the *total* urban population in the country, followed by Rift Valley. The two provinces contribute 45.5 percent to the total urban population. They are followed by Central, Coast, Nyanza and Eastern, each with between 10 and 13 percent share of total urban population. Being least urbanised, Western and North Eastern's contribution to the total urban population is relatively small.

Urban Population by County

Map 2.1 shows the proportion of urban population to the total population in each county (see also Appendix 2). Given the provincial trends, the large majority of counties are relatively less urbanised. Five counties – Nairobi, Mombasa, Kiambu, Machakos and Kisumu – have more than half of their populations living in urban centres.

Map 2.1: Percent Urban Population by County, 2009
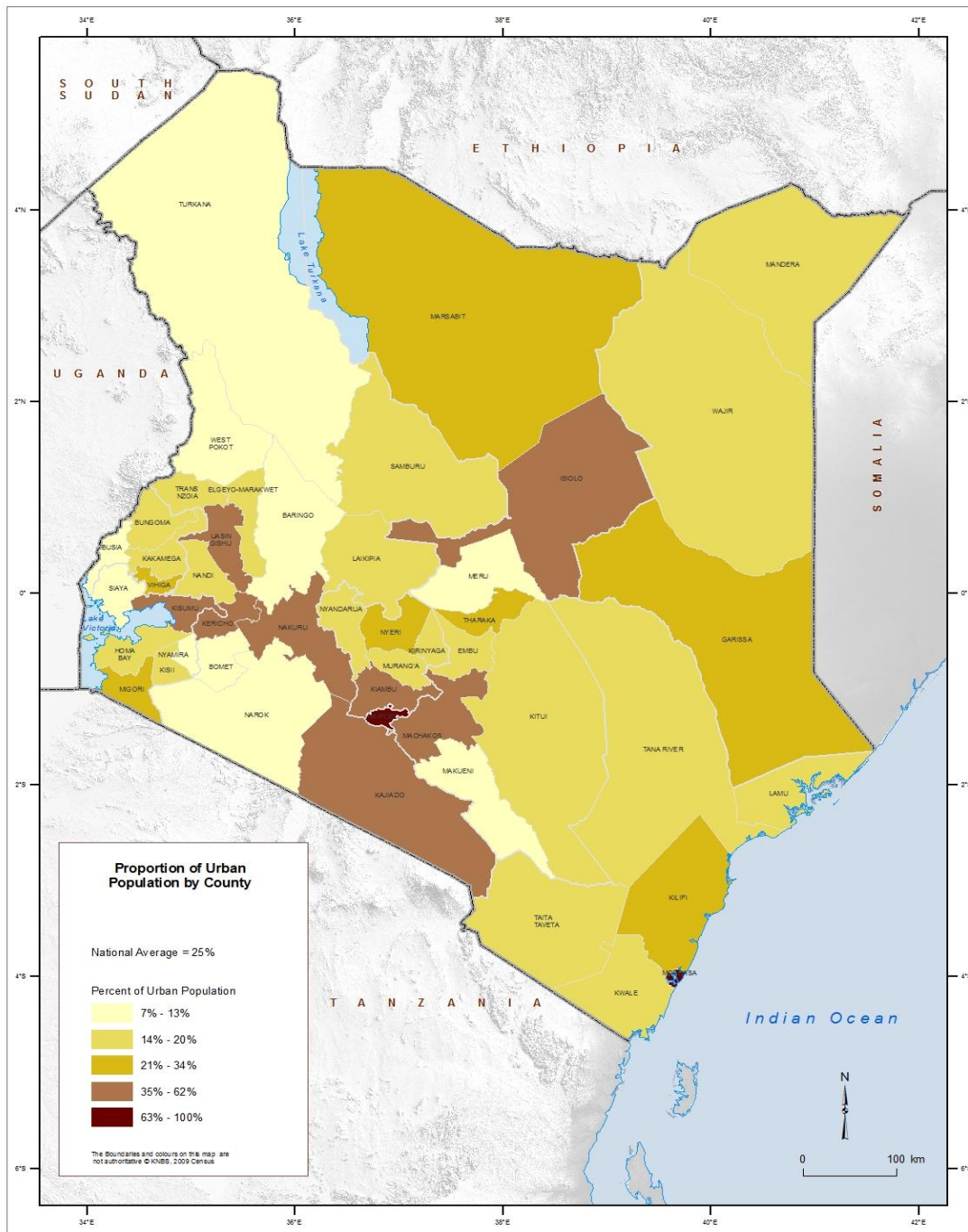
Nairobi and Mombasa, which are the same time the two largest towns in Kenya, are wholly urban. These five counties are followed by Nakuru (45 percent), Isiolo (44 percent); Kajiado (41 percent); Uasin Gishu (39 percent); Kericho (38 percent); Migori (34 percent); Vihiga (31 percent) and Kilifi (25 percent). The rest of the counties have less than one-quarter of their populations living in urban areas. Meru, West Pokot and Narok are the least urbanised counties with less than 10 percent urban population.

Population by Urban Centre

Table 2.2 presents the population of major urban centres with a population size of more than 150,000 people in 2009. The major urban centres contribute half of the total urban population in Kenya. The capital city of Nairobi leads the urban hierarchy with 3.1 million people and a disproportionate percent share of total urban population. Mombasa is the second largest urban centre with 0.9 million inhabitants, followed by Kisumu, Nakuru and Eldoret. Other major urban centres – Kikuyu, Ruiru, Kangundo-Tala, Naivasha, Thika and Machakos – are in close proximity to Nairobi. However, peri-urban population is much higher than the core urban population in Kangundo-Tala and Machakos. Similarly, Kangundo-Tala and Machakos have more than half of their population living in peri-urban areas. Out of the total urban population, 2.9 million are residing in peri-urban areas.

Table 2.2: Population by Major Urban Centres, 2009

Urban centre*	Total population	Core urban population	Peri-urban population	% of total urban population
KENYA	12,023,570	9,090,412	2,933,158	
Nairobi	3,109,861	3,109,861	0	25.9
Mombasa	925,137	905,627	19,510	7.7
Kisumu	383,444	254,016	129,428	3.2
Nakuru	367,183	343,395	23,788	3.1
Eldoret	312,351	247,500	64,851	2.6
Kikuyu	264,714	200,285	64,429	2.2
Ruiru	240,226	238,329	1,897	2
Kangundo-Tala	218,722	13,119	205,603	1.8
Naivasha	170,551	91,898	78,653	1.4
Thika	151,225	136,386	14,839	1.3
Machakos	150,467	40,819	109,648	1.3

2.2 Trends in Urbanization

National Trends

Table 2.3 shows the trends of urbanization in Kenya between 1948 and 2009. At the time of Kenya's first population census in 1948, there were 17 urban centres with an aggregate population of 285,000 people. The urban population was proportionately small (5.3 percent of the total population), with majority of the urban dwellers being non-African. Since then the number of urban centres, the urban population and the proportion of people living in urban centres have been increasing. The number of urban centres increased to 91 in 1979 and to 230 in 2009. The urban population increased to 2.3 million in 1979 and to 12 million in 2009. The proportion of people living in urban centres increased to 15.1 percent in 1979 and to 31.3 percent in 2009. In all Censuses, the urban population has been disproportionately concentrated in Nairobi and Mombasa.

Table 2.3: Urbanization Trends in Kenya, 1948-2009

Year	Total population	No. of urban centres	Urban population*	% of urban to total population	Intercensal growth rate (percent)
1948	5,407,599	17	285,000	5.3	-
1962	8,636,263	34	747,651	8.7	6.3
1969	10,956,501	47	1,076,908	9.8	7.1
1979	15,327,061	91	2,315,696	15.1	7.7
1989	21,448,774	139	3,878,697	18.1	5.2
1999	28,159,922	180	5,429,790	19.3	3.4
2009	38,412,088	230	12,023,570	31.3	8.3

The growth of urban centres both in number and population accelerated immediately after independence, when Africans were allowed to migrate to towns without any legal and administrative restrictions. This explains the high urban growth rates in 1969 and 1979, largely a consequence of rural-to-urban migration. However, as the population become more urbanised, the urban growth rate declined from a peak of 7.7 percent in 1979 to 3.4 percent in 1999. In 2009, the urban growth rate rose to a high of 8.3 percent.

Population of Urban Centres by Population Size Category

For two decades, only one urban centre has had a population of over 1 million (Table 2.4), which is a mega city status. While Nairobi continues to have the largest share of the urban population, the importance of small and medium-size urban centres is beginning to emerge in the urban hierarchy. Small urban centres are considered to be those with a population of less than 10,000 people, while medium-size urban centres have a population of more than 10,000 but less than 100,000 people.

Table 2.4: Urban Population by Size Category of Urban Centres, 1962-2009

	Category of urban centres by population size							
	1 million and over		100,000-999,999		10,000-99,999		2,000-9,999	
Year	No.	Total population	No.	Total population	No.	Total population	No.	Total population
1962	0	-	2	523,075	5	105,712	27	118,864
1969	0	-	2	756,359	9	79,267	36	153,282
1979	0	-	6	1,321,566	24	717,855	64	276,275
1989	1	1,324,570	5	1,046,588	40	1,080,726	93	426,813
1999	1	2,083,509	4	1,214,927	62	1,508,180	113	623,174
2009	1	3,109,861	22	4,617,114	97	3,665,486	110	631,109

No. = Number of urban centres

Table 2.4 demonstrates that the numbers and populations of small and medium-size urban centres have shown an upward trend over the years and is expected to do so in future. Generally, most urban centres in Kenya are small and medium-size. In 2009, these urban centres were 207 in number with a total population of about 4.3 million people. They contributed 35.7 percent to the total urban population in the country. It is also important to note that urban centres in the population size category 100,000-999,999 drastically increased in number and population in the year 2009. Map 2.2 shows the spatial distribution of urban centres in 2009 by population size category.

Map 2.2: Spatial Distribution of Urban Centres by Population Size Category, 2009
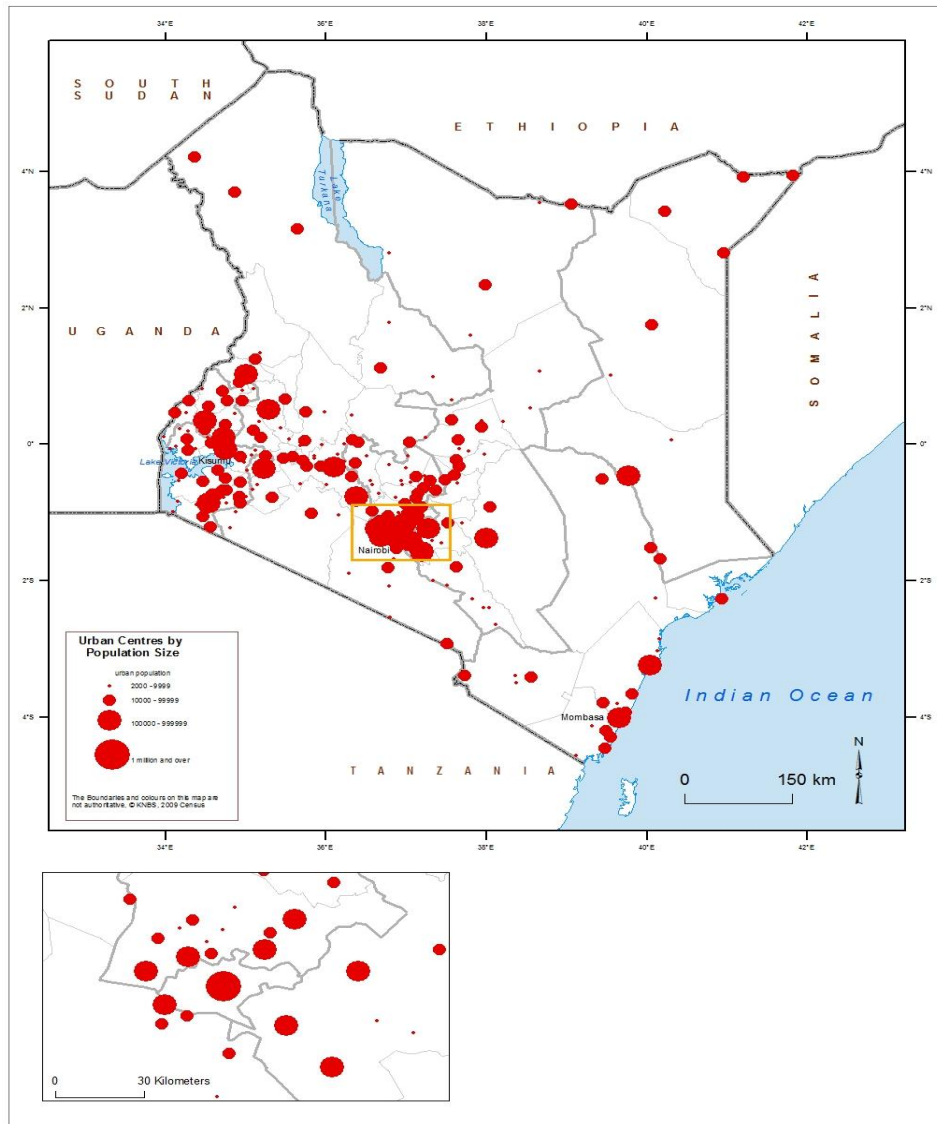
Generally and regardless of size category, most urban centres in Kenya are concentrated in Central, Western, Nyanza, and lower parts of Eastern and Rift Valley provinces. This reflects the historical and colonial influence of urbanization process in Kenya. The location of administrative centres, the Kenya-Uganda Railway, European large-scale commercial farming, caravan towns and missionary centres are some of the factors that influenced patterns of urbanization during the colonial period. Urban centres with 100,000 and more people are notably the major urban centres in Kenya. Those with between 10,000 and 99,999 people are likely to be the major urban centres in the Counties.

The City of Nairobi in the National Context

Nairobi was first established in June 1899 as a transportation and administrative centre. Nairobi grew to become a Township in 1900 and the capital of Kenya in 1905. In 1919, Nairobi was elevated to a Municipality and finally, in March 1950, Nairobi became a City.

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Nairobi's population has increased from 119,000 people in 1948 to 1.3 million in 1989 and to 3.1 million in 2009. During the same period, the total urban population increased from 285,000 people to 3.9 million and to 12 million, respectively. Figure 2.1 illustrates the dominance of Nairobi in contributing to the total urban population in Kenya between 1948 and 1999. In 2009, Nairobi's share of the total urban population declined from an average of 34 percent over the years to 25.9 percent. This further demonstrates the emerging importance of small and medium-size urban centres.

Figure 2.1: Nairobi's Population in the National Context, 1948-2009
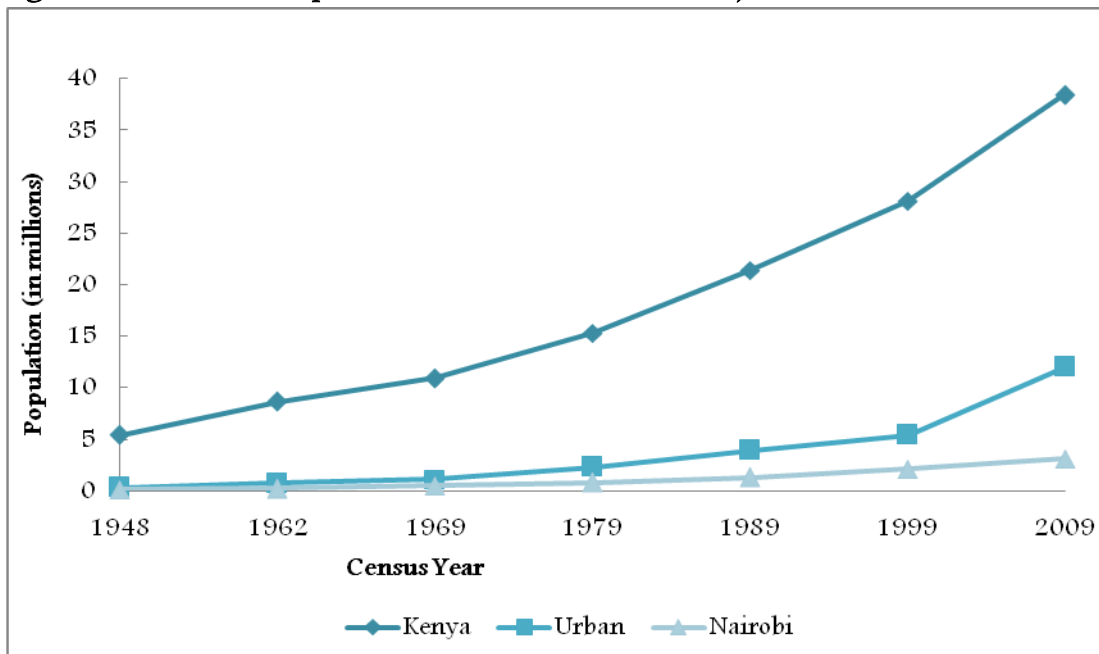
Figure 2.2 illustrates that Nairobi's growth rate increased considerably after independence because of its attractiveness to African migrants. The growth rate increased from 4.6 percent in 1948 to 12.2 percent in 1969. However, from 1979 to 1999, Nairobi has been growing at a sustained and constant rate of a little less than 5 percent a year (4.9 percent in 1979, 4.7 percent in 1989 and 4.5 percent in 1999). In 2009, Nairobi's population growth rate reduced to 3.8 percent.

Figure 2.2: Nairobi's Growth Rate in the National Context, 1962-2009
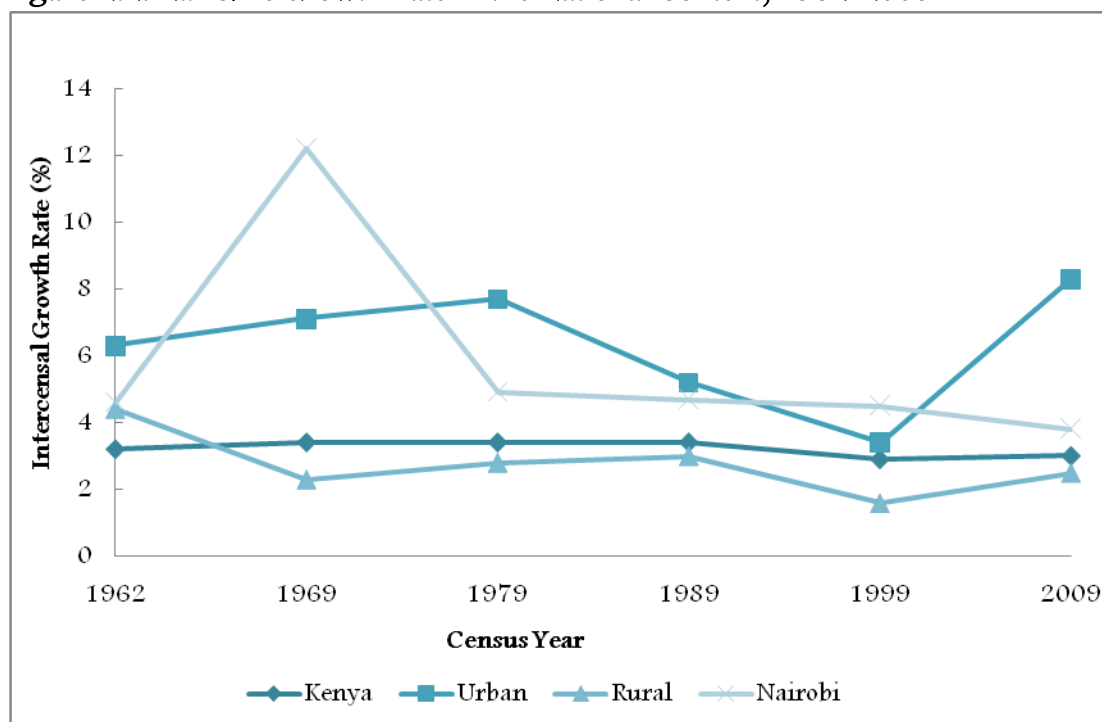
Provincial Trends

The urban population of each province has been increasing over time except for Eastern Province which had a negative growth rate in 1999. Table 2.5 presents the share of each province's urban population to the total urban population between 1969 and 2009. Generally, Nairobi has had the largest share of the total urban population ranging between 26 and 47 percent. On the other hand, North Eastern has had the least share of not more than 3 percent except for 2009. Central, Nyanza, Rift Valley and Western have had consistent increase in the proportion of their urban population to the total. The rest of the provinces have experienced fluctuations.

Table 2.5: Urbanization Trends by Province, 1969-2009

Province	percent share of total urban population				
	1969	1979	1989	1999	2009
Nairobi	47.0	35.7	34.1	38.4	25.9
Central	4.3	5.6	8	6.7	12.5
Coast	26.3	17.6	15.2	16.5	11.8
Eastern	3.5	10.1	9.2	5.3	9.9
North Eastern	~	2.7	2.3	2.7	3.4
Nyanza	4.1	9	9.1	7.9	11.1
Rift Valley	13.8	14.8	17.3	17.4	19.6
Western	1.0	4.6	4.8	5.2	5.8

Urban Primacy

Urban primacy occurs when the largest city in a country dominates the urban hierarchy in terms of its population size. Urban primacy is quantitatively measured in terms of a *two-city*, a *four-city* or *11-city* primacy index. This report uses the *11-city* primacy index which is the ratio of the population of the largest city in the country or region to the combined population of the next 10 cities in population rank. According to UNECA (1989)

a primacy index of less than 1 is "low"; 1-2.9 is "medium" while 3 and above is "high". Figure 2.3 gives the 11-city primacy index for Kenya over the years. Although the primacy index is generally "low", the trends illustrate the dominance of Nairobi in the urban hierarchy, particularly after independence. For example, the primacy index rose from 0.8 in 1948 to 1.2 in 1969. However, the growth of medium-size urban centres has stabilized the primacy index to an average of 0.9, even as Nairobi continues to have the largest share of the urban population.

Figure 2.3: 11-City Primary Index in Kenya, 1948-2009
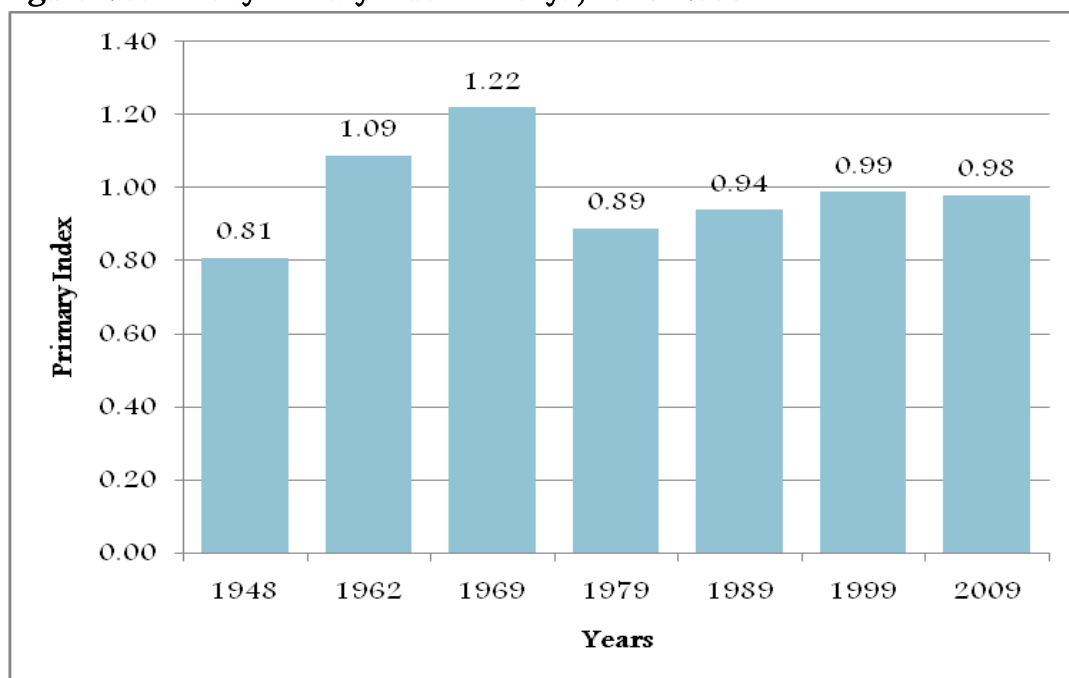
The dominance of one or two major urban centres is also evident regionally in the provinces and counties. These dominant urban centres contribute the largest percentage of urban population in each province. Examples are Garissa and Mandera in North Eastern, Machakos and Embu in Eastern, Nakuru and Eldoret in Rift Valley, Thika and Nyeri in Central, Kakamega in Western, Kisumu in Nyanza and Mombasa in Coast.

2.3 Population of Municipal Councils

An urban centre has been defined as a built-up and compact human settlement with a population of at least 2,000 people defined *without* regard to the local authority boundaries. Whereas municipal and town councils essentially consist of local urban authorities, they are *administrative units* whose service provision boundaries may sometimes include the surrounding rural population. The Local Government Act (Cap 265) of the laws of Kenya does not provide a clear definition of these local authority/government areas but gives the Minister powers to "establish any area to be or cease to be a municipality, county or township" (Kenya, 1998).

For purposes of planning, however, this analytical report provides information on the population of municipal councils (see Figure 2.4 and Appendix 10). The Cities of Nairobi, Mombasa and Kisumu municipalities are excluded from this analysis. Nakuru, Eldoret, Kehancha, Ruiru and Malindi are the most populous municipal councils in Kenya, each

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serving a population of over 200,000 people. On the other hand, Siaya, Iten/Tambach, Chuka, Voi, Kabarnet, Murang'a, Chwele, Kangema and Karatina are the smallest municipal councils, each serving a population of less than 50,000 people. Notably, all the municipal councils have varying proportions of rural, core urban and peri-urban population.

Figure 2.4: Population by Major Municipal Councils, 2009
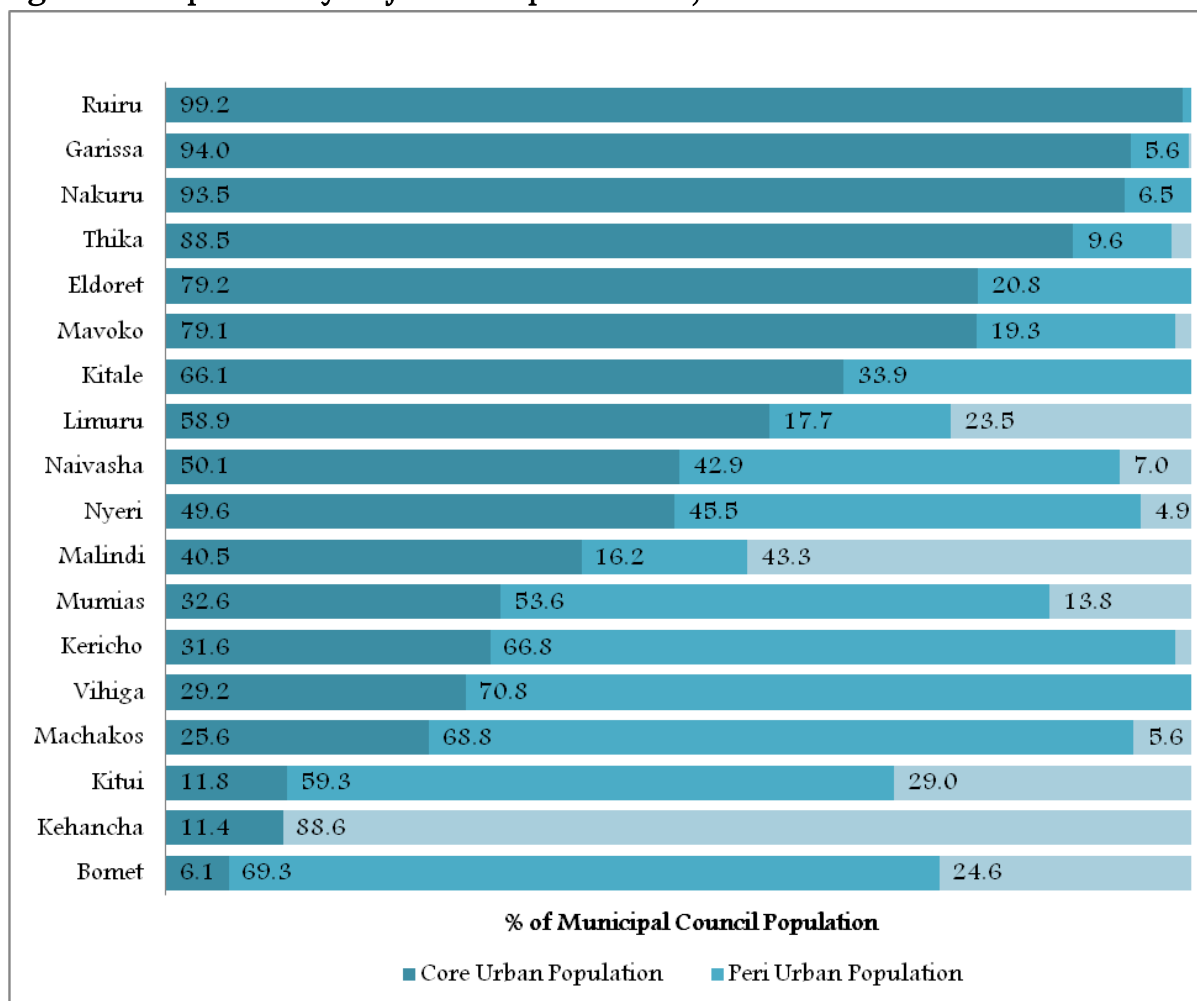
Nakuru, Eldoret, Ruiru, Kitale, Vihiga, Kimilili, Kakamega, Mandera, Meru, Chuka, Murang'a and Karatina serve purely an urban population (as shown in Appendix 10). Garissa, Homa Bay, Mavoko, Kisii, Kericho and Thika serve a small proportion (less than 2 percent) of their rural populations. On the other hand, Kapenguria, Voi, Runyenjes, Maua, Kehancha, Kangema and Chwele serve very large rural populations. Fifty percent of their total population is rural. Chwele is basically a rural municipality while Kehancha and Kangema have more than 80 percent of their population living in the rural areas.

Chapter 3- Demographic and Socio-Economic Characteristics of the Urban Population

This chapter highlights selected demographic and socio-economic characteristics of the urban population. These characteristics include age and sex structure, education status, economic activity status and main employer.

3.1 Demographic Characteristics

Age and Sex Structure

Kenya's urban centres are generally dominated by economically active population (15-64 years). Nationally, this age category is 61.5 percent of the total urban population. The economically active are followed by children (0-14 years) who constitute 36.4 percent of the urban population. The least represented (2.2 percent) are the old age population of 65 years and above. This implies that urban centres continue to attract the economically active population. Urban centres are important nodes for employment, higher education, trading and provision of relatively better services and infrastructure.

The sex ratio for the urban population in the country is 100. However, sex ratios of individual urban centres range from 80 to 140. Three quarters of the urban centres have a low sex ratio. In other words, there are more females than males in these urban centres. This trend implies that the selective dominance of males in the urban centres since the colonial period is gradually declining, even in the major urban centres as shown in Table 3.1.

Table 3.1: Sex Ratios by Major Urban Centres, 1979-2009

Urban centre	1979	1989	1999	2009**
KENYA (Urban)	115	110	108	100
Nairobi	138	132	115	104
Mombasa	121	125	117	106
Kisumu	104	108	102	97
Nakuru	123	116	105	100
Eldoret	134	122	108	101
Kikuyu	*	*	*	96
Ruiru	*	*	107	100
Kangundo-Tala	*	*	*	98
Naivasha	142	108	102	101
Thika	136	122	111	101
Machakos	95	98	97	97

*Data not available ** Appendix 3 provides the sex ratios for more urban centres in 2009*

In contrast, more females have joined the rural-urban migration stream. This has been attributed to increasing female education and participation in urban labour force. In addition, more and more women are living in the urban centres with their spouses. During the colonial period and immediately after independence, women were traditionally living in the rural home while the men sought work in urban centres.

Urban centres with high sex ratios include Daadab, Isinya, Gilgil, Mavoko, Takaba, Chemelil, Magadi and Rhamu (See Figure 3.1). Some of these urban centres are located in North Eastern Province or are industrial urban centres. Those with lowest sex ratios are

relatively smaller urban centres: Loiyangalani, Yala, Kimbimbi, Kiria-ini, Karatina, Othaya, Kagio and Kiminini.

Figure 3.1: Urban Centres with High and Low Sex Ratios, 2009
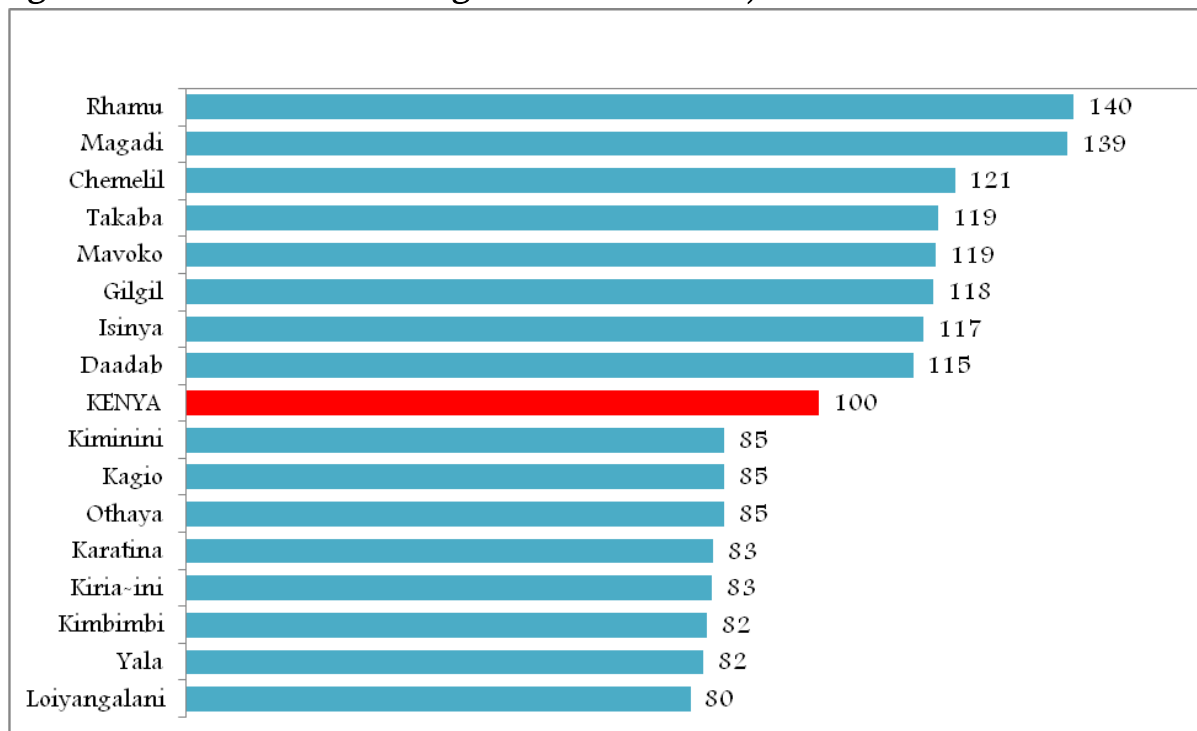
A further analysis of the urban population by age and sex (Figure 3.2) reveals that the proportion of urban dwellers aged 20-29 is much higher for both males and females. The age and sex structure of Nairobi is slightly different (Figure 3.3), but shows the expected urban shape. The proportion of each sex is much lower between ages 5-19 and thereafter takes the expected trend of having more males and females aged 20-29, which can be attributed to in-migration.

Figure 3.2: Urban Population by Age and Sex, 2009

Population pyramid showing urban population by age group (0-4 through 70-74) and sex. Horizontal axis ranges from 3,000,000 to 0 to 3,000,000. Female (light blue) on right, Male (dark blue) on left.
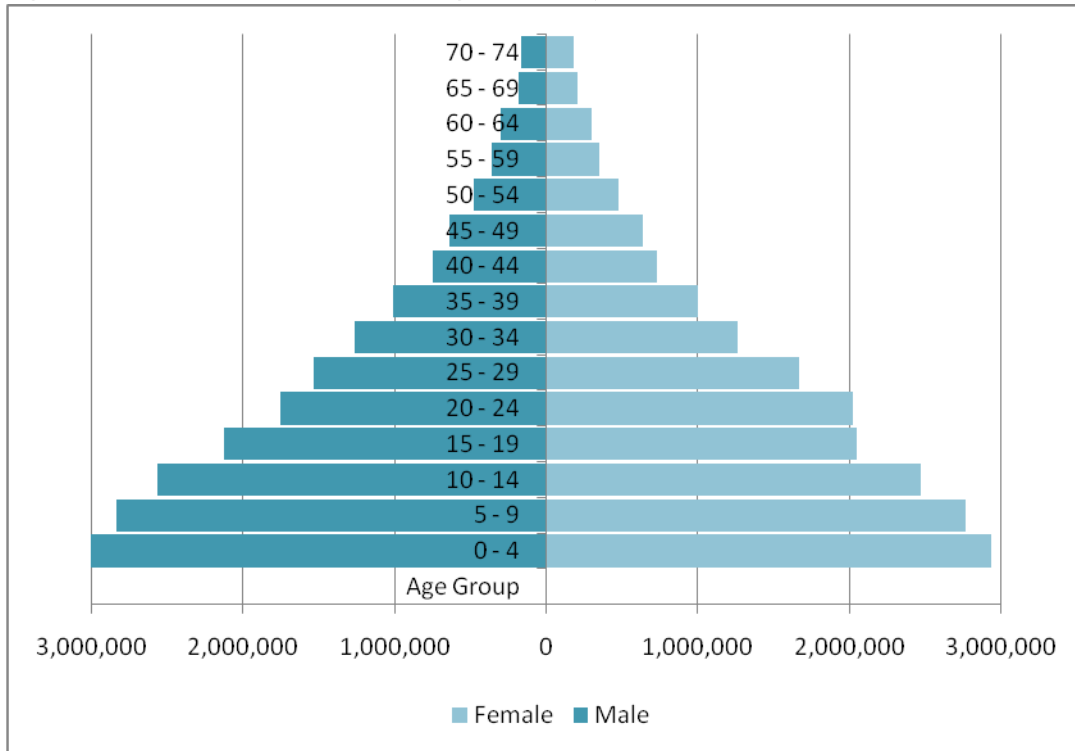
Figure 3.3: Population of Nairobi by Age and Sex, 2009

Population pyramid showing Nairobi population by age group (0-4 through 75+) and sex. Horizontal axis ranges from 260,000 to 10,000 to 240,000. Female (light blue) on right, Male (dark blue) on left.

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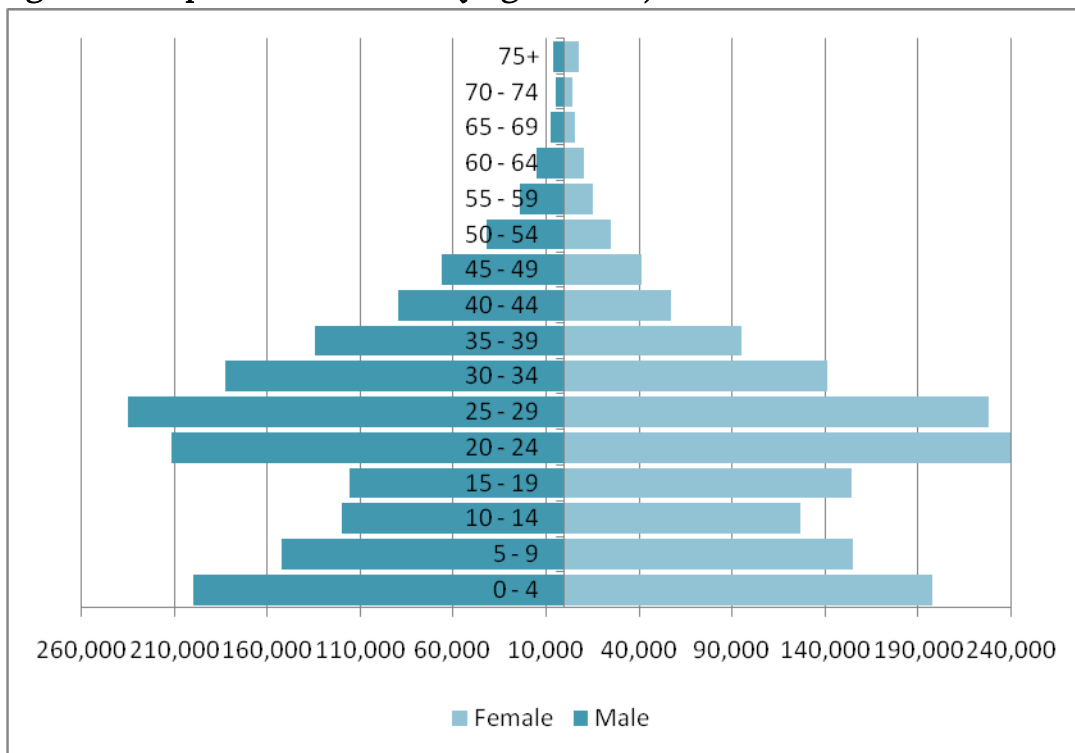
3.2 Socio-Economic Characteristics

Education Status

Educational attainment is a good indicator of socio-economic development and the capacity of a population to participate in development activities. Ideally, it is an index that reflects the stock of highly educated and skilled labour force in a country. Table 3.2 presents the highest level of education completed for population aged 3 years and above. At the National level, more than one-third of the population has completed secondary education and above while 18 percent have no education. Except for Mombasa, Kisumu, Kangundo-Tala, Naivasha and Machakos, the other major urban centres have proportions of their population with secondary level of education completed higher than the National average.

Table 3.2: Education Status by Major Urban Centres, 2009

Urban centre	Highest Level of Education Completed (% Of Population Aged 3 Years and Above)			
	None	Primary incomplete	Primary complete	Secondary and above
KENYA (Urban)	18	25.3	19.9	36.7
Nairobi	12.6	18	19.7	49.7
Mombasa	18.8	23.3	22.2	35.7
Kisumu	18	27.8	21	33.1
Nakuru	14.8	22.2	19.4	43.6
Eldoret	14.9	24.4	18.2	42.5
Kikuyu	13	21.2	22.9	42.9
Ruiru	12.8	19.3	19.9	48
Kangundo-Tala	17.1	34.9	22.5	25.5
Naivasha	16.3	25	23.9	34.8
Thika	11.4	19	20.8	48.8
Machakos	14.2	28.3	24.9	32.6

Urban centres with at least half of the population completing secondary education and above include Nairobi, 66.2 percent; Karatina, 68.6 percent; Kitengela, 66.7 percent; Gilgil, 71.6 percent and Ongata Rongai, 77.3 percent. On the other hand, urban centres with more than half of the population with no education include Garissa, 56.9 percent; Rhamu, 69.1 percent; Wajir, 66.1 percent; Mandera, 68.8 percent; Masalani, 66 percent; Kakuma, 61.4 percent; Lokichogio, 60.2 percent; These are mainly urban centres in North Eastern Province, Marsabit County and those hosting refugees.

A further analysis of the urban population aged 18 years and above reveals that 8.4 percent have no education. About one-eighth (12.7 percent) never completed primary school. One-quarter (25.3 percent) completed primary school, while more than half (53.7 percent) have attained secondary education and above as shown in Table 3.3. Compared to other major urban centres, Mombasa has the highest proportion of persons aged 18 years and above with no education.

Nationally, 18 urban centres have more than half of their population with no education (See Figure 3.4). These are largely urban centres in North Eastern parts of Kenya, arid and semi-arid Kenya and refugee towns. Examples are Garissa (57 percent); Moyale (58 percent); Lokichogio (60 percent); Kakuma (61 percent); Takaba (64 percent); Masalani (66 percent); Mandera (66 percent); Wajir (66 percent); Elwak (67 percent); Rhamu (69 percent); Loiyangalani (76 percent) and Bura East (77 percent).

Table 3.3: Education Status of Adult Population by Major Urban Centres, 2009

| Urban centre | Highest level of education completed (percent of population aged 18 years and above) | | | |
	None	Primary incomplete	Primary complete	Secondary and above
KENYA (Urban)	8.4	12.7	25.3	53.7
Nairobi	3.9	7.1	22.9	66.2
Mombasa	9.8	12.5	27.8	49.9
Kisumu	5.1	15	28.4	51.5
Nakuru	4.1	8.9	23.7	63.3
Eldoret	4.7	11.2	22.3	61.7
Kikuyu	4.3	9.4	27.4	58.9
Ruiru	2.7	7.5	23.6	66.3
Kangundo-Tala	6.9	23	30.5	39.6
Naivasha	5.9	12.7	30.8	50.6
Thika	2.3	7.8	24.5	65.4
Machakos	5.9	15.6	31.7	46.8

Appendix 4 provides a list of more urban centres with proportions of the population with no education and secondary and above.

Figure 3.4: Number of Urban Centres with Adult Population Having No Eductaion
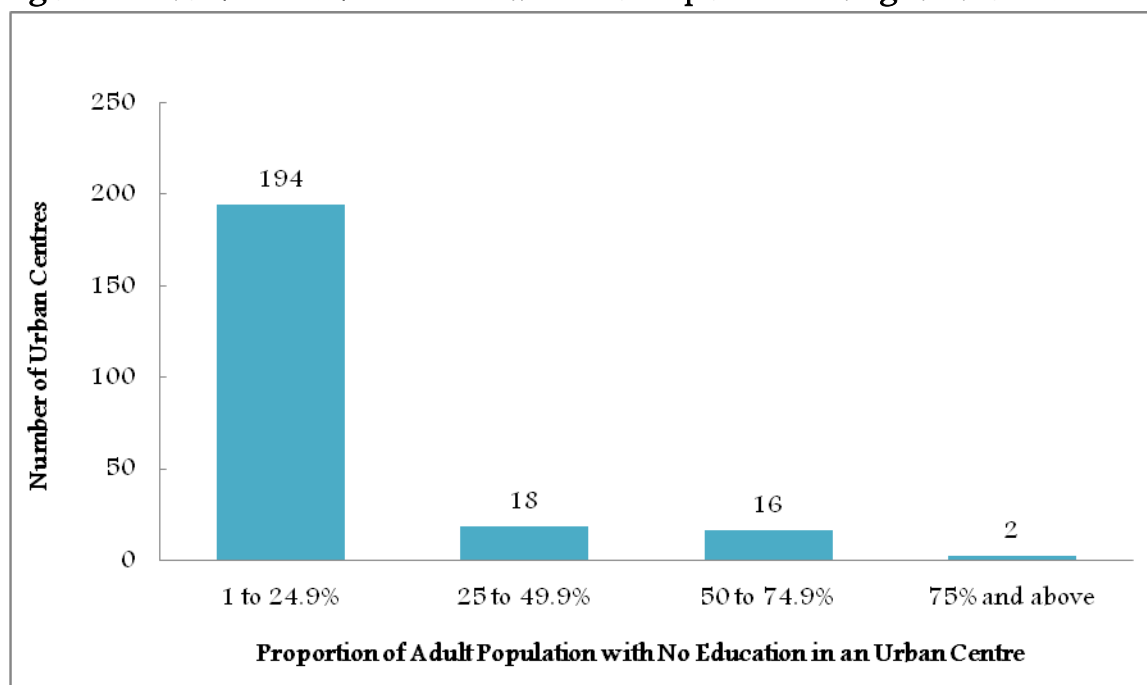
Economic Activity Status

The proportion of urban population who worked for pay ranged between 25 and 62 percent in the urban centres. Those unemployed ranged between 0.6 and 22 percent, while the inactive were between 18 and 55 percent. The unemployed are persons who are seeking and are available for work, but have no employment. The inactive (i.e. not in labour force) are those persons who were neither working nor available or looking for work. They include home makers, those in full-time schooling, retired persons, the aged, the incapacitated or those not economically active for some other reason. Nationally, less than half (47 percent), of the urban population were employed. Slightly more than one-third were inactive and less than 10 percent were unemployed (Table 3.4).

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Table 3.4: Economic Activity by Major Urban Centres, 2009

Urban centre	Engagement in economic activity (percent of population aged 5 years and above)			
	Working	Unemployed	Inactive	Not determined/ Not applicable*
KENYA (Urban)	**46.5**	**6.2**	**36.1**	**11.1**
Nairobi	51	7.6	31.4	10
Mombasa	43.2	8.5	37.5	10.9
Kisumu	41.6	5.1	41.1	12.1
Nakuru	44.5	6.6	37.9	11.1
Eldoret	42.6	6.4	39.7	11.4
Kikuyu	45	6.4	39.2	9.3
Ruiru	47.6	5.3	37.4	9.7
Kangundo-Tala	46.1	3.1	39.4	11.3
Naivasha	52.7	3.6	32.3	11.3
Thika	50.8	5.6	34	9.6
Machakos	46	6	38	10

* The last column is those whose economic activity could not be determined and those to whom the question was not applicable. (See also Appendix 4).

There is no significant variation in economic activity in the major urban centres. However, Nairobi, Naivasha and Thika have at least half of their population in gainful work. Employment or work is a major attraction of the population to the urban centres. As such the proportion of the unemployed is relatively small. This is because the concept of work covers all persons undertaking economic activities either for pay, profit or family gain. Urban households, rich or poor, have adopted a number of livelihood strategies in their attempts to manage (in particular but not necessarily restricted to) the changes in their economic environment and circumstances.

A further analysis of the main employer is presented in Table 3.5 and reveals that the informal sector contributes a significant proportion to the employed population in urban centres. At the National level, more than half of the employed population is in the informal sector. This is followed by employment in the private sector (29.6 percent). Employment in the public sector is very minimal, averaging 7.5 percent. This trend is similar in almost all the urban centres. Even then, smaller urban centres tend to have a relatively higher proportion of public sector employment. These are largely public servants working in the provincial administration and local authorities.

Another emerging source of livelihood in the urban centres is engagement in agricultural activities, be it in town or in the rural areas. Several empirical studies show that an increasing number of the urban poor in Sub-Saharan Africa depend on urban farming as well as rural livelihood sources (i.e. rural farming).

Table 3.5: Main Employer by Major Urban Centres, 2009

Urban centre	Main Employer by Sector (% of Working Population)			
	Public	Private	Informal	Agricultural activities
KENYA (Urban)	**7.5**	**29.6**	**53.1**	**9.6**
Nairobi	7.6	40.8	51.4	0.3
Mombasa	7.6	41.2	49.1	1.8
Kisumu	7.7	23.3	60.7	8.0
Nakuru	9.1	34.5	53.6	2.6
Eldoret	10.4	32.3	54.4	2.7
Kikuyu	6.9	30.1	50.2	12.7
Ruiru	11.5	33	52.8	2.6
Kangundo-Tala	3.7	11	60.6	24.4
Naivasha	7.3	46.6	31.5	14.6
Thika	9.1	39.8	48.9	2.1
Machakos	7.3	20.5	56.3	15.6

Note: The row percentages exclude the "not stated" category. Appendix 4 provides a list of more urban centres with proportions of the population working in the informal sector.

Chapter 4~Housing and Household Characteristics of the Urban Population

This chapter highlights selected housing and household characteristics of the urban population. These characteristics include: tenure status, housing conditions, household's main source of water, household's main mode of human waste disposal, household size and household type.

4.1 Housing Characteristics

Tenure Status

Table 4.1 presents the tenure status in major urban centres (see also Appendix 5). Nationally, more than half of the urban households lived in individual rental units. About one-third lived in their houses – purchased, constructed or inherited. The rest lived in houses by the government, local authority, parastatal or private company. However, there are variations in the urban centres. Generally, house ownership tends to be higher in urban centres with a large concentration of peri-urban population (e.g. Kangundo-Tala, Machakos, Kikuyu and Kisumu), as well as in urban centres located within a largely rural population. Peri-urban areas are formerly rural and agricultural lands that are gradually turning to urban land use. Residents in these areas tend to live in own houses as they did before the change of land use from rural to urban.

Table 4.1: Tenure Status by Major Urban Centres, 2009**

Urban centre	Tenure status (percent households)*				
		Rented/provided			
	Own House	Government	Local Authority	Parastatal/ Company	Individual rental units
KENYA (Urban)	33.8	2.4	1.5	4.2	57.4
Nairobi	13.5	2.6	2.6	5.1	75.2
Mombasa	22.4	1.8	1.5	4.2	69.3
Kisumu	36.0	2.1	1.2	3.6	56.3
Nakuru	21.7	2.6	4.0	4.5	66.3
Eldoret	24.2	2.1	2.5	4.2	66.3
Kikuyu	50.4	1.0	0.4	2.3	45.0
Ruiru	26.5	1.6	0.4	4.9	66.0
Kangundo-Tala	88.3	0.5	0.5	1.2	9.3
Naivasha	26.5	2.2	0.7	14.5	55.8
Thika	16.2	1.5	3.7	3.9	74.2
Machakos	67.6	2.1	0.3	1.7	27.9

*The percentages exclude "other" category. ** Appendix 5 provides a list of more urban centres with proportion of households living in own house and individual rental units.*

Urban centres with low house ownership and provision of housing by the government, local authority, parastatal or private company have a higher proportion of their households living in individual rental units. Provision of housing by parastatal or private company tends to be relatively high in urban centres that host parastatals or private companies. Examples are found in Naivasha (flower industry), Chemelil (Chemelil Sugar), Magadi

(Magadi-Soda), Muhoroni (Muhoroni Sugar), Mumias (Mumias Sugar), Machinery, Nandi Hills and Kakuma (NGOs). These companies provide housing for their employees.

The results confirm that provision of public housing is still relatively low in the urban centres. Public investment in housing development has dwindled over the years due to inadequate budgetary provision, coupled with emerging economic trends towards increased private sector participation in various sectors. The minimal contribution of the public sector in housing has exposed urban households to market forces that generally tend to be imperfect and non-responsive to needs of the poor, hence the mushrooming of informal settlements in the major towns (see Chapter 5). The small proportion of households living in own houses also indicates the inability of most households to purchase houses as a result of high house prices. Of the 230 urban centres, 143 had less than 50 percent of their households living in own house. Thirty seven urban centres are better-off, with 75 percent and above as shown in Figure 4.1.

Figure 4.1: Number of Urban Centres with Households Living in Own House, 2009
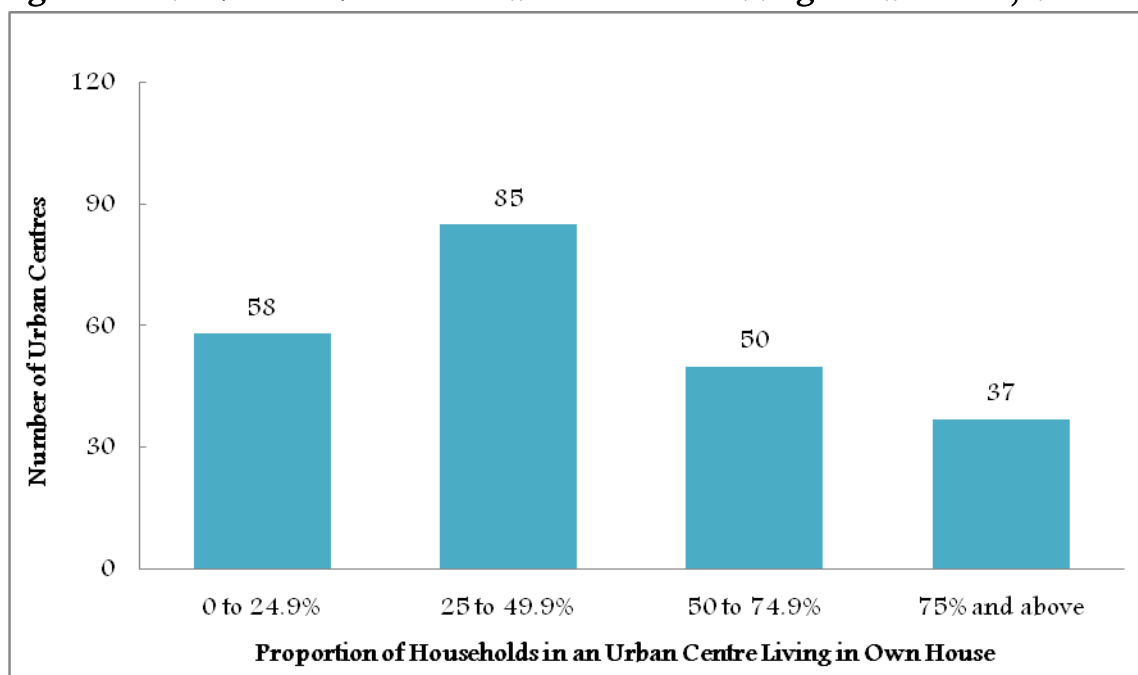
Housing Conditions

Two aspects of housing conditions are discussed in this section: the dominant roofing and wall material of main dwelling unit. Corrugated iron sheet (79 percent) is the dominant roofing material in all the urban centres. This is followed by tiles, concrete and asbestos (17 percent), which is gaining dominance in some Coastal and Central Kenya urban centres. Given the existing by-laws and building codes in most local authorities, grass and *makuti* are not very common, except in the Coastal and Northern Kenya urban centres, where such roofing material is preferred because of weather conditions. Table 4.2 provides information on the dominant roof and wall material in major urban centres (see also Appendix 5).

At the National level, more than half of the households live in durable housing made of stone, brick or wall. However, a further analysis of all the towns reveals a lot of variations from as low as 6.6percent to as high as 98.5 percent. The same variation is reflected in the proportion of non-durable houses made of mud, wood and corrugated iron sheet. Of the

230 urban centres, 130 had less than 50 percent of their households living in durable structures. Thirty eight urban centres are better-off with 75 percent and above (see Figure 4.2).

Table 4.2: Dominant Roof and Wall Material by Major Urban Centres, 2009**

| Urban centre | percent households* | | | | | | |
| | Roof material | | | Wall material | | | |
	Iron sheet	Tiles/Concrete/Asbestos	Grass/ Makuti	Stone/Brick/Block	Mud	Wood	Iron sheet/Tin
KENYA (Urban)	**78.9**	**16.7**	**3.8**	**56.6**	**22.9**	**5.8**	**13.6**
Nairobi	65.3	34	0.1	61.4	9.1	1.9	27.5
Mombasa	78.4	16.4	4.5	74.3	24.5	0.2	0.8
Kisumu	88.3	9.1	2.2	38.1	58.8	0.2	2.8
Nakuru	87.7	11.6	0.1	64.7	31.9	2.3	1.1
Eldoret	87.9	10.4	0.6	52.5	39	3.1	4.3
Kikuyu	88.5	11.3	0.1	35.3	3.9	9.8	51
Ruiru	74.8	24.6	0.3	86.3	2.5	1.7	9.4
Kangundo-Tala	93.6	3.0	3.2	95.8	2.6	0.2	1.2
Naivasha	92.5	6.5	0.6	66.6	17.7	8.3	7.1
Thika	84.4	15.3	0.2	82.6	7.7	5.7	3.9
Machakos	93.2	6.1	0.5	90.6	7.4	0.4	1.6

*The percentages exclude "other" category. ** Appendix 5 provides a list of more urban centres with selected dominant roofing and wall material of the main dwelling unit.

Figure 4.2: Number of Urban Centres with Households Living in Durable Structures, 2009
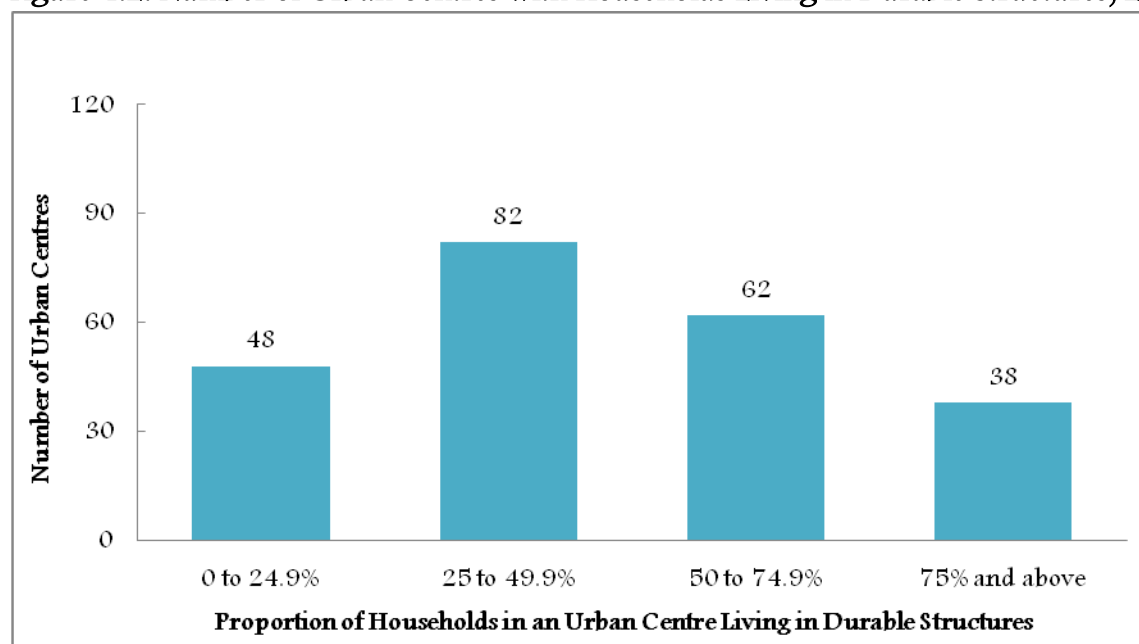
Households Main Source of Water

Urban households have various main sources of water. These are piped water in the house or fetched from elsewhere, ground water (borehole, well, spring), water vendor, rain water and surface water (lake, river, pond, dam). Table 4.3 presents the proportion of households with access to different categories of main source of water (see also Appendix 6). Although the proportion of households with access to piped water is relatively high in most urban centres, majority of these households do not have individual connections to the house. Nationally, half of the households (53 percent) have access to piped water. However, the

large majority (38.7 percent) access piped water from elsewhere, rather than within their households.

Table 4.3: Main Source of Water by Major Urban Centres, 2009**

Urban centre	percent households*					
	Piped Water in House	Piped Water Elsewhere	Ground Water	Water Vendor	Rain Water	Surface Water
KENYA (Urban)	**14.4**	**38.7**	**23.6**	**13.4**	**0.7**	**9.1**
Nairobi	23.4	52.3	7.2	16.5	0.2	0.4
Mombasa	11.6	41.3	22	24.4	0.1	0.5
Kisumu	5.5	35.5	26.7	18.3	1.1	12.8
Nakuru	18.4	57.0	7.7	14.1	1.8	0.8
Eldoret	16.1	50.2	29.9	2.4	0.1	1.3
Kikuyu	13.9	29.8	35.8	15.5	1.1	3.9
Ruiru	19.2	41.2	24.6	8.8	0.5	5.8
Kangundo-Tala	1.1	4.1	65.4	6.1	0.8	22.5
Naivasha	5.5	16.4	30.3	37.4	4.5	5.9
Thika	25.6	59.7	2.2	10.9	0.1	1.5
Machakos	7.1	14.1	46.1	21.3	1.1	10.3

*The percentages exclude "other" category. ** Appendix 6 provides a list of more urban centres with proportions of households having access to piped water.*

Figure 4.3 indicates that 213 out of 230 urban centres have less than 25 percent of their households connected to piped water in the house. Households with no access to piped water tend to rely on ground water sources (borehole, spring, and well), water vendors or surface water (lake, river, pond and dam). In some of the urban centres, surface water is largely the main source of water. Roof catchment is virtually underutilized in all the urban centres.

Figure 4.3: Number of Urban Centres with Access to Piped Water
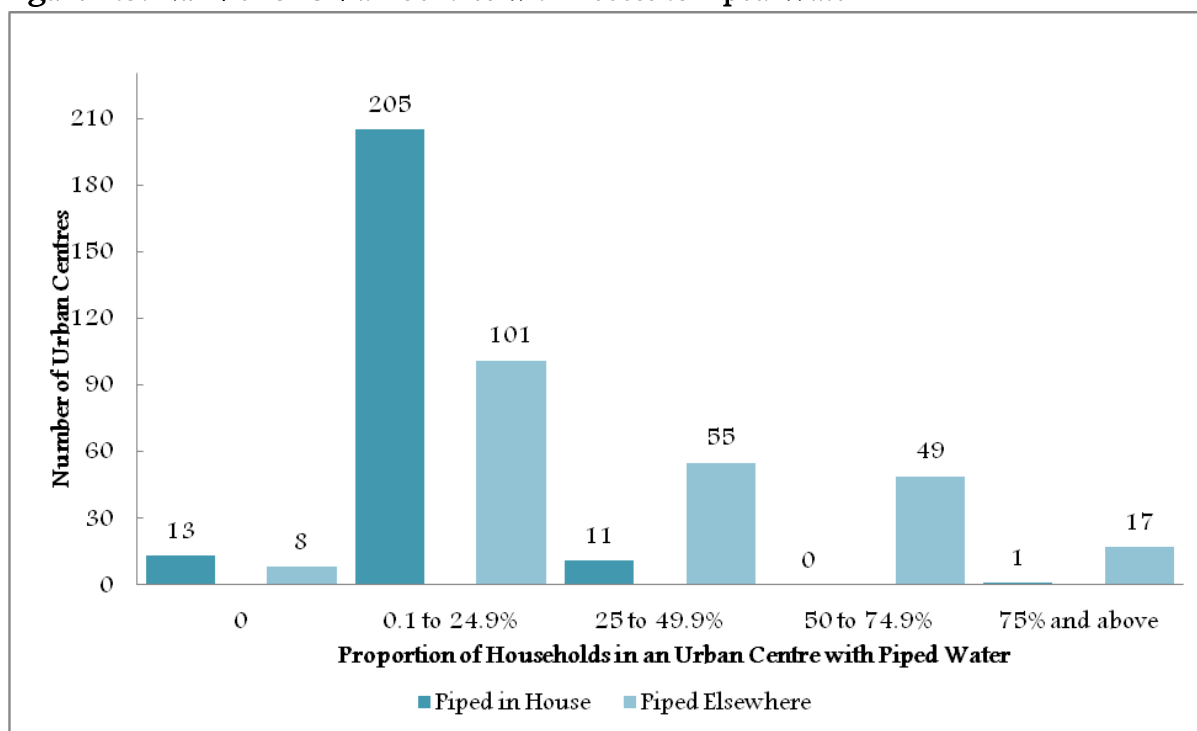
Households' Main Mode of Human Waste Disposal

The proportions presented in Table 4.4 and Appendix 6 reveals that connection to main sewer is generally low in most urban centres. At the National level, about one-fifth of the households are connected to main sewer, while slightly more than two thirds (68 percent) rely on pit latrines, with a large percentage of these, using ordinary pit latrines.

Table 4.4: Main Mode of Human Waste Disposal by Major Urban Centres, 2009

Urban centre	percent households*				
	Main sewer	Septic tank/Cess pool	VIP latrine	Ordinary pit latrine	Other
KENYA (Urban)	19.9	8.9	5.9	62	3.3
Nairobi	47.7	10.8	2.7	37.6	1.3
Mombasa	13.9	14.5	5.9	62.3	3.4
Kisumu	10.0	5.0	3.9	75.1	6.0
Nakuru	23.1	8.3	8.2	59.9	0.5
Eldoret	18.1	7.4	6.3	67.7	0.6
Kikuyu	1.5	10.7	6.8	80.8	0.2
Ruiru	5.1	23.0	9.9	61.6	0.5
Kangundo-Tala	0.5	0.7	10.2	86.1	2.5
Naivasha	9.5	8.4	5.1	76.1	0.9
Thika	40.2	10.6	8.2	40.3	0.8
Machakos	8.8	6.5	6.4	77.4	0.9

Appendix 6 provides a list of more urban centres with proportions of households having access to main sewer and ordinary pit latrine.

Figure 4.4 illustrates access to main sewer. Over 95 percent of the urban centres have less than 25 percent of their households connected to the main sewer. Only three urban centres have more than half of the households connected to main sewer. These are Embu, 80 percent; Kapenguria, 60 percent and Machinery, 59 percent. Furthermore, 28 urban centres have no sewer connection.

Figure 4.4: Number of Urban Centres with Access to Main Sewer
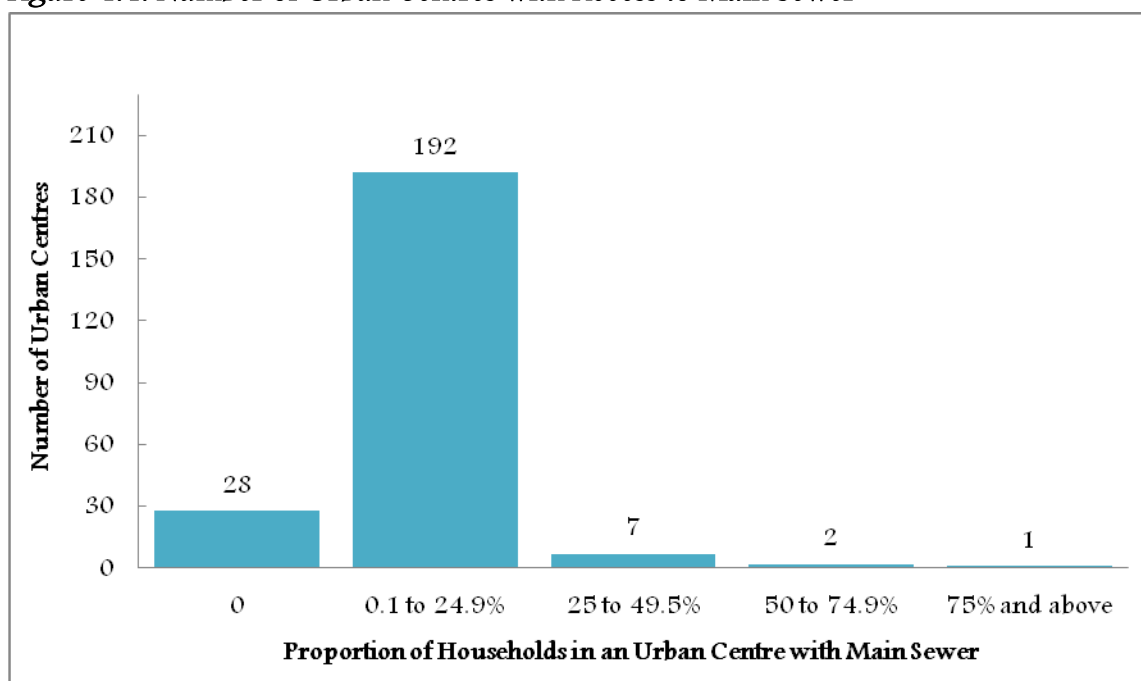
Chapter 5~Urban Settlements

For the first time, the 2009 Census captured the informal settlements population. This chapter provides a comparison between formal and informal settlements. The chapter is divided into two sections. The first section highlights the formal and informal settlements population, while the second section presents selected characteristics of both settlements. However, more attention will be paid to the urban informal settlements, while providing comparative data for the formal settlements.

5.1 Urban Formal and Informal Settlements Population

Formal and Informal Settlements Population by Province

An Urban informal settlement is a settlement characterized by at least two of the following:

- Inadequate access to safe water;
- Inadequate access to sanitation and other infrastructure;
- Poor structural quality of housing;
- Overcrowding; and
- Insecure residential status.

According to the 2009 Census results, only 15 percent of the urban population lives in informal settlements. Table 5.1 shows that, Nairobi, as a Capital City and Province, contributes a larger share (62 percent) of the *total* urban informal settlements population in the country. Nairobi is followed by Coast, Nyanza and Rift Valley. The contribution of Central, Eastern, Western and North Eastern to the total urban informal settlements population is very minimal.

Table 5.1: Urban Formal and Informal Settlements Population by Province, 2009

Province	Total urban population	Formal settlements population	Informal settlements population	% of informal settlement population	% of total informal settlements population
KENYA	12,023,570	10,221,871	1,801,699		
Nairobi	3,109,861	1,985,402	1,124,459	36.2	62.4
Central	1,501,343	1,477,343	24,000	1.6	1.3
Coast	1,421,511	1,132,461	289,050	20.3	16
Eastern	1,192,025	1,168,376	23,649	2	1.3
North Eastern	408,591	405,046	3,545	0.9	0.2
Nyanza	1,334,991	1,147,824	187,167	14	10.4
Rift Valley	2,356,490	2,218,012	138,478	5.9	7.7
Western	698,758	687,407	11,351	1.6	0.6

The same trend is observed *within* the provinces. Nairobi has more than one-third of its population living in informal settlements; followed by Coast, (20 percent) and Nyanza, (14 percent). The rest of the provinces have a very small proportion of their population living in informal settlements.

Population of Formal and Informal Settlements by County

Appendix 7 provides the population of urban formal and informal settlements by county. Most of the counties do not have informal settlements. Where they exist, the population of

residents living there is relatively small. West Pokot County has the highest percent of its urban population (66 percent) living in informal settlements. The County is followed by Taita Taveta (43 percent); Nairobi (36 percent); Kisumu (36 percent); Uasin Gishu (21 percent); Mombasa (24 percent); Tana River (17 percent) and Kilifi (16 percent). The rest have less than 10 percent of their population living in the informal settlements.

Population of Formal and Informal Settlements by Urban Centre

Contrary to expectation, a large majority of urban centres do not have informal settlements. Only 36 urban centres recorded informal settlements population (see Appendix 8). Existing literature indicate that informal settlements are a characteristic of most urban centres, especially in sub-Saharan Africa where lack of affordable housing is a major concern. The Kenyan situation can be attributed to lack of a clearer definition of an informal settlement. As such, these findings should be treated as the first indications of the urban informal settlements' population.

Eleven out of the 36 urban centres have more than 10,000 of their population living in informal settlements. Seven have an informal settlement population of between 5,000 and 10,000. Thirteen have between 1,000 and 5,000 people in the informal settlements. The last five towns have an informal settlements population of less than 1,000 people. As shown in Table 5.2, the city of Nairobi has the largest share of the *total* informal settlements population. It is followed by Mombasa, Kisumu and Eldoret. The rest have less than one percent of their population living in informal settlements. However, when the three cities are compared, Kisumu leads with the high proportion (46.9 percent) of informal settlements' population, followed by Nairobi (36 percent) and Mombasa (24 percent) respectively.

Table 5.2: Formal and Informal Settlements Population by Urban Centres, 2009

Urban centre	Urban Population	Formal settlements		Informal settlements		% share of total informal settlements population
		Population	% share in urban centre	Population	percent share in urban centre	
KENYA	12,023,570	10,221,871		1,801,699		
Nairobi	3,109,861	1,985,402	63.8	1,124,459	36.2	62.4
Mombasa	925,137	707,269	76.5	217,868	23.5	12.1
Kisumu	383,444	203,536	53.1	179,908	46.9	10
Eldoret	312,351	239,653	76.7	72,698	23.3	4
Thika	149,289	132,945	89.1	16,344	10.9	0.9
Nakuru	367,183	351,688	95.8	15,495	4.2	0.9
Naivasha	170,551	159,623	93.6	10,928	6.4	0.6
Machakos	150,467	145,899	97	4,568	3	0.3
Kikuyu	264,714	264,349	99.9	365	0.1	0

Nairobi's Formal and Informal Settlements Population

As indicated in Table 5.2 above, Nairobi has the largest share (62.4 percent) of the total informal settlements population in the country. It also houses the highest number of informal settlements, but only few of them are widely known. These are Kibera, Mathare, Mukuru and Korogocho. However, given their character and nature, it is not easy to define the spatial contexts of these informal settlements. More often than not, the population of specific informal settlements in Nairobi and in other urban centres is an estimation. Figure

5.1 gives an overview of the administrative locations in Nairobi with an informal settlements population of over 50 percent.

Figure 5.1: Locations in Nairobi with the Highest Concentration of Informal Settlements' Population, 2009

Population, 2009

Location	Informal Settlement Population	Formal Settlement Population
Mukuru Nyayo	55	45
Uthiru-Ruthimitu	56.9	43.1
Pumwani	67.9	32.1
Mutuini	73.2	26.8
Mathare	79.7	20.3
Kangemi	79.7	20.3
Serangombe	81.9	18.1
Viwandani	83.1	16.9
Laini Saba	86.7	13.3
Kibera	91.1	8.9
Mukuru Kwa Njenga	93.5	6.5
Kawangware	98.2	
Korogocho	100	

Percent of Total Population in Location

■ Informal Settlement Population □ Formal Settlement Population

Korogocho is wholly an informal settlement. Kawangware, Mukuru Kwa Njenga, Kibera, Laini Saba, Viwandani, Serangombe, Kangemi and Mathare have over three-quarters of their population living in informal settlements. The rest – Mutuini, Pumwani, Uthiru-Ruthimitu and Mukuru Nyayo – have between 55 percent and 73 percent of their population living in informal settlements. All these locations with a high concentration of informal settlements population are spatially distributed in all administrative divisions of Nairobi as indicated in Appendix 9 and Map 5.1. Notably, Makadara (in Makadara Division), Ngara; Starehe (in Central Division); Kileleshwa; Kilimani and Parklands (in Westlands Division) do not have informal settlements.

Map 5.1: Spatial Concentration of Informal Settlements Population in Nairobi, 2009
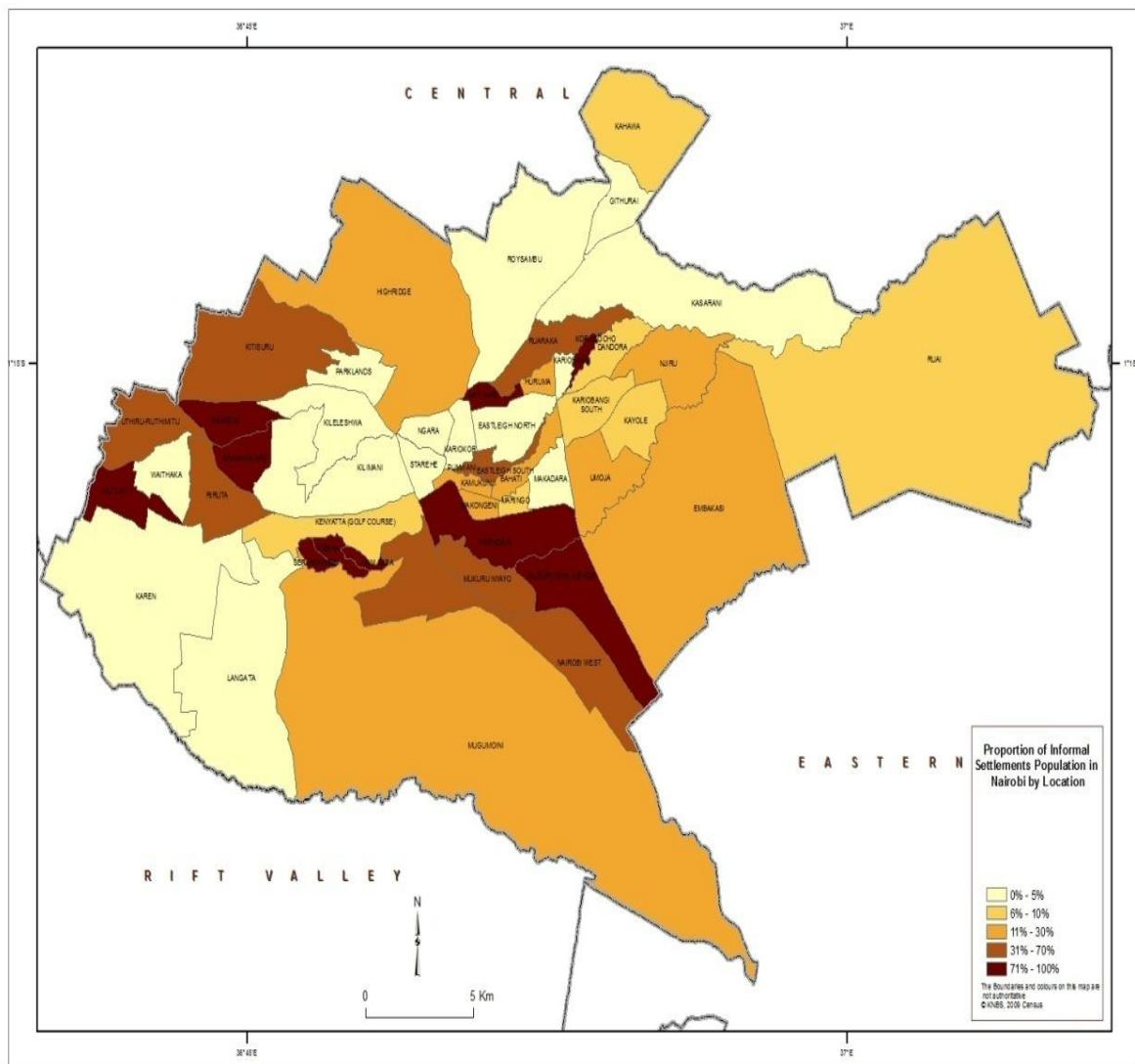
5.2 Characteristics of Formal and Informal Settlements

This section highlights the characteristics of formal and informal settlements in the city of Nairobi; and the municipalities of Mombasa and Kisumu. The three contribute 84.5 percent of the total urban informal settlements in Kenya. Furthermore, they each attract an informal settlements population of over 100,000 people.

Socio-Economic Characteristics

Table 5.3 presents the socio-economic characteristics of formal and informal settlements population. There seems to be no significant differences between the two settlements' population in terms of their socio-economic characteristics. However, some trends can be observed. Formal settlements tend to have higher proportions of adult population with no education, those with secondary education and above, and economically active population working in the public sector. On the other hand, informal settlements tend to have higher proportions of unemployed population and those working in the informal sector.

Table 5.3: Socio-Economic Characteristics of Formal and Informal Settlements, 2009

Urban centre	percent of urban settlements'/category population					
	Education status (18+ years old)		Economic activity		Main employer	
	None	Secondary and above	Working	Unemployed	Public sector	Informal sector
KENYA (Urban)						
Formal	8.9	54.5	46.3	5.9	3.8	24.6
Informal	5.4	49.7	48.1	7.9	2	26.4
Nairobi						
Formal	4.0	73.7	51.2	7.0	5.1	26.0
Informal	3.6	52.5	50.6	8.6	1.7	26.9
Mombasa						
Formal	9.7	52.3	42.7	8.5	3.6	20.8
Informal	10.1	41.9	44.6	8.4	2.2	23.1
Kisumu						
Formal	6.4	51.6	41.1	4.8	4.0	23.4
Informal	3.6	51.3	42.2	5.5	2.5	28.4

Housing Characteristics

The housing characteristics of formal and informal settlements are presented in Tables 5.4 and 5.5. The former presents the tenure status, roofing and wall material, while the later is on main source of water and mode of human waste disposal. Table 5.4 shows that formal settlements have higher proportions of households living in their own, durable houses made of stone, brick or block and with tiles and asbestos as roofing material. On the other hand, informal settlements have higher proportions of households living in individual rented units and non-durable structures made of wood, mud, corrugated iron sheets, tin, grass or reeds.

Table 5.4: Housing Characteristics of Formal and Informal Settlements, 2009

Urban centre	percent of urban settlements' households					
	Tenure status		Roofing material		Wall material	
	Own house	Individual rental unit	Iron sheet	Tiles/Asbestos	Durable	Non-durable
KENYA (Urban)						
Formal	37.9	52.4	77.0	8.5	61.6	38.0
Informal	15.1	80.6	89.4	3.0	33.1	66.8
Nairobi						
Formal	15.3	69.0	50.6	19.3	85.2	14.8
Informal	10.7	84.6	88.5	3.1	25.7	74.2
Mombasa						
Formal	23.1	66.7	75.1	8.3	77.5	22.4
Informal	20.2	76.8	89.4	2.4	65.0	34.9
Kisumu						
Formal	52.3	35.0	82.2	10.8	41.9	58.0
Informal	19.7	77.4	95.9	2.7	34.3	65.6

Table 5.5 shows that formal settlements have better access to piped water in the dwelling unit and connection to main sewer. Households in informal settlements tend to depend on piped water from elsewhere. They also depend more on pit latrines.

Table 5.5: Service Provision in Formal and Informal Settlements, 2009

Urban centre	% of urban settlements' households			
	Source of water		Mode of human waste disposal	
	Piped water in house	Piped water elsewhere	Main sewer	Ordinary pit latrine
KENYA (Urban)				
Formal	16.0	35.7	20.9	59.7
Informal	6.7	52.8	15.5	72.2
Nairobi				
Formal	34.1	49.6	65.4	17.4
Informal	7.3	56.3	21.0	68.1
Mombasa				
Formal	13.5	39.5	16.6	57.4
Informal	5.8	46.5	5.9	76.4
Kisumu				
Formal	8.3	19.2	17.9	63.4
Informal	2.7	51.7	2.1	86.8

Chapter 6 –Summary of Key Findings and Recommendations

This chapter highlights the summary of key findings and recommendations in the context of emerging indicators that could be relevant to existing and proposed development programmes and policies in urban Kenya. Particularly important are the Millennium Development Goals and Kenya's Vision 2030.

6.1 Summary of Key Findings

Levels and Trends in Urbanization

Although the proportion of Kenya's total population living in urban centres is still relatively low within the global context, urban population has been increasing since independence. The urban population increased from 5.4 million in 1999 to 12 million people in 2009. The proportion of urban population to the total population rose from 19 percent in 1999 to 31.3 percent in 2009. Similarly, the urban growth rate rose from 3.4 percent in 1999 to a high of 8.3 percent in 2009. Even then, a further analysis by Province and County reveals varied levels and trends in urbanization.

In some of the urban centres, the population of the built-up area (core urban) is relatively smaller than the peri-urban population. This implies that the formerly rural settlements are gradually being absorbed into the spatial growth of these urban centres. While Nairobi continues to have the largest share of the urban population, the importance of small and medium-size urban centres is beginning to emerge in the urban hierarchy. In 2009, these urban centres had a total population of 4.3 million people – contributing 36 percent to the total urban population in Kenya. As such, Nairobi's share of the total urban population population reduced from an average of 34 percent over the years to 26 percent in 2009.

Demographic and Socio-Economic Characteristics of the Urban Population

The selective dominance of males in the urban centres since the colonial period is gradually declining in most urban centres. Nationally, the sex ratio is 100. This implies that the urban population of males and females in the country is almost the same. Furthermore, three quarters of the urban centres have more females than males. In terms of education attainment, urban residents are doing relatively better. An analysis of the adult population (18 years and above) shows that more than half (53.7 percent) have attained secondary education and above while 8.4 percent have no education. Even then, a number of urban centres have high proportions of their adult population with no education.

Contrary to the common perception, the proportion of the unemployed population is relatively small in most urban centres, ranging between 0.6 and 22 percent. However, the informal sector contributes a significant proportion to the employed population in the urban centres. At the National level, more than half (53 percent) of the employed population is in the informal sector, followed by the private sector (30 percent). Employment in the public sector is very minimal (7.5 percent).

Housing and Household Characteristics of the Urban Population

The proportion of urban households living in own house is gradually increasing but with variations between the urban centres. House ownership tends to be higher in urban centres with a large concentration of peri-urban population. Of the 230 urban centres, 87 had more than 50 percent of their households living in own house. Nationally, about one-third (34 percent) of the households lived in own house – purchased, constructed or inherited. More than half (57 percent) lived in individual rental units, while the rest lived in rented or provided houses by the government, local authority, parastatal or private company.

This implies that the provision of public housing is still relatively low in the urban centres. In addition, more than half (57 percent) of the households live in durable housing made of stone, brick or wall. However, this is not uniform in all urban centres. There is a wide variation from as low as 1.6 percent to as high as 99.9 percent. Of the 230 urban centres, 130 have less than 50 percent of their households living in durable structures.

Although the proportion of households with access to piped water is relatively high in most urban centres, majority of these households do not have individual connections to the house. Of the 230 urban centres, 213 have less than 25 percent of their households connected to piped water in the house. On the other hand, access to main sewer is very poor in urban Kenya. Almost all the urban centres (220) have less than 25 percent of their households connected to the main sewer. Nationally, only 3 urban centres have more than half of the households connected to main sewer.

Urban Settlements

The urban population living in informal settlements is relatively small (15 percent of total) but disproportionately concentrated in Nairobi 62 percent; Mombasa, 12 percent and Kisumu, 10 percent. Furthermore, only 36 out of the 230 urban centres have informal settlements. Existing literature indicate that informal settlements are a characteristic of most urban centres, especially in sub-Saharan Africa where lack of affordable housing is a major concern. The Kenyan situation can be attributed to lack of a clearer definition of an informal settlement. A comparison of selected characteristics of formal and informal settlements reveals that informal settlements tend to have higher proportions of unemployed population and those working in the informal sector. In addition, formal settlements have better access to piped water in the dwelling and connection to main sewer. Households in informal settlements tend to depend on piped water from elsewhere and use pit latrines.

6.2 Recommendations

1. The definition of what constitutes an urban area varies from one country to another. For the purposes of future Population and Housing Censuses, there is need for a clearer definition of what constitutes urban, peri-urban and rural areas, as well as urban informal settlement.

2. Given the levels, trends and patterns of urbanization process in the country, there is need for a national urban policy to guide urban development countrywide. In addition,

the policy should aim at guiding the urbanization process by reducing risks and maximizing opportunities offered by the urban growth.

3. There is no doubt that small and medium-size urban centres will continue to grow and absorb a larger proportion of the urban population. There is need to plan for the spatial growth and development of these urban centres as well as strengthening their governance capacities.

4. The growth of Nairobi City has spilled over to the adjacent urban centres. Other large urban centres will gradually experience the same. There is need to encourage area-wide metropolitan planning and governance.

5. Urban centres are central places where people converge on a daily basis. They serve not only the urban residents but also the population living around the urban centre. However, the day time population of urban centres is hardly captured in Population and Housing Censuses, yet it is important for planning purposes. There is need to capture and plan for the day-time population in urban areas.

6. Whereas the water sector reforms may have improved the general access to water situation in most urban centres, access to improved sanitation is still very poor. There is an urgent need for local authorities to urgently address this situation.

7. Improving the conditions of informal settlements in the three cities of Nairobi, Mombasa and Kisumu should be encouraged, while at the same time controlling further growth of these settlements in other urban centres.

8. One way of achieving a sustainable urban development is through generating, collecting and analyzing accurate and reliable city-level data which can better inform local and national decision-making processes.

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Appendices

Appendix 1(a): Main Census Questionnaires

Republic of Kenya

Statistics Act 2006

Population and Housing Census – 24th/25th August 2009

KNBS
KENYA NATIONAL
BUREAU OF STATISTICS
Keeping you informed

Province	District	Division	Location	Sub-Location	E.A. Number	E.A. Type	E.A. Status	Household No.	Household Type	Constituency	Structure No.: S

Ward	Males =	Females =	Total Household Population =		☐ Spoilt ☐

A: Information Regarding All Persons

B: Information Regarding Females Aged 12 Years and Above

Name	Line Number	Relationship	Sex	Age	Line Number of Mother	Usual member of household	Tribe/ Nationality	Religion	Marital Status	Birth Place	Previous Residence	Duration of Residence		Orphanhood		Particulars of All Live Births								Particulars of Last Live Births	
(P-00)		(P-10)	(P-11)	(P-12)	(P-13)	(P-14)	(P-15)	(P-16)	(P-17)	(P-18)	(P-19)	(P-20)	(P-21)	(P-22)	(P-23)	(P-24)	(P-25)	(P-26)	(P-27)	(P-28)	(P-29)	(P-30)	(P-31)	(P-32)	(P-33)
What are the names of each person who spent the night of 24th/25th August, 2009 in this household? (Record two names of each person, young and old, starting with the head of the household.) An illustration of how to write the names is shown below. PATRICIA ODENG	Illustration 1 2 3 4 5 6 7 8 9 0	What is <NAME>'s relationship to the head of this household? 1=Head 2=Spouse 3=Son/Daughter 4=Grandchild 5=Brother/Sister 6=Father/Mother 7=Nephew/Niece 8=In-Law 9=Grandparent 10=Other Relative 11=Non-relative 99=DK	What is <NAME>'s sex? 1=Male 2=Female	How old is <NAME>? (Record age in completed years using two digits. If under 1 year, record "0". If 95 years and above code 95)	Please insert line number of <NAME>'s biological mother ENTER "0" IF BIOLOGICAL MOTHER IS NOT IN HOUSE-HOLD	Is <NAME> a usual member of this house-hold? 1=Yes 2=No	What is <NAME>'s tribe or nationality? For Kenyans, write tribe code. For non-Kenyans, write code for nationality. The code list is provided.	What is <NAME>'s religion? 1=Catholic 2=Protestant 3=Other Christian 4=Muslim 5=Hindu 6=Tradition-alist 7=Other religion 8=No religion 9=DK	What is <NAME>'s marital status? 1=Never married 2=Married Mono-gamous 3=Married Poly-gamous 4=Widowed 5=Divorced 6=Separated 9=DK	Where was <NAME> born? Write district code, if in Kenya, or country code, if outside Kenya. The code list is provided.	Where was <NAME> living in August 2008? Write district code, if in Kenya, or country code, if outside Kenya. If aged under 1 year, write "0". The code list is provided.	When did <NAME> move to the current district? For respondents enumerated in their district of birth, code month and year of birth. If date of movement is not known, write "99" for month and "9999" for year. Month	Year	Is <NAME>'s father alive? 1=Yes 2=No 9=DK	Is <NAME>'s mother alive? 1=Yes 2=No 9=DK	How many children have you ever born alive? Boys	Girls	How many children have you born alive who usually live in this household? Boys	Girls	How many children have you born alive who usually live elsewhere? Boys	Girls	How many children have you born alive who have died? Boys	Girls	When was your last child born? If date of birth is not known code "99" for month and "9999" for year. Month	Year
	1																								
	2																								
	3																								
	4																								
	5																								
	6																								
	7																								
	8																								
	9																								
	0																								

315686000041

2009031

38

Census Household Questionnaire (continued)

Line Number	B: Information Regarding Females Aged 12 Years and Above			C: Information Regarding Persons with Disability		D: Information Regarding Persons Aged 3 Years and Above			E: Labour Force Particulars (To be asked of all persons aged 5 years and above)			F: Information Regarding ICT (To be asked of persons aged 3 years & above)							G: Annual Live Births	H: Information About Deaths In the Household				

Illustration codes (header):

B: Information Regarding Females Aged 12 Years and Above — Particulars of Last Live Births
- (P-34) Was this last birth notified? 1=Yes 2=No 9=DK
- (P-35) Was this child male or female? 1=Male 2=Female 3=Male twins 4=Female twins 5=Male-female twins 6=Multiple births 9=DK
- (P-36) Is this child still alive? 1=Yes 2=No 3=One of the twins 4=Both twins 5=One of the multiples 7=All of the multiples 9=DK

C: Information Regarding Persons with Disability
- (P-37) What type of disability does <NAME> have? (List not more than three) 1. Visual 2. Hearing 3. Speech 4. Physical 5. Mental 6. Self care 7. Others 8. None
- (P-38) Because of the disability, does <NAME> have difficulties in engaging in any economic activity? 1=Yes 2=No 3=NA 9=DK

D: Information Regarding Persons Aged 3 Years and Above — Education
- (P-39) What is the school/Learning institution attendance status of <NAME>? 1=At school/Learning Institution 2=Left School/Learning Institution 3=Never went to school/Learning Institution 9=DK
- (P-40) What is the highest Std/Form/Level reached by <NAME>? The code list provided. Write "97" if P-39 equals 3 or 9
- (P-41) What is the highest Std/Form/Level completed by <NAME>? The code list provided. Write "97" if P-39 equals 3 or 9

E: Labour Force Particulars
- (P-42) Economic Activity. What was <NAME> mainly doing during the last 7 days preceding the census night? The code list provided
- (P-43) For those who worked or held a job (including those on leave/sick leave) Who was <NAME>'s main employer? The code list provided. Code "99" for Not Applicable
- (P-44) How many hours did <NAME> work in the last 7 days preceding the census night? Code "99" for Not Applicable

F: Information Regarding ICT — Was <NAME> able to get a service from the following items within the last one month?
- (P-45) Radio 1=Yes 2=No 9=DK
- (P-46) TV Set 1=Yes 2=No 9=DK
- (P-47) Mobile Phone 1=Yes 2=No 9=DK
- (P-48) Landline 1=Yes 2=No 9=DK
- (P-49) Computer 1=Yes 2=No 9=DK
- (P-50) How often does <NAME> use internet (e.g. email, chatting, etc.)? 1. Daily 2. Weekly 3. Monthly 4. Yearly 5. Never 9. DK If '5' or '9' Skip to H-10
- (P-51) Where did <NAME> mainly use the internet? 1=Own house 2=A friend's house 3=Office/Workplace 4=Cyber cafe 5=Community centre 6=Educational centre 7=Other 8=Mobile Phones 9=DK

G: Annual Live Births
- (H-10) How many live births occurred in this household between 24/08/2008 and 24/08/2009 (last 12 months)?

H: Information About Deaths In the Household
- (H-11) How many deaths occurred in this household between 24/08/2008 and 24/08/09 (last 12 months)? If '0' Skip to H-17
- (H-12) Name of the household member who died.
- (H-13) Was this death notified? 1=Yes 2=No 9=DK
- (H-14) Age. How old was <NAME>'s at his/her death? In completed years Code "0" for less than 1 year Code "99" for DK
- (H-15) Sex 1=Male 2=Female If male skip to next name

Line numbers: 1, 2, 3, 4, 5, 6, 7, 8, 9, 0

Remarks

Continuation page ____ of ____

H: Information About Deaths In the Household (H-16)
For females who died at age 12 - 49 years — Did the death occur...
1=During pregnancy?
2=During delivery?
3=Within two months after delivery?
4=Other
9=DK

I: Information Regarding Livestock (H-17)
How many of each of the following livestock are currently owned by this household?

Livestock	Number	Livestock	Number
1. Exotic cattle		7. Pigs	
2. Indigenous cattle		8. Indigenous chicken	
3. Sheep		9. Chicken Commercial	
4. Goat		10. Bee Hives	
5. Camels		11. Other	
6. Donkeys			

J: Housing Conditions and Amenities – To be Asked of the Household Head or Any Other Responsible Person

- (H-18) Dwelling Units. How many dwelling units does this household occupy?
- (H-19) Habitable. How many habitable rooms do these units contain?
- (H-21) Tenure Status of Main Dwelling Unit. If owner occupied, state whether: 1=Purchased 2=Constructed 3=Inherited. If rented/provided, state whether: 4=Government 5=Local Authority 6=Parastatal 7=Private Company 8=Individual 9=Faith based organization/NGO 10=Other form

Dominant Construction Material of Main Dwelling Unit:
- (H-22) Roof: 1=Corrugated Iron sheets 2=Tiles 3=Concrete 4=Asbestos Sheets 5=Grass 6=Makuti 7=Tin 8=Mud/Dung 9=Other (Specify)
- (H-23) Wall: 1=Stone 2=Brick/Block 3=Mud/Wood 4=Mud/Cement 5=Wood only 6=Corrugated Iron sheets 7=Grass/Reeds 8=Tin 9=Other (Specify)
- (H-24) Floor: 1=Cement 2=Tiles 3=Wood 4=Earth 5=Other (Specify)

- (H-25) Main Source of Water: 1=Pond 2=Dam 3=Lake 4=Stream/River 5=Protected Spring water 6=Unprotected Spring 7=Protected Well 8=Unprotected Well 9=Borehole 10=Piped into dwelling 11=Piped 12=Jabia 13=Rain/Harvested 14=Water Vendor 15=Other Specify)
- (H-26) Main Mode of Human Waste Disposal: 1=Main Sewer 2=Septic tank 3=Cess pool 4=VIP Pit Latrine 5=Pit Latrine covered 6=Pit Latrine uncovered 7=Bucket Latrine 8=Bush 9=Other (Specify)
- (H-27) Main Type of Cooking Fuel: 1=Electricity 2=Paraffin 3=LPG 4=Biogas 5=Firewood 6=Charcoal 7=Solar 8=Other (Specify)
- Main Type of Lighting Fuel: 1=Electricity 2=Pressure lamp 3=Lantern 4=Tin lamp 5=Gas Lamp 6=Fuel wood 7=Solar 8=Other (Specify)

K: Ownership of Household Assets (H-28)
Did the Household own any of the following items? 1=Yes 2=No

1. Radio	8. Car
2. TV	9. Truck/Lorry/tractor/bus
3. Mobile Phone	10. Refrigerator
4. Landline Telephone	11. Boat
5. Computer	12. Animal Drawn cart
6. Bicycle	13. Canoes
7. Motor Cycle	14. Tuk tuk

L: Emigrants (H-29)
Emigrants in the last 15 years (since 1995)
How many members of this household have migrated to another country since 1995?

If NONE write "0" and end the interview

If NOT "0" fill the Emigrant Short Questionnaire

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CODE LIST FOR HIGHEST EDUCATION LEVEL REACHED AND COMPLETED FOR P-40 & P41

Not Stated/DK 99
Never Attended 97
PRE-PRIMARY
Pre Primary (ECD) 96
PRIMARY
Standard 1(Incomplete) 0
Standard 1 1
Standard 2 2
Standard 3 3
Standard 4 4
Standard 5 5
Standard 6 6
Standard 7 7
Standard 8 8
SECONDARY
Form 1 9
Form 2 10
Form 3 11
Form 4 12
Form 5 13
Form 6 14
TERTIARY-MIDDLE LEVEL COLLEGES
Not Completed/Attending Post Secondary Education 15
Completed Post Secondary Education 16
UNIVERSITY
Not Completed/ Attending Undergraduate 17
Completed Undergraduate 18
Not Completed/ Attending Masters/PhD Degree 19
Completed Masters/PhD Degree 20
NON-FORMAL EDUCATION
Not Completed/Attending Basic/Post Literacy 21
Completed Basic/Post Literacy 22
YOUTH POLYTECHNIC
Not Completed/Attending Youth Polytechnic 23
Completed Youth Polytechnic 24
OTHER EDUCATION
Attending Madrassa/Duksi 25
Completed Madrassa/Duksi 26

CODE LIST FOR P42-ECONOMIC ACTIVITY CODE

Worked For Pay 1
On Leave 2
Sick Leave 3
Worked On Own/Family Business 4

Worked On Own/Family Agricultural Holding 5
Apprentice/Intern 6
Volunteer 7
Seeking Work (Action Taken) 8
Seeking Work (No Action Taken) 9
No Work Available 10
Retired 11
Homemaker 12
Full Time Student 13
Incapacitated 14
Other (Specify) 15

CODE LIST FOR P43- MAIN EMPLOYER

Private Sector Enterprise 1
Local Authorities 2
Central Government 3
Teachers Service Commission (TSC) 4
State Owned Enterprise 5
International NGO 6
Local NGO/CBO 7
Faith Based Organization 8
Self Modern 9
Informal Sector 'Jua Kali' (Employed) 10
Self Employed - Informal 11
Small Scale Agriculture (Employed) 12
Self Small Scale Agriculture 13
Pastoralist Activities (Employed) 14
Self Pastoralist Activities 15
Individual/Private Household 16
Other (Specify) 17

Appendix 1(b): Hotel/Lodge Residents, Hospital In-Patients, Prison/Police Cells Questionnaires

00454063

Republic of Kenya
POPULATION AND HOUSING CENSUS 24TH/25TH AUGUST 2009
HOTEL/LODGE RESIDENTS, HOSPITAL IN-PATIENTS, PRISON/POLICE CELLS

Statistics Act 2006

KNBS
KENYA NATIONAL BUREAU OF STATISTICS
Keeping you informed
STRICTLY CONFIDENTIAL

Province		District		Division		Location		Sub-Location		E.A. Number	

E.A. Type	E.A. Status	Constituency		Ward		Males =			Females =		

Total Population =

Type of Institution: ☐ Hotel/Lodge Residents ☐ Hospital In-patients ☐ Prison/Police Cells

Name of Institution: _____

Serial Number	Name	Sex	Age	Duration of Stay		Education Level	Home District/ Country	Tribe/ Nationality
(SQ01)	(SQ02)	(SQ03)	(SQ04)	(SQ05)		(SQ06)	(SQ07)	(SQ08)
Illustration 1 2 3 4 5 6 7 8 9 0	What are the names of each person? (Record two names for each person.) PATRICIA ODENG	What is <NAME>'s sex? 1=Male 2=Female	How old is <NAME>? (Record age in completed years using two digits. If under 1 year, record "0". If 95 years and above, code "95".)	How long has <NAME> stayed? Months	Years	What was the highest education level completed by <NAME>? 1=None 2=Primary 3=Secondary 4=University under graduate 5=University post graduate 6=Other tertiary colleges 9=DK	What is <NAME>'s home district/ country? (Code list is provided)	What is <NAME>'s Tribe/Nationality? (Code list is provided)
1								
2								
3								
4								
5								
6								
7								
8								
9								
0								

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Appendix 1(c): Emigrants Questionnaires

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Republic of Kenya

POPULATION AND HOUSING CENSUS 24TH/25TH AUGUST 2009

EMIGRANTS

Statistics Act 2006

STRICTLY CONFIDENTIAL

KNBS
KENYA NATIONAL BUREAU OF STATISTICS
Keeping you informed

Province	District	Division	Location	Sub-Location	E.A. Number	E.A. Type	E.A. Status	Household No.

Household Type	Constituency	Structure No.: S	Ward	Males =	Females =	Total Population =

Name of Respondent:

Line Number

Serial Number	Name of Emigrant	Sex	Age	Education Level	Professional Training	Destination	Current Residence	Year of Departure	Status/ Reason			Remittances	
(E-01)	(E-02)	(E-03)	(E-04)	(E-05)	(E-06)	(E-07)	(E-08)	(E-09)	(E-10)	(E-11)	(E-12)		(E-13)
Illustration 1 2 3 4 5 6 7 8 9 10	What are the names of each emigrant? (Record two names for each emigrant.) PATRICIA ODENG	What is <NAME>'s sex? 1=Male 2=Female	How old is <NAME>? (Record age in completed years using two digits. If under 1 year, record "0". If 95 years and above, code "95".)	What was the highest education level completed by <NAME>? 1=None 2=Primary 3=Secondary 4=University under graduate 5=University post graduate 6=Other tertiary colleges 9=DK	What was <NAME>'s professional training? 1=Doctor 2=Teacher 3=Nurse 4=Artisan 5=Lecturer 6=Engineer 7=Economist 8=Statistician 9=Others 10=None	What was <NAME>'s destination? (Code list is provided)	What is <NAME>'s country of current residence? (Code list is provided)	What was <NAME>'s year of departure?	What is <NAME>'s status/ reason for staying abroad? 1=Citizenship 2=Employment 3=Education 4=Sports 5=Marriage 6=Link-up with Family 7=Others (Specify) 9=DK	Did <NAME> remit money in the last 12 months to any household member? 1=Yes 2=No 3=DK	If yes, how much? (KSHS)		How was the money utilized? 1=Investment 2=Health 3=Education 4=Household consumption 5=Others
1													
2													
3													
4													
5													
6													

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Appendix 1(d): Travellers and Persons on Transit Questionnaire

00042482

Republic of Kenya
POPULATION AND HOUSING CENSUS 24TH/25TH AUGUST 2009
TRAVELLERS AND PERSONS ON TRANSIT

Statistics Act 2006

KNBS
KENYA NATIONAL
BUREAU OF STATISTICS
Keeping you informed
STRICTLY CONFIDENTIAL

Province		District		Division		Location		Sub-Location		E.A. Number	

E.A. Type		E.A. Status		Constituency		Ward		Males =		Females =	

Total Population =

Name of Place/Street/Station/Airport of Enumeration: _____

Serial Number	Name	Sex	Age	Home District/ Country	Tribe/ Nationality
(SQ01)	(SQ02)	(SQ03)	(SQ04)	(SQ05)	(SQ06)
Illustration 1 2 3 4 5 6 7 8 9 1 0	What are the names of each traveller? (Record two names for each traveller.)	What is <NAME>'s sex?	How old is <NAME>? (Record age in completed years using two digits. If under 1 year, record "0". If 95 years and above, code "95".)	What is <NAME>'s home district/ country?	What is <NAME>'s Tribe/Nationality?
	PATRICIA				
	ODENG	1=Male 2=Female		(Code list is provided)	(Code list is provided)
1					
2					
3					
4					
5					
6					
7					
8					
9					
0					

20039012

Appendix 1(e): Vagrants and Outdoor Sleepers Questionnaire

00021854

Republic of Kenya

POPULATION AND HOUSING CENSUS 24TH/25TH AUGUST 2009

VAGRANTS AND OUTDOOR SLEEPERS

KNBS
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BUREAU OF STATISTICS
Keeping you informed

Statistics Act 2006

STRICTLY CONFIDENTIAL

Province		District		Division		Location		Sub-Location		E.A. Number	

E.A. Type		E.A. Status		Constituency		Ward		Males =		Females =	

Total Population =

Name of Place/Street of Enumeration: _____

Serial Number	Name	Sex	Age	Home District/ Country	Tribe/ Nationality	Education Level
(SQ01)	(SQ02)	(SQ03)	(SQ04)	(SQ05)	(SQ06)	(SQ07)
Illustration 1 2 3 4 5 6 7 8 9 1 0	What are the names of each person? (Record two names for each person.) PATRICIA ODENG	What is \<NAME\>'s sex? 1=Male 2=Female	How old is \<NAME\>? (Record age in completed years using two digits. If under 1 year, record "0". If 95 years and above, code "95".)	What is \<NAME\>'s home district/ country? (Code list is provided)	What is \<NAME\>'s Tribe/ Nationality? (Code list is provided)	What was the highest education level completed by \<NAME\>? 1=None 2=Primary 3=Secondary 4=University under graduate 5=University post graduate 6=Other tertiary colleges 9=DK
1						
2						
3						
4						
5						
6						
7						
8						
9						
0						

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Appendix 1(f): Diplomatic Missions Questionnaire

Serial Number of Form: ………………

REPUBLIC OF KENYA
POPULATION AND HOUSING CENSUS 24TH/25TH AUGUST 2009
QUESTIONNAIRE FOR
DIPLOMATIC MISSIONS

KNBS
KENYA NATIONAL BUREAU OF STATISTICS
Keeping you informed

STATISTICS ACT 2006   **STRICTLY CONFIDENTIAL**

Province	District	Division	
Location	Sub-Location	E. A. Number	
E.A. Type	E.A. Status	Household Type	
Constituency	Ward	Males	
Females		Total Population	

Name of Hotel/Institution _____

Sno.	Name	Sex	Age	Duration of Stay		Education Level	Home District/ Nationality	Proffessional Training	
(D01)		(D02)	(D03)	(D04)		(D05)	(D06)	(D07)	
	What are the names of each person who spent the night of 24th/25th August, 2009 in this household ? PATRICIA ODENG	What is <NAME>'s sex ? 1=Male 2=Female	How old is <NAME>? (Record age in completed years using two digits.If under 1 year, record "00". If 95 years and above code 95)	How long has <NAME>'s stayed ? Months	Years	What is the highest education level completed by <NAME> ?	What is <NAME>'s home district/ country?	What is <NAME>'s proffessional training ? 1=Doctor 6=Engineer 2=Teacher 7=Economis 3=Nurse 8=Statistcia 4=Artisan 9=Others 5=Lecturer 10=None	
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									

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Appendix 2: Urban and Rural Population by County, 2009

Province/ County	Total population	Rural population	% of rural population	Urban population	% of urban population
Nairobi	3,109,861	0	0	3,109,861	100
Central					
Kiambu	1,618,422	611,426	37.8	1,006,996	62.2
Kirinyaga	525,962	444,270	84.5	81,692	15.5
Murang'a	940,882	808,326	85.9	132,556	14.1
Nyandarua	595,421	480,814	80.8	114,607	19.2
Nyeri	689,437	523,945	76	165,492	24
Coast					
Kilifi	1,102,937	823,795	74.7	279,142	25.3
Kwale	645,955	531,554	82.3	114,401	17.7
Lamu	100,398	80,773	80.5	19,625	19.5
Mombasa	925,137	0	0	925,137	100
Taita Taveta	277,475	229,905	82.9	47,570	17.1
Tana River	239,323	203,687	85.1	35,636	14.9
Eastern					
Embu	513,271	431,741	84.1	81,530	15.9
Isiolo	141,711	79,956	56.4	61,755	43.6
Kitui	1,008,156	871,473	86.4	136,683	13.6
Machakos	1,093,503	529,112	48.4	564,391	51.6
Makueni	880,048	779,595	88.6	100,453	11.4
Marsabit	289,337	225,642	78	63,695	22
Meru	1,350,481	1,247,092	92.3	103,389	7.7
Tharaka-Nithi	364,290	284,161	78	80,129	22
North Eastern					
Garissa	619,571	479,668	77.4	139,903	22.6
Mandera	1,023,670	845,368	82.6	178,302	17.4
Wajir	658,596	568,210	86.3	90,386	13.7
Nyanza					
Homa Bay	961,956	825,241	85.8	136,715	14.2
Kisii	1,148,612	921,077	80.2	227,535	19.8
Kisumu	959,882	462,793	48.2	497,089	51.8
Migori	914,289	606,874	66.4	307,415	33.6
Nyamira	597,730	520,708	87.1	77,022	12.9
Siaya	839,420	750,205	89.4	89,215	10.6
Rift Valley					
Baringo	553,564	490,321	88.6	63,243	11.4
Bomet	889,447	789,027	88.7	100,420	11.3
Elgeyo Marakwet	369,270	317,356	85.9	51,914	14.1
Kajiado	682,123	402,097	58.9	280,026	41.1
Kericho	587,416	362,228	61.7	225,188	38.3
Laikipia	396,086	317,744	80.2	78,342	19.8
Nakuru	1,593,448	875,125	54.9	718,323	45.1
Nandi	751,815	649,204	86.4	102,611	13.6
Narok	845,196	789,592	93.4	55,604	6.6
Samburu	222,327	185,234	83.3	37,093	16.7
Trans Nzoia	815,810	655,907	80.4	159,903	19.6
Turkana	849,277	748,660	88.2	100,617	11.8
Uasin Gishu	888,043	546,102	61.5	341,941	38.5
West Pokot	511,824	470,559	91.9	41,265	8.1
Western					
Bungoma	1,372,020	1,160,283	84.6	211,737	15.4
Busia	740,043	657,865	88.9	82,178	11.1
Kakamega	1,655,013	1,423,717	86	231,296	14
Vihiga	553,633	380,086	68.7	173,547	31.3

Appendix 3: Population by Urban Centres, 2009

	Urban centre	Total population	Core urban population	Peri urban population	Sex ratio
1	Nairobi	3,109,861	3,109,861	0	104
2	Mombasa	925,137	905,627	19,510	106
3	Kisumu	383,444	254,016	129,428	97
4	Nakuru	367,183	343,395	23,788	100
5	Eldoret	312,351	247,500	64,851	101
6	Kikuyu	264,714	200,285	64,429	96
7	Ruiru	240,226	238,329	1,897	100
8	Kangundo-Tala	218,722	13,119	205,603	98
9	Naivasha	170,551	91,898	78,653	101
10	Thika	151,225	136,386	14,839	101
11	Machakos	150,467	40,819	109,648	97
12	Kitale	148,261	98,071	50,190	101
13	Mavoko	135,571	108,924	26,647	119
14	Kericho	127,042	40,813	86,229	102
15	Vihiga	124,391	36,380	88,011	92
16	Nyeri	117,297	61,187	56,110	97
17	Malindi	115,882	82,747	33,135	99
18	Garissa	115,744	109,224	6,520	106
19	Karuri	115,731	107,754	7,977	99
20	Kitui	115,183	19,067	96,116	94
21	Awendo	108,742	17,909	90,833	94
22	Ngong	107,042	103,927	3,115	102
23	Mumias	102,208	38,623	63,585	95
24	Kimilili	94,719	40,928	53,791	94
25	Kakamega	90,670	67,170	23,500	98
26	Kapsabet	87,850	23,303	64,547	98
27	Mandera	87,150	57,186	29,964	110
28	Bomet	83,440	6,742	76,698	98
29	Kiambu	83,265	75,203	8,062	96
30	Wajir	82,106	16,188	65,918	111
31	Rongo	81,968	12,282	69,686	92
32	Kisii	81,318	60,222	21,096	97
33	Limuru	79,686	61,306	18,380	98
34	Ukunda	69,294	60,489	8,805	104
35	Wote	67,542	9,433	58,109	99
36	Ol Kalou	67,186	7,010	60,176	96
37	Migori	66,234	52,418	13,816	92
38	Embu	59,428	34,825	24,603	95
39	Homa Bay	59,165	28,593	30,572	91
40	Meru	57,940	43,146	14,794	95
41	Kitengela	56,984	56,984	0	104
42	Nyamira	56,857	12,657	44,200	92
43	Bungoma	54,469	54,469	0	95
44	Ahero	54,194	8,362	45,832	92
45	Matuu	51,025	10,569	40,456	96
46	Suneka	50,961	5,688	45,273	92
47	Busia	50,099	39,076	11,023	92
48	Keroka	49,853	6,949	42,904	90
49	Webuye	49,767	23,364	26,403	97
50	Luanda	49,156	7,149	42,007	92
51	Mtwapa	48,426	48,426	0	98

Appendix 3 Cont'

	Urban centre	Total population	Core urban population	Peri urban population	Sex ratio
52	Kilifi	47,957	43,388	4,569	94
53	Kipkelion	47,902	3,582	44,320	98
54	Makuyu	47,452	6,955	40,497	99
55	Lodwar	47,101	44,153	2,948	94
56	Isiolo	46,578	43,746	2,832	95
57	Nanyuki	46,285	38,339	7,946	99
58	Nyahururu	45,301	40,803	4,498	92
59	Londiani	44,843	5,405	39,438	99
60	Iten/Tambach	44,513	9,012	35,501	95
61	Chuka	43,064	7,614	35,450	96
62	Juja	42,665	40,183	2,482	103
63	Elwak	41,009	28,069	12,940	114
64	Molo	40,555	32,572	7,983	94
65	Ongata Rongai	39,951	39,951	0	92
66	Gilgil	39,016	39,016	0	118
67	Narok	37,129	37,129	0	100
68	Moyale	37,076	27,632	9,444	102
69	Oyugis	36,528	8,917	27,611	89
70	Kakuma	36,494	31,581	4,913	109
71	Kapenguria	36,379	20,456	15,923	97
72	Kerugoya/Kutus	35,343	20,121	15,222	93
73	Masimba	34,973	1,146	33,827	90
74	Muhoroni	34,379	14,756	19,623	108
75	Bondo	33,197	14,478	18,719	91
76	Elburgon	32,578	29,556	3,022	103
77	Murang'a	30,949	23,723	7,226	93
78	Mariakani	30,671	30,671	0	99
79	Kehancha	29,521	29,521	0	100
80	Chogoria	28,530	6,434	22,096	100
81	Rhamu	26,221	23,894	2,327	140
82	Kabarnet	25,954	17,269	8,685	87
83	Maragwa	25,081	4,263	20,818	95
84	Wanguru	23,935	17,581	6,354	96
85	Takaba	23,922	21,271	2,651	119
86	Siaya	23,825	22,182	1,643	90
87	Njoro	23,770	23,770	0	92
88	Kwale	21,378	6,037	15,341	91
89	Malaba	20,623	15,626	4,997	91
90	Runyenjes	19,434	1,956	17,478	95
91	Taveta	19,288	16,889	2,399	100
92	Lamu	18,328	12,767	5,561	102
93	Kiserian	17,939	14,086	3,853	99
94	Moi's Bridge	17,884	14,146	3,738	93
95	Eldama Ravine	17,610	17,610	0	93
96	Hola	17,124	11,492	5,632	94
97	Lokichogio	17,022	17,022	0	108
98	Maua	16,443	14,753	1,690	87
99	Voi	16,136	16,136	0	97
100	Kendu Bay	16,030	5,213	10,817	92
101	Madogo	15,705	13,147	2,558	106
102	Maralal	15,213	15,213	0	95

Appendix 3 Cont'

	Urban centre	Total population	Core urban population	Peri urban population	Sex ratio
103	Mwingi	14,900	14,900	0	93
104	Marsabit	14,474	14,474	0	99
105	Kajiado	14,434	14,205	229	99
106	Masalani	13,900	13,900	0	110
107	Karatina	13,467	8,362	5,105	83
108	Kandara	12,889	0	12,889	93
109	Tabaka	12,526	12,526	0	92
110	Butere	12,503	4,448	8,055	88
111	Msambweni	12,503	12,503	0	94
112	Mbita	11,948	10,720	1,228	96
113	Kiminini	11,642	5,523	6,119	85
114	Mai Mahiu	10,783	10,783	0	94
115	Loitoktok	10,694	8,908	1,786	101
116	Lumakanda	10,548	2,478	8,070	99
117	Sagana	10,499	9,837	662	91
118	Nandi Hills	10,105	6,953	3,152	103
119	Githunguri	10,062	10,062	0	93
120	Mairo_Inya	10,053	10,053	0	94
121	Kilgoris	9,994	9,994	0	98
122	Usenge	9,954	9,686	268	97
123	Watamu	9,407	9,407	0	107
124	Shamata	9,221	2,921	6,300	96
125	Namanga	9,004	9,004	0	106
126	Litein	8,839	5,797	3,042	95
127	Isinya	8,791	8,791	0	117
128	Sori	8,604	8,604	0	95
129	Marimanti	8,535	1,638	6,897	97
130	Makindu	8,503	7,766	737	86
131	Habaswein	8,280	8,280	0	114
132	Timau	8,227	8,227	0	98
133	Sotik	8,141	4,996	3,145	104
134	Chemelili	7,947	7,947	0	121
135	Baragoi	7,926	4,628	3,298	91
136	Matunda	7,889	5,115	2,774	90
137	Katito	7,840	3,067	4,773	89
138	Kinango	7,682	4,317	3,365	93
139	Kapsowar	7,401	7,401	0	96
140	Majengo	7,396	7,396	0	99
141	Nkubu	7,385	7,385	0	99
142	Subukia	7,286	7,286	0	90
143	Ugunja	7,149	6,491	658	86
144	Emali	7,024	7,024	0	99
145	Ting'ang'a	6,944	5,492	1,452	91
146	Sindo	6,788	5,812	976	88
147	Marigat	6,764	6,764	0	97
148	Wundanyi	6,576	3,914	2,662	95
149	Port Victoria	6,539	6,539	0	89
150	Merti	6,515	6,515	0	90
151	Kosele	6,256	4,446	1,810	93
152	Marereni	6,252	6,252	0	92

Appendix 3 Cont'

	Urban centre	Total population	Core urban population	Peri urban population	Sex ratio
153	Uriri	6,202	0	6,202	90
154	Sultan Hamud	6,171	3,820	2,351	96
155	Muhuru Bay	6,144	6,144	0	92
156	Archers Post	6,123	2,683	3,440	106
157	Kapsokwony	6,116	3,663	2,453	96
158	Magarini	6,098	6,098	0	94
159	Wamba	6,059	2,579	3,480	99
160	Njabini	6,027	6,027	0	98
161	Nairagie Enkare	5,840	5,840	0	96
162	Nyansiongo	5,792	5,792	0	101
163	Kibwezi	5,697	4,804	893	94
164	Daadab	5,624	5,624	0	115
165	Mwatate	5,570	5,570	0	96
166	Kaloleni	5,474	5,474	0	99
167	Maseno	5,426	3,624	1,802	99
168	Gatundu	5,418	5,418	0	87
169	Mukurwe-Ini	5,402	2,168	3,234	95
170	Bissil	5,345	5,345	0	87
171	Mau Narok	5,293	5,293	0	94
172	Othaya	5,213	5,213	0	85
173	Dundori	5,187	5,187	0	93
174	Githiga	5,184	5,184	0	98
175	Mogotio	5,162	5,162	0	94
176	Engineer	5,139	5,139	0	89
177	Mweiga	5,103	5,103	0	88
178	Sololo	5,035	4,098	937	99
	Others*	234,206	212,593	21,613	

These are all other urban centres with a population of between 2,000-4,999 people.

Appendix 4: Socio-Economic Characteristics by Urban Centres, 2009

Urban centre	% of category population				
	Education attainment (18+ years old)		Economic activity		Main Employer
	None	Secondary and above	Working	Unemployed	Informal sector
Ahero	10.9	31.4	41.8	3.3	60.4
Awendo	8.2	29.4	49.1	3.7	47
Bomet	8.4	35.3	51	2.4	48.4
Bondo	7.3	40.4	39.2	5.2	52.9
Bungoma	5.2	61.5	46.6	5.8	63.1
Busia	7.8	47.4	43.5	5.4	62.6
Butere	15.2	37.1	49.4	4.3	53
Chogoria	3.7	46.6	58.8	1.6	42.6
Chuka	6.4	42.5	51.5	2.3	44.2
Elburgon	8.1	35.1	46.3	4.6	47.2
Eldama Ravine	6	55.5	41.3	5.3	47.5
Eldoret	4.7	61.7	42.6	6.4	54.4
Elwak	66.9	18.3	28.7	7	83
Embu	5.7	57.7	57.3	3.7	49.9
Garissa	56.9	24.5	38.6	12.4	76.4
Gilgil	3.1	71.6	35.2	3.4	48.7
Githunguri	3.1	61.9	53.4	2.8	52.3
Hola	28.6	30.3	40.4	6.7	58
Homa Bay	7.2	41.8	42.9	5.7	64.8
Isiolo	25.9	39.8	37.5	8.9	64.1
Iten/Tambach	6.8	41.5	32.2	3.5	47.8
Juja	2.6	63.8	47.8	4.7	48.4
Kabarnet	5.2	63	44.5	6.7	52.7
Kajiado	8.3	58.6	41.3	3.8	61.6
Kakamega	6.2	55.9	47.1	5.6	60.5
Kakuma	61.4	14.1	36.3	15.9	85.9
Kandara	7.3	34.4	41.3	3.6	68.8
Kangundo-Tala	6.9	39.6	46.1	3.1	60.6
Kapenguria	17.6	38.1	34.4	4.9	59.5
Kapsabet	7.3	40.1	45.9	3	55.2
Karatina	2.8	68.6	54.3	2.6	49.4
Karuri	4.3	57.6	46.6	7.5	48.1
Kehancha	12.9	46.5	43.7	3.6	66
Kendu Bay	9.7	36.4	36.7	4.8	60.7
Kericho	6.5	47.9	50.2	3	47.6
Keroka	9.6	53.6	47.3	2.2	45.5
Kerugoya/Kutus	7.7	51.7	56.2	2.8	56.8
Kiambu	4.2	60	49.8	6	49.6
Kikuyu	4.3	58.9	45	6.4	50.2
Kilifi	18	39.4	40.8	7.2	59.7
Kimilili	6.8	38.3	39.5	1.5	39.9
Kiminini	5.4	49.1	36.8	4	57
Kipkelion	12.4	30.7	44.1	4.5	56.4
Kiserian	4.9	51.5	44.7	4.4	60.7
Kisii	5	64.5	46.1	5.7	56.4

Appendix 4 Cont'

	None	Secondary and above	Working	Unemployed	Informal sector
Kisumu	5.1	51.5	41.6	5.1	60.7
Kitale	7	49.3	40	5.7	53.3
Kitengela	3.6	66.7	52.2	5.6	41.6
Kitui	12.9	35.1	47.1	5.7	66.4
Kwale	27.5	29	37.4	5	47.4
Lamu	30.4	25.1	39.6	4.7	64.4
Limuru	5.5	50.3	43.4	5	39.8
Lodwar	44.5	26.6	40.3	10.4	80
Loitoktok	9	45.2	44	5.2	55.1
Lokichogio	60.2	19.1	56.9	11.1	84.7
Londiani	10.6	33	47.7	3.4	44.5
Luanda	11.4	28.6	47.5	4.5	57.8
Lumakanda	7.3	39.7	46.5	5.7	48
Machakos	5.9	46.8	46	6	56.3
Madogo	44.5	13	29.7	10.9	68.9
Mai Mahiu	4.7	39.2	40.8	4.6	65.7
Mairo_Inya	5.3	54.5	39.9	3.7	49.6
Makuyu	7.7	36	49.8	3.4	38.2
Malaba	9.1	44.8	51.5	4.4	55.3
Malindi	16.9	35.7	42.7	5.3	54.1
Mandera	65.8	16	35.8	12.4	87.1
Maragwa	7.3	34.3	49.5	2	48.7
Maralal	21.9	43.9	40.8	7.2	68
Mariakani	15.6	40.2	42.3	5.5	47.4
Marsabit	38.6	31.4	45.3	7.2	74.4
Masalani	66	19.3	48.5	11.2	87.8
Masimba	9.1	52	54.7	1.4	39.3
Matuu	8.8	36.4	44.1	4.8	70.1
Maua	12.7	45.2	50.9	2.6	68.8
Mavoko	3	58.7	53.1	6.8	44
Mbita	3.9	48.5	44.1	5.4	61.9
Meru	4.9	56.9	54.1	6.1	53.8
Migori	6.6	44	38.8	3.3	53.7
Moi's Bridge	8.1	43.8	39.4	5.9	61.6
Molo	6.2	49.5	44.5	4.9	57.5
Mombasa	9.8	49.9	43.2	8.5	49.1
Moyale	57.5	18.9	24.9	7.4	71.9
Msambweni	26.1	27.3	31.4	6.9	65.5
Mtwapa	11.4	47.8	45.8	7.7	50.4
Muhoroni	7.2	40	46.9	4	54
Mumias	14.1	35.6	42	3.5	42.1
Murang'a	5	56.9	51.3	4	50.9
Mwingi	6.6	45.7	52	3.4	57.8
Nairobi	3.9	66.2	51	7.6	51.4
Naivasha	5.9	50.6	52.7	3.6	31.5
Nakuru	4.1	63.3	44.5	6.6	53.6
Nandi Hills	5.5	42.5	48.2	3.4	54.8
Nanyuki	5.4	62.7	49.2	4.9	45.6
Narok	5.2	58.1	47	3.9	56.3
Ngong	3.8	61.8	45.6	6.1	50.3

Appendix 4 Cont'

	None	Secondary and above	Working	Unemployed	Informal sector
Njoro	6.4	48.4	38.3	9.1	57.6
Nyahururu	4.3	59.4	48.3	4	55.2
Nyamira	8.6	48.8	49.1	2.8	45.2
Nyeri	4.2	59.2	50.9	4.3	48.7
Ol Kalou	9.1	36.3	45.7	2.7	33.4
Ongata Rongai	2.1	77.3	48.4	5.9	43.7
Oyugis	8.1	41.4	42.2	4.6	50.8
Rhamu	69.1	18.4	29.7	16	81
Rongo	8.4	33.8	53	4.2	49.2
Ruiru	2.7	66.3	47.6	5.3	52.8
Runyenjes	9	37.8	58.1	4	49.8
Sagana	4.6	54.5	56.8	3.7	53.3
Siaya	7.1	48.5	50	4.1	60.6
Suneka	11.1	36.5	44.3	2.1	52.5
Tabaka	7.9	43.8	44.9	1.6	54.4
Takaba	63.6	20.7	37	4.5	86.8
Taveta	9.2	32.7	50.2	3.9	57.9
Thika	2.3	65.4	50.8	5.6	48.9
Ukunda	13.7	42.5	39.5	8.3	51.2
Vihiga	7.3	37.1	41.9	6.4	60.3
Voi	5	52.8	42.4	6	51.7
Wajir	66.1	18.1	33.7	19.6	87.1
Wanguru	4.2	50.2	58.9	2	53.3
Webuye	5.1	50.4	47.1	3.6	55.9
Wote	9	40.2	42.8	2.6	52.6

* This list includes urban centres with a population of 10,000 people and above.

Appendix 5: Tenure Status and Housing Conditions by Urban Centres, 2009

Urban centre	% households					
	Tenure status		Roof material		Wall material	
	Own house	Individual rental units	Iron sheet	Grass/Makuti	Stone/Brick/Block	Mud/Tin/Iron sheet
Ahero	80.5	17.6	87.2	10.5	17.5	81.6
Awendo	73.6	19.4	91.7	4.4	22.6	77.3
Bomet	82	14.7	77.5	19.3	15.8	83.7
Bondo	61.3	35	85.7	12.3	30.4	69.3
Bungoma	27.2	65.2	95.3	0.4	58.2	41.8
Busia	31.8	62.3	89.6	7.4	62	37.8
Butere	65.6	27.9	77.6	13	26.5	73.2
Chogoria	82.8	14	96.8	0.1	29.1	70.4
Chuka	73.1	24.2	94.4	0.7	33.2	66.6
Elburgon	42.7	52.8	92.3	2.2	17	82.8
Eldama Ravine	35.1	54.4	91.9	0.4	34.8	62.7
Eldoret	24.2	66.3	87.9	0.6	52.5	46.4
Elwak	93.5	5.4	38.1	60.3	35.3	9.3
Embu	35.5	54.6	91.4	0.2	59	39.7
Garissa	54.8	38.8	75.9	17.2	69.3	22.8
Gilgil	19.8	59.6	89	0.1	72.2	27.7
Githunguri	25.8	67.9	73.4	0.2	66.7	33.2
Hola	69.1	21.3	71.8	22.1	25.5	66.6
Homa Bay	56.3	38.3	92.5	4.7	21	77.5
Isiolo	39.1	53	93.2	2.3	38.1	61.4
Iten/Tambach	73.7	20.5	74.5	22.1	24	75.9
Juja	22.9	67.6	83.3	0	91.5	8.4
Kabarnet	47.7	42.2	89.7	3.1	26.5	73.3
Kajiado	22.9	61.5	91.9	0.1	69.7	29.9
Kakamega	40.4	49.1	94	1	45.6	54.2
Kakuma	69.8	12.1	36.9	50.3	9.7	72
Kandara	85	11.8	91.6	0	43.2	56
Kangundo-Tala	88.3	9.3	93.6	3.2	95.8	4
Kapenguria	45.9	44.1	84.8	11.7	37.5	62.4
Kapsabet	63	30.1	93.5	2.8	27.4	72.5
Karatina	15.9	72.3	80.5	0	85.8	14.2
Karuri	36.9	60.2	91.4	0.1	42.5	57.3
Kehancha	35	59.5	92.7	1.5	61	38.9
Kendu Bay	73	24.5	90	2.6	18.5	81.5
Kericho	49.4	37.6	91.2	3.6	35	64.8
Keroka	82.7	13.7	85.9	8.9	36.2	63.7
Kerugoya/Kutus	47.4	45.7	88.9	0.1	55.5	44.4
Kiambu	39.5	52.3	82.5	0.1	54.6	45.3
Kikuyu	50.4	45	88.5	0.1	35.3	64.7
Kilifi	46.6	43.3	63.1	31.1	65.8	34
Kimilili	81.3	17	88.2	8.2	16.3	83.6
Kiminini	45.8	49	96.1	0.8	39.5	60.2
Kipkelion	85	12	82.3	16.3	6.6	93.1
Kiserian	28.9	66.5	88.6	0.1	42.6	57.4

Appendix 5: Cont'

	Tenure status		Roof material		Wall material	
	Own house	Individual rental units	Iron sheet	Grass/Makuti	Stone/Brick/Block	Mud/Tin/Iron sheet
Kisii	38.2	54.7	88.2	1.5	59.4	40.5
Kisumu	36	56.3	88.3	2.2	38.1	61.8
Kitale	32.3	57.4	91	1.8	39.5	60.1
Kitengela	17.8	73.3	79.5	0.1	57.6	42.2
Kitui	75.5	21.1	90.7	6	86.5	13.1
Kwale	73.6	16.8	38.1	57.4	33.5	64.9
Lamu	48.3	42.2	14.5	34.6	77.8	11.3
Limuru	41.9	44.9	90.1	0.1	44.9	55.1
Lodwar	65.1	26.1	52.6	37.9	26.3	62.9
Loitoktok	39.2	51.3	90.9	1.5	25.1	74.5
Lokichogio	56.6	29.3	53.6	41.6	12.1	63.8
Londiani	81.2	14.5	89	9.2	12.4	87.5
Luanda	88.8	10.1	94.5	3.9	20.2	79.7
Lumakanda	65.5	30.2	95.7	0.9	25.8	74.1
Machakos	67.6	27.9	93.2	0.5	90.6	9.3
Madogo	55.7	41.3	74.4	21.3	32.2	51.1
Mai Mahiu	25	72.1	96.9	0	76.4	23.6
Mairo_Inya	50.2	48.3	95.5	0	36.7	63.3
Makuyu	67	17.2	90.8	0.6	70	29.9
Malaba	40.1	54.9	74.7	23	61.1	38.8
Malindi	40	53.3	62.2	23.5	66.7	32.6
Mandera	81.4	13.5	43.3	53.6	37.5	16.1
Maragwa	65.7	30.7	94.8	0.1	52.4	47.2
Maralal	28.8	64.9	93.2	1.5	16.2	82.2
Mariakani	34.2	60.9	89.9	4.9	62.9	36.9
Marsabit	45.5	43.9	93.8	0.1	20.8	79.1
Masalani	73	21.3	72.9	24.2	44.7	39.6
Masimba	92	7	76.6	17.1	20.6	79.3
Matuu	71.2	27.2	91.2	5.9	91.4	8.5
Maua	29.7	64.7	96.6	0.2	48.4	50.9
Mavoko	24.4	66.6	75.6	1	56	43.4
Mbita	23.9	70.7	97.6	0.4	49.7	50
Meru	31	62.5	89	0.1	51	48.4
Migori	51	44	92.2	3.5	45.3	54.4
Moi's Bridge	42.4	54.4	90.9	1.2	47	52.9
Molo	35.7	59.1	93.1	0.1	40	59.2
Mombasa	22.4	69.3	78.4	4.5	74.3	25.5
Moyale	64.2	29.8	90.9	5.2	27.7	71.5
Msambweni	80.6	13.7	32.4	63.8	68	29.7
Mtwapa	31.7	61.8	78.5	11	79	20.1
Muhoroni	45.1	39.9	78.6	14.6	18.5	81.3
Mumias	61	27.3	80.5	13.4	32.6	67.3
Murang'a	33.2	58.3	75.7	0	79	20.9
Mwingi	11	80.2	97.4	0	98.5	1.2
Nairobi	13.5	75.2	65.3	0.1	61.4	38.4
Naivasha	26.5	55.8	92.5	0.6	66.6	33.1

Appendix 5: Cont'

	Tenure status		Roof material		Wall material	
	Own house	Individual rental units	Iron sheet	Grass/Makuti	Stone/Brick/Block	Mud/Tin/Iron sheet
Nakuru	21.7	66.3	87.7	0.1	64.7	35.2
Nandi Hills	19.1	55.6	97.9	0.6	42.3	57.5
Nanyuki	18.7	63.2	81.6	0.9	45.3	54.5
Narok	18.4	70.5	95.4	0.1	62.4	37.5
Ngong	22.9	70.5	84.6	0.1	54.2	45.4
Njoro	32.1	63	96.7	0.1	46.1	53.9
Nyahururu	28.5	62.9	89.6	0.2	49.3	50.6
Nyamira	82	15.9	92.6	3.2	32.6	67.3
Nyeri	45	45.8	90.9	0.1	45.1	54.7
Ol Kalou	62.2	24.9	88.8	0.9	26	65.7
Ongata Rongai	18.9	77.6	75.2	0	79.6	20.3
Oyugis	68.2	29.8	94.3	2.4	31.1	68.8
Rhamu	87.7	8.6	21.1	73.7	16.9	53.3
Rongo	81.2	16.4	90.9	6.4	20.4	79.5
Ruiru	26.5	66	74.8	0.3	86.3	13.6
Runyenjes	81.4	15	97.5	0.2	28.2	52.5
Sagana	21.3	75.6	88.7	0.1	85.1	14.7
Siaya	36.4	55.9	86.6	7.6	65.2	34.6
Suneka	89.1	9.7	89.3	5.4	16.3	83.6
Tabaka	79	17.3	90.7	6.7	33.3	66.7
Takaba	95	3.8	61.4	37.4	25.7	40.6
Taveta	44.2	44.5	88.5	6.1	62.2	37.7
Thika	16.2	74.2	84.4	0.2	82.6	17.3
Ukunda	37.9	56.9	66.3	28.6	80.1	19
Vihiga	85.2	12.3	90.6	2.6	22.5	77.5
Voi	35.3	55.2	87.3	0	66.4	33.3
Wajir	84.7	11.4	32.1	65.7	33.1	6.8
Wanguru	37	57.6	95.9	0	80.6	19.3
Webuye	54.9	37.2	91	4.7	44.6	54.5
Wote	73.8	24	85.8	12.1	79.8	20

* This list includes urban centres with a population of 10,000 people and above.

Appendix 6: Households Main Source of Water and Mode of Human Waste Disposal by Urban Centres, 2009

Urban centre	% households			
	Source of water		Mode of human waste disposal	
	Piped water in house	Piped water elsewhere	Main sewer	Ordinary pit latrine
Ahero	2.1	25	0.1	88.1
Awendo	2.6	1.7	2.8	70.2
Bomet	2.1	15.4	0.5	90.2
Bondo	3.7	26.6	0.4	73.4
Bungoma	6.3	16.6	2.2	80.5
Busia	2.4	12.8	3.7	81.3
Butere	5	22.8	0.1	90.6
Chogoria	45.4	44.2	0.9	87.1
Chuka	10.1	36.2	0.7	86.6
Elburgon	5.3	33.6	0.3	96.2
Eldama Ravine	11.8	69.9	1	78.4
Eldoret	16.1	50.2	18.1	67.7
Elwak	0.8	1	0	74.3
Embu	27.8	51.7	80.2	0.1
Garissa	11.2	80.1	4.6	72.9
Gilgil	22.8	69.9	17.9	50.8
Githunguri	8.1	33.2	5.9	75
Hola	14.2	39.4	1.5	63.5
Homa Bay	6.9	35	11.5	59.8
Isiolo	15.2	68.8	13.2	74.5
Iten/Tambach	2.9	26.2	0.9	84.6
Juja	13.3	34.9	3.9	59.2
Kabarnet	8.4	53.6	2.6	75
Kajiado	1.3	3.6	2.1	89.6
Kakamega	12.3	21.7	10.5	74.7
Kakuma	3.3	38.8	0.1	57.2
Kandara	1.9	18.4	0.2	93.2
Kangundo-Tala	1.1	4.1	0.5	86.1
Kapenguria	7	16.1	60.2	0.2
Kapsabet	1.9	7.4	2.1	81.4
Karatina	26.2	50.1	41.8	38.1
Karuri	6.9	12.4	1.1	80.2
Kehancha	1	4.6	0.2	84.5
Kendu Bay	0.4	6.2	0.1	82.3
Kericho	12.2	45.6	8.1	85
Keroka	1.8	4.9	0	94
Kerugoya/Kutus	16.9	45.7	4.9	68.3
Kiambu	18.7	35.6	9.2	68.4
Kikuyu	13.9	29.8	1.5	80.8
Kilifi	20.9	64.4	4.5	71.6
Kimilili	3.1	19.9	0.6	88.7
Kiminini	0.2	0.8	0.1	88.4
Kipkelion	1.7	12.2	0.2	93.8
Kiserian	12.9	45.3	0.5	76.4
Kisii	4.9	9.3	6.8	82.7
Kisumu	5.5	35.5	10	75.1

Appendix 6 Cont'

	Source of water		Mode of human waste disposal	
	Piped water in house	Piped water elsewhere	Main sewer	Ordinary pit latrine
Kitale	4.7	28.3	7.2	79.2
Kitengela	16.6	47	3.1	75.9
Kitui	2.3	7	1.1	81.1
Kwale	5.9	51.8	0.3	72.5
Lamu	32.9	33.9	0.6	67.3
Limuru	14.3	46	5.6	76
Lodwar	11.7	48.3	0.5	53.5
Loitoktok	10.1	73.6	0.4	85.9
Lokichogio	0.4	13.8	0.1	64
Londiani	3.7	8	1.1	94.5
Luanda	0.4	4	0.1	94.4
Lumakanda	0.9	15.7	0	85.6
Machakos	7.1	14.1	8.8	77.4
Madogo	4.1	49	0.2	62
Mai Mahiu	13.7	15.6	0.1	85.2
Mairo_Inya	10.4	13.3	0.4	82.9
Makuyu	6.5	16.7	2.1	85.6
Malaba	1.8	5.5	0.2	87.9
Malindi	24.4	62.4	3.1	46.8
Mandera	6.4	8.9	0.6	80.5
Maragwa	1.5	4.1	0.2	88.5
Maralal	4.6	60.6	0.1	86.1
Mariakani	10.6	68	2.1	70.1
Marsabit	1	8.8	0	90.2
Masalani	2.4	81.1	0.3	75.2
Masimba	0.9	0.6	0.1	94.8
Matuu	3.4	9.6	0	84.3
Maua	13.3	73.3	0.9	64.2
Mavoko	10.2	25.8	17.5	57.2
Mbita	4.2	17.3	1.3	91.4
Meru	21.2	69	8.1	66.3
Migori	3.5	12.6	0.5	86.5
Moi's Bridge	1.9	4.7	0.2	80.4
Molo	5.7	17.6	2.4	83.7
Mombasa	11.6	41.3	13.9	62.3
Moyale	0.3	2.6	0.1	88.5
Msambweni	17.2	40.3	1.2	58.2
Mtwapa	3	2.6	5.8	71.4
Muhoroni	6.7	31.4	6.3	78
Mumias	8.2	8.9	9.2	81.2
Murang'a	28.1	58.2	28	55.9
Mwingi	13.4	42.2	0.3	75.3
Nairobi	23.4	52.3	47.7	37.6
Naivasha	5.5	16.4	9.5	76.1
Nakuru	18.4	57	23.1	59.9
Nandi Hills	8.2	43.6	2.6	90.4
Nanyuki	28.6	58.5	41.9	46.5
Narok	7.4	30.2	1.1	85
Ngong	14.1	29.6	2.7	73.7

Appendix 6 Cont'

	Source of water		Mode of human waste disposal	
	Piped water in house	Piped water elsewhere	Main sewer	Ordinary pit latrine
Njoro	3.4	14.3	1.1	89.2
Nyahururu	20.3	43.7	29.2	54.4
Nyamira	2	8.7	0.2	92.8
Nyeri	22.1	61.1	18	66.8
Ol Kalou	5.5	9.1	1.2	84
Ongata Rongai	17.5	22.5	2.7	53.9
Oyugis	2	20.8	0.1	89.6
Rhamu	10.9	34.7	0.2	68.7
Rongo	0.4	0.4	0.1	78.5
Ruiru	19.2	41.2	5.1	61.6
Runyenjes	6.1	26.4	47.1	0.2
Sagana	12.8	57.6	2.5	66.6
Siaya	5.4	17.8	2.6	88
Suneka	0.2	0.1	0	92.4
Tabaka	3.9	4.3	2.3	87.2
Takaba	0	0.1	0.1	79.3
Taveta	10.6	78.3	1.9	84.9
Thika	25.6	59.7	40.2	40.3
Ukunda	5.2	28.5	2	71.9
Vihiga	2.6	5.8	1	87.2
Voi	21.1	70	7.5	71.5
Wajir	0.4	1.3	0.9	2.3
Wanguru	12.8	38.2	2.9	82.7
Webuye	8.6	15.8	11	74.6
Wote	1.1	2.5	0.4	82.4

This list includes urban centres with a population of 10,000 people and above.

Appendix 7: Urban Formal and Informal Settlements Population by County, 2009

Province/ County	Urban population	Formal settlements population	% of formal settlements population	Informal settlements population	% of informal settlements population
Nairobi	3,109,861	1,985,402	63.8	1,124,459	36.2
Central					
Kiambu	1,006,996	990,287	98.3	16,709	1.7
Kirinyaga	81,692	81,692	100	0	0
Murang'a	132,556	132,556	100	0	0
Nyandarua	114,607	114,607	100	0	0
Nyeri	165,492	158,201	95.6	7,291	4.4
Coast					
Kilifi	279,142	234,192	83.9	44,950	16.1
Kwale	114,401	114,401	100	0	0
Lamu	19,625	19,625	100	0	0
Mombasa	925,137	707,269	76.5	217,868	23.5
Taita Taveta	47,570	27,345	57.5	20,225	42.5
Tana River	35,636	29,629	83.1	6,007	16.9
Eastern					
Embu	81,530	76,790	94.2	4,740	5.8
Isiolo	61,755	61,755	100	0	0
Kitui	136,683	133,087	97.4	3,596	2.6
Machakos	564,391	556,375	98.6	8,016	1.4
Makueni	100,453	100,453	100	0	0
Marsabit	63,695	63,695	100	0	0
Meru	103,389	96,988	93.8	6,401	6.2
Tharaka-Nithi	80,129	79,233	98.9	896	1.1
North Eastern					
Garissa	139,903	136,995	97.9	2,908	2.1
Mandera	178,302	178,302	100	0	0
Wajir	90,386	89,749	99.3	637	0.7
Nyanza					
Homa Bay	136,715	135,631	99.2	1,084	0.8
Kisii	227,535	223,572	98.3	3,963	1.7
Kisumu	497,089	317,181	63.8	179,908	36.2
Migori	307,415	307,415	100	0	0
Nyamira	77,022	77,022	100	0	0
Siaya	89,215	87,003	97.5	2,212	2.5
Rift Valley					
Baringo	63,243	63,243	100	0	0
Bomet	100,420	100,420	100	0	0
Elgeyo Marakwet	51,914	51,914	100	0	0
Kajiado	280,026	273,650	97.7	6,376	2.3
Kericho	225,188	219,285	97.4	5,903	2.6
Laikipia	78,342	78,342	100	0	0
Nakuru	718,323	691,900	96.3	26,423	3.7
Nandi	102,611	102,611	100	0	0
Narok	55,604	55,604	100	0	0
Samburu	37,093	37,093	100	0	0
Trans Nzoia	159,903	159,903	100	0	0
Turkana	100,617	100,617	100	0	0
Uasin Gishu	341,941	269,243	78.7	72,698	21.3
West Pokot	41,265	14,187	34.4	27,078	65.6
Western					
Bungoma	211,737	211,737	100	0	0
Busia	82,178	82,178	100	0	0
Kakamega	231,296	227,211	98.2	4,085	1.8
Vihiga	173,547	166,281	95.8	7,266	4.2

Appendix 8: Formal and Informal Settlements Population by Urban Centres, 2009

Urban centre	Urban population	Formal settlements		Informal settlements		% share of total informal settlements population
		Population	% share in urban centre	Population	% share in urban centre	
KENYA	**12,023,570**	**10,221,871**		**1,801,699**		
Nairobi	3,109,861	1,985,402	63.8	1,124,459	36.2	62.4
Mombasa	925,137	707,269	76.5	217,868	23.5	12.1
Kisumu	383,444	203,536	53.1	179,908	46.9	10
Eldoret	312,351	239,653	76.7	72,698	23.3	4
Kapenguria	36,379	14,187	39	22,192	61	1.2
Mtwapa	48,426	30,905	63.8	17,521	36.2	1
Thika	149,289	132,945	89.1	16,344	10.9	0.9
Nakuru	367,183	351,688	95.8	15,495	4.2	0.9
Mariakani	30,671	17,433	56.8	13,238	43.2	0.7
Voi	16,136	4,170	25.8	11,966	74.2	0.7
Naivasha	170,551	159,623	93.6	10,928	6.4	0.6
Taveta	19,288	11,029	57.2	8,259	42.8	0.5
Malindi	115,882	108,386	93.5	7,496	6.5	0.4
Luanda	49,156	41,890	85.2	7,266	14.8	0.4
Ngong	107,042	100,666	94	6,376	6	0.4
Kilifi	47,957	41,662	86.9	6,295	13.1	0.3
Maua	16,443	10,160	61.8	6,283	38.2	0.3
Kericho	127,042	121,139	95.4	5,903	4.6	0.3
Embu	59,428	54,688	92	4,740	8	0.3
Nyeri	115,711	111,013	95.9	4,698	4.1	0.3
Machakos	150,467	145,899	97	4,568	3	0.3
Kakamega	90,670	86,585	95.5	4,085	4.5	0.2
Suneka	50,961	46,998	92.2	3,963	7.8	0.2
Kitui	115,183	111,587	96.9	3,596	3.1	0.2
Hola	17,124	13,675	79.9	3,449	20.1	0.2
Mavoko	135,571	132,123	97.5	3,448	2.5	0.2
Garissa	115,744	112,836	97.5	2,908	2.5	0.2
Karatina	13,467	10,874	80.7	2,593	19.3	0.1
Madogo	15,705	13,147	83.7	2,558	16.3	0.1
Usenge	9,954	7,742	77.8	2,212	22.2	0.1
Homa Bay	59,165	58,081	98.2	1,084	1.8	0.1
Marimanti	8,535	7,639	89.5	896	10.5	0
Wajir	82,106	81,469	99.2	637	0.8	0
Kaloleni	5,474	5,074	92.7	400	7.3	0
Kikuyu	264,714	264,349	99.9	365	0.1	0
Meru	57,940	57,822	99.8	118	0.2	0

Appendix 9: Formal and Informal Settlements Population in Nairobi by Location, 2009

District/ Division/ Location	Total population	Formal settlements		Informal settlements	
		Population	% of total	Population	% of total
NAIROBI WEST					
Dagoretti Division					
Kawangware	113,126	2,069	1.8	111,057	98.2
Kenyatta (Golf Course)	32,938	31,242	94.9	1,696	5.1
Mutuini	17,932	4,809	26.8	13,123	73.2
Riruta	98,811	52,989	53.6	45,822	46.4
Uthiru-Ruthimitu	32,268	13,917	43.1	18,351	56.9
Waithaka	31,053	30,462	98.1	591	1.9
Kibera Division					
Karen	13,641	13,403	98.3	238	1.7
Kibera	87,391	7,761	8.9	79,630	91.1
Laini Saba	52,371	6,971	13.3	45,400	86.7
Langa'ta	19,263	18,348	95.2	915	4.8
Mugumoini	45,622	33,682	73.8	11,940	26.2
Nairobi West	80,475	51,511	64	28,964	36
Serangombe	54,341	9,852	18.1	44,489	81.9
NAIROBI EAST					
Embakasi Division					
Dandora	141,885	128,174	90.3	13,711	9.7
Embakasi	87,969	73,699	83.8	14,270	16.2
Kariobangi South	55,952	52,759	94.3	3,193	5.7
Kayole	175,910	161,623	91.9	14,287	8.1
Mukuru Kwa Njenga	200,940	13,061	6.5	187,879	93.5
Njiru	49,443	37,165	75.2	12,278	24.8
Ruai	35,953	33,594	93.4	2,359	6.6
Umoja	177,300	138,831	78.3	38,469	21.7
Makadara Division					
Makadara	48,291	48,291	100	0	0
Makongeni	20,045	16,856	84.1	3,189	15.9
Maringo	25,362	23,733	93.6	1,629	6.4
Mukuru Nyayo	53,051	23,877	45	29,174	55
Viwandani	71,365	12,046	16.9	59,319	83.1
NAIROBI NORTH					
Central Division					
Huruma	106,175	88,123	83	18,052	17
Kariokor	45,572	44,862	98.4	710	1.6
Mathare	86,434	17,519	20.3	68,915	79.7
Ngara	23,980	23,980	100	0	0
Starehe	7,233	7,233	100	0	0
Kasarani Division					
Githurai	87,488	85,788	98.1	1,700	1.9
Kahawa	52,587	47,428	90.2	5,159	9.8
Kariobangi	39,195	39,195	100	0	0
Kasarani	100,199	97,223	97	2,976	3
Korogocho	41,943	0	0	41,943	100
Roysambu	47,493	45,483	95.8	2,010	4.2
Ruaraka	152,000	103,366	68	48,634	32

Appendix 9 Cont'

District/ Division/ Location	Total population	Formal settlements		Informal settlements	
		Population	% of total	Population	% of total
Pumwani Division					
Bahati	44,449	39,929	89.8	4,520	10.2
Eastleigh North	80,391	78,868	98.1	1,523	1.9
Eastleigh South	87,170	50,026	57.4	37,144	42.6
Kamukunji	18,645	13,264	71.1	5,381	28.9
Pumwani	21,665	6,948	32.1	14,717	67.9
WESTLANDS					
Westlands Division					
Highridge	53,473	43,123	80.6	10,350	19.4
Kangemi	80,631	16,335	20.3	64,296	79.7
Kileleshwa	27,116	27,116	100	0	0
Kilimani	40,978	40,978	100	0	0
Kitisuru	31,234	16,778	53.7	14,456	46.3
Parklands	11,112	11,112	100	0	0

Appendix 10: Population Distribution by Municipal Councils, 2009

Municipal Council	Total Population	Rural	% of total	Core urban	% of total	Peri-urban	% of total
Bomet	110,662	27,222	24.6	6,742	6.1	76,698	69.3
Bungoma	80,180	25,711	32.1	54,469	67.9	0	0
Busia	59,806	9,707	16.2	39,076	65.3	11,023	18.4
Chuka	43,064	0	0	7,614	17.7	35,450	82.3
Chwele	19,017	19,017	100	0	0	0	0
Eldoret	312,351	0	0	247,500	79.2	64,851	20.8
Embu	62,073	2,645	4.3	34,825	56.1	24,603	39.6
Garissa	116,134	390	0.3	109,224	94	6,520	5.6
Homa Bay	60,073	908	1.5	28,593	47.6	30,572	50.9
Iten/Tambach	46,649	2,136	4.6	9,012	19.3	35,501	76.1
Kabarnet	31,510	5,556	17.6	17,269	54.8	8,685	27.6
Kakamega	90,670	0	0	67,170	74.1	23,500	25.9
Kangema	18,045	16,144	89.5	1,901	10.5	0	0
Kapenguria	73,809	37,430	50.7	20,456	27.7	15,923	21.6
Kapsabet	92,077	4,227	4.6	23,303	25.3	64,547	70.1
Karatina	13,467	0	0	8,362	62.1	5,105	37.9
Kehancha	258,459	228,938	88.6	29,521	11.4	0	0
Kericho	129,145	2,103	1.6	40,813	31.6	86,229	66.8
Kerugoya/Kutus	51,419	16,076	31.3	20,121	39.1	15,222	29.6
Kiambu	87,958	4,693	5.3	75,203	85.5	8,062	9.2
Kimilili	94,719	0	0	40,928	43.2	53,791	56.8
Kisii	82,629	1,311	1.6	60,222	72.9	21,096	25.5
Kitale	148,261	0	0	98,071	66.1	50,190	33.9
Kitui	162,117	46,934	29	19,067	11.8	96,116	59.3
Limuru	104,113	24,427	23.5	61,306	58.9	18,380	17.7
Lodwar	57,003	9,902	17.4	44,153	77.5	2,948	5.2
Machakos	159,373	8,906	5.6	40,819	25.6	109,648	68.8
Malindi	204,537	88,655	43.3	82,747	40.5	33,135	16.2
Mandera	87,150	0	0	57,186	65.6	29,964	34.4
Maua	54,661	38,218	69.9	14,753	27	1,690	3.1
Mavoko	137,724	2,153	1.6	108,924	79.1	26,647	19.3
Meru	57,940	0	0	43,146	74.5	14,794	25.5
Migori	74,183	7,949	10.7	52,418	70.7	13,816	18.6
Mumias	118,579	16,371	13.8	38,623	32.6	63,585	53.6
Murang'a	30,949	0	0	23,723	76.7	7,226	23.3
Naivasha	183,304	12,753	7	91,898	50.1	78,653	42.9
Nakuru	367,183	0	0	343,395	93.5	23,788	6.5
Nanyuki	57,320	11,035	19.3	38,339	66.9	7,946	13.9
Nyahururu	60,285	14,984	24.9	40,803	67.7	4,498	7.5
Nyeri	123,300	6,003	4.9	61,187	49.6	56,110	45.5
Ruiru	240,226	0	0	238,329	99.2	1,897	0.8
Runyenjes	61,389	41,955	68.3	1,956	3.2	17,478	28.5
Siaya	46,869	23,044	49.2	22,182	47.3	1,643	3.5
Thika	154,161	2,936	1.9	136,386	88.5	14,839	9.6
Vihiga	124,391	0	0	36,380	29.2	88,011	70.8
Voi	41,225	25,089	60.9	16,136	39.1	0	0
Webuye	70,086	20,319	29	23,364	33.3	26,403	37.7

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