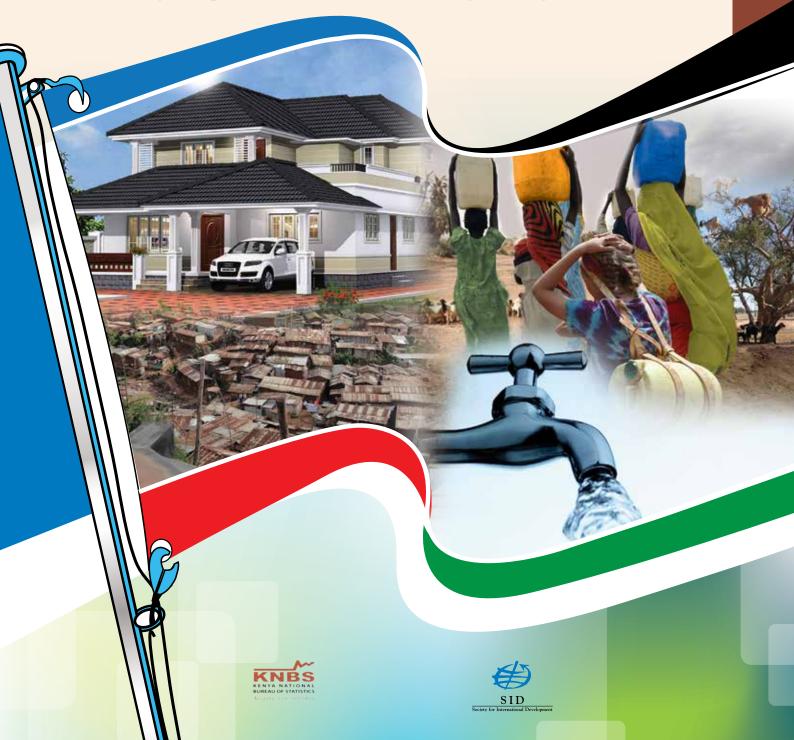
Exploring Kenya's Inequality

Pulling Apart or Pooling Together?



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Foreword

Kenya, like all African countries, focused on poverty alleviation at independence, perhaps due to the level of vulnerability of its populations but also as a result of the 'trickle down' economic discourses of the time, which assumed that poverty rather than distribution mattered – in other words, that it was only necessary to concentrate on economic growth because, as the country grew richer, this wealth would trickle down to benefit the poorest sections of society. Inequality therefore had a very low profile in political, policy and scholarly discourses. In recent years though, social dimensions such as levels of access to education, clean water and sanitation are important in assessing people's quality of life. Being deprived of these essential services deepens poverty and reduces people's well-being. Stark differences in accessing these essential services among different groups make it difficult to reduce poverty even when economies are growing. According to the *Economist* (June 1, 2013), a 1% increase in incomes in the most unequal countries produces a mere 0.6 percent reduction in poverty. In the most equal countries, the same 1% growth yields a 4.3% reduction in poverty. Poverty and inequality are thus part of the same problem, and there is a strong case to be made for both economic growth and redistributive policies. From this perspective, Kenya's quest in vision 2030 to grow by 10% per annum must also ensure that inequality is reduced along the way and all people benefit equitably from development initiatives and resources allocated.

Since 2004, the Society for International Development (SID) and Kenya National Bureau of Statistics (KNBS) have collaborated to spearhead inequality research in Kenya. Through their initial publications such as 'Pulling Apart: Facts and Figures on Inequality in Kenya,' which sought to present simple facts about various manifestations of inequality in Kenya, the understanding of Kenyans of the subject was deepened and a national debate on the dynamics, causes and possible responses started. The report 'Geographic Dimensions of Well-Being in Kenya: Who and Where are the Poor?' elevated the poverty and inequality discourse further while the publication 'Readings on Inequality in Kenya: Sectoral Dynamics and Perspectives' presented the causality, dynamics and other technical aspects of inequality.

KNBS and SID in this publication go further to present monetary measures of inequality such as expenditure patterns of groups and non-money metric measures of inequality in important livelihood parameters like employment, education, energy, housing, water and sanitation to show the levels of vulnerability and patterns of unequal access to essential social services at the national, county, constituency and ward levels.

We envisage that this work will be particularly helpful to county leaders who are tasked with the responsibility of ensuring equitable social and economic development while addressing the needs of marginalized groups and regions. We also hope that it will help in informing public engagement with the devolution process and be instrumental in formulating strategies and actions to overcome exclusion of groups or individuals from the benefits of growth and development in Kenya.

It is therefore our great pleasure to present 'Exploring Kenya's inequality: Pulling apart or pooling together?'

Ali Hersi

Society for International Development (SID) Regional Director



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Stefano Prato Managing Director, SID



Striking Features on Intra-County Inequality in Kenya

Inequalities within counties in all the variables are extreme. In many cases, Kenyans living within a single county have completely different lifestyles and access to services.

Income/expenditure inequalities

- 1. The five counties with the worst income inequality (measured as a ratio of the top to the bottom decile) are in Coast. The ratio of expenditure by the wealthiest to the poorest is 20 to one and above in Lamu, Tana River, Kwale, and Kilifi. This means that those in the top decile have 20 times as much expenditure as those in the bottom decile. This is compared to an average for the whole country of nine to one.
- 2. Another way to look at income inequality is to compare the mean expenditure per adult across wards within a county. In 44 of the 47 counties, the mean expenditure in the poorest wards is less than 40 percent the mean expenditure in the wealthiest wards within the county. In both Kilifi and Kwale, the mean expenditure in the poorest wards (Garashi and Ndavaya, respectively) is less than 13 percent of expenditure in the wealthiest ward in the county.
- 3. Of the five poorest counties in terms of mean expenditure, four are in the North (Mandera, Wajir, Turkana and Marsabit) and the last is in Coast (Tana River). However, of the five most unequal counties, only one (Marsabit County) is in the North (looking at ratio of mean expenditure in richest to poorest ward). The other four most unequal counties by this measure are: Kilifi, Kwale, Kajiado and Kitui.
- 4. If we look at Gini coefficients for the whole county, the most unequal counties are also in Coast: Tana River (.631), Kwale (.604), and Kilifi (.570).
- 5. The most equal counties by income measure (ratio of top decile to bottom) are: Narok, West Pokot, Bomet, Nandi and Nairobi. Using the ratio of average income in top to bottom ward, the five most equal counties are: Kirinyaga, Samburu, Siaya, Nyandarua, Narok.

Access to Education

- 6. Major urban areas in Kenya have high education levels but very large disparities. Mombasa, Nairobi and Kisumu all have gaps between highest and lowest wards of nearly 50 percentage points in share of residents with secondary school education or higher levels.
- 7. In the 5 most rural counties (Baringo, Siaya, Pokot, Narok and Tharaka Nithi), education levels are lower but the gap, while still large, is somewhat lower than that espoused in urban areas. On average, the gap in these 5 counties between wards with highest share of residents with secondary school or higher and those with the lowest share is about 26 percentage points.
- 8. The most extreme difference in secondary school education and above is in Kajiado County where the top ward (Ongata Rongai) has nearly 59 percent of the population with secondary education plus, while the bottom ward (Mosiro) has only 2 percent.
- 9. One way to think about inequality in education is to compare the number of people with no education



to those with some education. A more unequal county is one that has large numbers of both. Isiolo is the most unequal county in Kenya by this measure, with 51 percent of the population having no education, and 49 percent with some. This is followed by West Pokot at 55 percent with no education and 45 percent with some, and Tana River at 56 percent with no education and 44 with some.

Access to Improved Sanitation

- 10. Kajiado County has the highest gap between wards with access to improved sanitation. The best performing ward (Ongata Rongai) has 89 percent of residents with access to improved sanitation while the worst performing ward (Mosiro) has 2 percent of residents with access to improved sanitation, a gap of nearly 87 percentage points.
- 11. There are 9 counties where the gap in access to improved sanitation between the best and worst performing wards is over 80 percentage points. These are Baringo, Garissa, Kajiado, Kericho, Kilifi, Machakos, Marsabit, Nyandarua and West Pokot.

Access to Improved Sources of Water

12. In all of the 47 counties, the highest gap in access to improved water sources between the county with the best access to improved water sources and the least is over 45 percentage points. The most severe gaps are in Mandera, Garissa, Marsabit, (over 99 percentage points), Kilifi (over 98 percentage points) and Wajir (over 97 percentage points).

Access to Improved Sources of Lighting

13. The gaps within counties in access to electricity for lighting are also enormous. In most counties (29 out of 47), the gap between the ward with the most access to electricity and the least access is more than 40 percentage points. The most severe disparities between wards are in Mombasa (95 percentage point gap between highest and lowest ward), Garissa (92 percentage points), and Nakuru (89 percentage points).

Access to Improved Housing

14. The highest extreme in this variable is found in Baringo County where all residents in Silale ward live in grass huts while no one in Ravine ward in the same county lives in grass huts.

Overall ranking of the variables

15. Overall, the counties with the most income inequalities as measured by the gini coefficient are Tana River, Kwale, Kilifi, Lamu, Migori and Busia. However, the counties that are consistently mentioned among the most deprived hence have the lowest access to essential services compared to others across the following nine variables i.e. poverty, mean household expenditure, education, work for pay, water, sanitation, cooking fuel, access to electricity and improved housing are Mandera (8 variables), Wajir (8 variables), Turkana (7 variables) and Marsabit (7 variables).



Abbreviations

AMADPOC African Migration and Development Policy Centre

CRA Commission on Revenue Allocation

DANIDA Danish International Development Agency

DAP Drivers of Accountability Programme

EAS Enumeration Areas

HDI Human Development Index

IBP International Budget Partnership

IEA Institute of Economic Affairs

IPAR Institute of Policy Analysis and Research

KIHBS Kenya Intergraded Household Budget Survey

KIPPRA Kenya Institute for Public Policy Research and Analysis

KNBS Kenya National Bureau of Statistics

LPG Liquefied Petroleum Gas

NCIC National Cohesion and Integration Commission

NTA National Taxpayers Association

PCA Principal Component Analysis

SAEs Small Area Estimation

SID Society for International Development

TISA The Institute for Social Accountability

VIP latrine Ventilated-Improved Pit latrine

VOCs Volatile Organic Carbons

WDR World Development Report

Introduction

Background

For more than half a century many people in the development sector in Kenya have worked at alleviating extreme poverty so that the poorest people can access basic goods and services for survival like food, safe drinking water, sanitation, shelter and education. However when the current national averages are disaggregated there are individuals and groups that still lag too behind. As a result, the gap between the rich and the poor, urban and rural areas, among ethnic groups or between genders reveal huge disparities between those who are well endowed and those who are deprived.

According to the world inequality statistics, Kenya was ranked 103 out of 169 countries making it the 66th most unequal country in the world. Kenya's Inequality is rooted in its history, politics, economics and social organization and manifests itself in the lack of access to services, resources, power, voice and agency. Inequality continues to be driven by various factors such as: social norms, behaviours and practices that fuel discrimination and obstruct access at the local level and/ or at the larger societal level; the fact that services are not reaching those who are most in need of them due to intentional or unintentional barriers; the governance, accountability, policy or legislative issues that do not favor equal opportunities for the disadvantaged; and economic forces i.e. the unequal control of productive assets by the different socio-economic groups.

According to the 2005 report on the World Social Situation, sustained poverty reduction cannot be achieved unless equality of opportunity and access to basic services is ensured. Reducing inequality must therefore be explicitly incorporated in policies and programmes aimed at poverty reduction. In addition, specific interventions may be required, such as: affirmative action; targeted public investments in underserved areas and sectors; access to resources that are not conditional; and a conscious effort to ensure that policies and programmes implemented have to provide equitable opportunities for all.

This chapter presents the basic concepts on inequality and poverty, methods used for analysis, justification and choice of variables on inequality. The analysis is based on the 2009 Kenya housing and population census while the 2006 Kenya integrated household budget survey is combined with census to estimate poverty and inequality measures from the national to the ward level. Tabulation of both money metric measures of inequality such as mean expenditure and non-money metric measures of inequality in important livelihood parameters like, employment, education, energy, housing, water and sanitation are presented. These variables were selected from the census data and analyzed in detail and form the core of the inequality reports. Other variables such as migration or health indicators like mortality, fertility etc. are analyzed and presented in several monographs by Kenya National Bureau of Statistics and were therefore left out of this report.

Methodology

Gini-coefficient of inequality

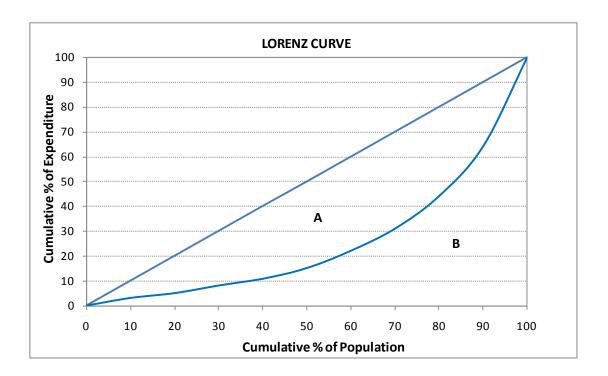
This is the most commonly used measure of inequality. The coefficient varies between '0', which reflects complete equality and '1' which indicates complete inequality. Graphically, the Gini coefficient can be



easily represented by the area between the Lorenz curve and the line of equality. On the figure below, the Lorenz curve maps the cumulative income share on the vertical axis against the distribution of the population on the horizontal axis. The Gini coefficient is calculated as the area (A) divided by the sum of areas (A and B) i.e. A/(A+B). If A=0 the Gini coefficient becomes 0 which means perfect equality, whereas if B=0 the Gini coefficient becomes 1 which means complete inequality. Let xi be a point on the X-axis, and yi a point on the Y-axis, the Gini coefficient formula is:

Gini =
$$1 - \sum_{i=1}^{N} (x_i - x_{i-1}) (y_i + y_{i-1})$$
.

An Illustration of the Lorenz Curve



Small Area Estimation (SAE)

The small area problem essentially concerns obtaining reliable estimates of quantities of interest — totals or means of study variables, for example — for geographical regions, when the regional sample sizes are small in the survey data set. In the context of small area estimation, an area or domain becomes small when its sample size is too small for direct estimation of adequate precision. If the regional estimates are to be obtained by the traditional direct survey estimators, based only on the sample data from the area of interest itself, small sample sizes lead to undesirably large standard errors for them. For instance, due to their low precision the estimates might not satisfy the generally accepted publishing criteria in official statistics. It may even happen that there are no sample members at all from some areas, making the direct estimation impossible. All this gives rise to the need of special small area estimation methodology.

Most of KNBS surveys were designed to provide statistically reliable, design-based estimates only at the national, provincial and district levels such as the Kenya Intergraded Household Budget Survey of 2005/06 (KIHBS). The sheer practical difficulties and cost of implementing and conducting sample surveys that would provide reliable estimates at levels finer than the district were generally prohibitive, both in terms of the increased sample size required and in terms of the added burden on providers of survey data (respondents). However through SAE and using the census and other survey datasets, accurate small area poverty estimates for 2009 for all the counties are obtainable.

The sample in the 2005/06 KIHBS, which was a representative subset of the population, collected detailed information regarding consumption expenditures. The survey gives poverty estimate of urban and rural poverty at the national level, the provincial level and, albeit with less precision, at the district level. However, the sample sizes of such household surveys preclude estimation of meaningful poverty measures for smaller areas such as divisions, locations or wards. Data collected through censuses are sufficiently large to provide representative measurements below the district level such as divisions, locations and sub-locations. However, this data does not contain the detailed information on consumption expenditures required to estimate poverty indicators. In small area estimation methodology, the first step of the analysis involves exploring the relationship between a set of characteristics of households and the welfare level of the same households, which has detailed information about household expenditure and consumption. A regression equation is then estimated to explain daily per capita consumption and expenditure of a household using a number of socio-economic variables such as household size, education levels, housing characteristics and access to basic services.

While the census does not contain household expenditure data, it does contain these socio-economic variables. Therefore, it will be possible to statistically impute household expenditures for the census households by applying the socio-economic variables from the census data on the estimated relationship based on the survey data. This will give estimates of the welfare level of all households in the census, which in turn allows for estimation of the proportion of households that are poor and other poverty measures for relatively small geographic areas. To determine how many people are poor in each area, the study would then utilize the 2005/06 monetary poverty lines for rural and urban households respectively. In terms of actual process, the following steps were undertaken:

Cluster Matching: Matching of the KIHBS clusters, which were created using the 1999 Population and Housing Census Enumeration Areas (EA) to 2009 Population and Housing Census EAs. The purpose was to trace the KIBHS 2005/06 clusters to the 2009 Enumeration Areas.

Zero Stage: The first step of the analysis involved finding out comparable variables from the survey (Kenya Integrated Household Budget 2005/06) and the census (Kenya 2009 Population and Housing Census). This required the use of the survey and census questionnaires as well as their manuals.

First Stage (Consumption Model): This stage involved the use of regression analysis to explore the relationship between an agreed set of characteristics in the household and the consumption levels of the same households from the survey data. The regression equation was then used to estimate and explain daily per capita consumption and expenditure of households using socio-economic variables



such as household size, education levels, housing characteristics and access to basic services, and other auxiliary variables. While the census did not contain household expenditure data, it did contain these socio-economic variables.

Second Stage (Simulation): Analysis at this stage involved statistical imputation of household expenditures for the census households, by applying the socio-economic variables from the census data on the estimated relationship based on the survey data.

Identification of poor households Principal Component Analysis (PCA)

In order to attain the objective of the poverty targeting in this study, the household needed to be established. There are three principal indicators of welfare; household income; household consumption expenditures; and household wealth. Household income is the theoretical indicator of choice of welfare/economic status. However, it is extremely difficult to measure accurately due to the fact that many people do not remember all the sources of their income or better still would not want to divulge this information. Measuring consumption expenditures has many drawbacks such as the fact that household consumption expenditures typically are obtained from recall method usually for a period of not more than four weeks. In all cases a well planned and large scale survey is needed, which is time consuming and costly to collect. The estimation of wealth is a difficult concept due to both the quantitative as well as the qualitative aspects of it. It can also be difficult to compute especially when wealth is looked at as both tangible and intangible.

Given that the three main indicators of welfare cannot be determined in a shorter time, an alternative method that is quick is needed. The alternative approach then in measuring welfare is generally through the asset index. In measuring the asset index, multivariate statistical procedures such the factor analysis, discriminate analysis, cluster analysis or the principal component analysis methods are used. Principal components analysis transforms the original set of variables into a smaller set of linear combinations that account for most of the variance in the original set. The purpose of PCA is to determine factors (i.e., principal components) in order to explain as much of the total variation in the data as possible.

In this project the principal component analysis was utilized in order to generate the asset (wealth) index for each household in the study area. The PCA can be used as an exploratory tool to investigate patterns in the data; in identify natural groupings of the population for further analysis and; to reduce several dimensionalities in the number of known dimensions. In generating this index information from the datasets such as the tenure status of main dwelling units; roof, wall, and floor materials of main dwelling; main source of water; means of human waste disposal; cooking and lighting fuels; household items such radio TV, fridge etc was required. The recent available dataset that contains this information for the project area is the Kenya Population and Housing Census 2009.

There are four main approaches to handling multivariate data for the construction of the asset index in surveys and censuses. The first three may be regarded as exploratory techniques leading to index construction. These are graphical procedures and summary measures. The two popular multivariate procedures - cluster analysis and principal component analysis (PCA) - are two of the key procedures that have a useful preliminary role to play in index construction and lastly regression modeling approach.

In the recent past there has been an increasing routine application of PCA to asset data in creating welfare indices (Gwatkin et al. 2000, Filmer and Pritchett 2001 and McKenzie 2003).

Concepts and definitions

Inequality

Inequality is characterized by the existence of unequal opportunities or life chances and unequal conditions such as incomes, goods and services. Inequality, usually structured and recurrent, results into an unfair or unjust gap between individuals, groups or households relative to others within a population. There are several methods of measuring inequality. In this study, we consider among other methods, the Gini-coefficient, the difference in expenditure shares and access to important basic services.

Equality and Equity

Although the two terms are sometimes used interchangeably, they are different concepts. Equality requires all to have same/ equal resources, while equity requires all to have the same opportunity to access same resources, survive, develop, and reach their full potential, without discrimination, bias, or favoritism. Equity also accepts differences that are earned fairly.

Poverty

The poverty line is a threshold below which people are deemed poor. Statistics summarizing the bottom of the consumption distribution (i.e. those that fall below the poverty line) are therefore provided. In 2005/06, the poverty line was estimated at Ksh1,562 and Ksh2,913 per adult equivalent per month for rural and urban households respectively. Nationally, 45.2 percent of the population lives below the poverty line (2009 estimates) down from 46 percent in 2005/06.

Spatial Dimensions

The reason poverty can be considered a spatial issue is two-fold. People of a similar socio-economic background tend to live in the same areas because the amount of money a person makes usually, but not always, influences their decision as to where to purchase or rent a home. At the same time, the area in which a person is born or lives can determine the level of access to opportunities like education and employment because income and education can influence settlement patterns and also be influenced by settlement patterns. They can therefore be considered causes and effects of spatial inequality and poverty.

Employment

Access to jobs is essential for overcoming inequality and reducing poverty. People who cannot access productive work are unable to generate an income sufficient to cover their basic needs and those of their families, or to accumulate savings to protect their households from the vicissitudes of the economy.

¹This is basically the idea that every person needs different levels of consumption because of their age, gender, height, weight, etc. and therefore we take this into account to create an adult equivalent based on the average needs of the different populations



The unemployed are therefore among the most vulnerable in society and are prone to poverty. Levels and patterns of employment and wages are also significant in determining degrees of poverty and inequality. Macroeconomic policy needs to emphasize the need for increasing regular good quality 'work for pay' that is covered by basic labour protection. The population and housing census 2009 included questions on labour and employment for the population aged 15-64.

The census, not being a labour survey, only had few categories of occupation which included work for pay, family business, family agricultural holdings, intern/volunteer, retired/home maker, full time student, incapacitated and no work. The tabulation was nested with education- for none, primary and secondary level.

Education

Education is typically seen as a means of improving people's welfare. Studies indicate that inequality declines as the average level of educational attainment increases, with secondary education producing the greatest payoff, especially for women (Cornia and Court, 2001). There is considerable evidence that even in settings where people are deprived of other essential services like sanitation or clean water, children of educated mothers have much better prospects of survival than do the children of uneducated mothers. Education is therefore typically viewed as a powerful factor in leveling the field of opportunity as it provides individuals with the capacity to obtain a higher income and standard of living. By learning to read and write and acquiring technical or professional skills, people increase their chances of obtaining decent, better-paying jobs. Education however can also represent a medium through which the worst forms of social stratification and segmentation are created. Inequalities in quality and access to education often translate into differentials in employment, occupation, income, residence and social class. These disparities are prevalent and tend to be determined by socio-economic and family background. Because such disparities are typically transmitted from generation to generation, access to educational and employment opportunities are to a certain degree inherited, with segments of the population systematically suffering exclusion. The importance of equal access to a well-functioning education system, particularly in relation to reducing inequalities, cannot be overemphasized.

Water

According to UNICEF (2008), over 1.1 billion people lack access to an improved water source and over three million people, mostly children, die annually from water-related diseases. Water quality refers to the basic and physical characteristics of water that determines its suitability for life or for human uses. The quality of water has tremendous effects on human health both in the short term and in the long term. As indicated in this report, slightly over half of Kenya's population has access to improved sources of water.

Sanitation

Sanitation refers to the principles and practices relating to the collection, removal or disposal of human excreta, household waste, water and refuse as they impact upon people and the environment. Decent sanitation includes appropriate hygiene awareness and behavior as well as acceptable, affordable and

sustainable sanitation services which is crucial for the health and wellbeing of people. Lack of access to safe human waste disposal facilities leads to higher costs to the community through pollution of rivers, ground water and higher incidence of air and water borne diseases. Other costs include reduced incomes as a result of disease and lower educational outcomes.

Nationally, 61 percent of the population has access to improved methods of waste disposal. A sizeable population i.e. 39 percent of the population is disadvantaged. Investments made in the provision of safe water supplies need to be commensurate with investments in safe waste disposal and hygiene promotion to have significant impact.

Housing Conditions (Roof, Wall and Floor)

Housing conditions are an indicator of the degree to which people live in humane conditions. Materials used in the construction of the floor, roof and wall materials of a dwelling unit are also indicative of the extent to which they protect occupants from the elements and other environmental hazards. Housing conditions have implications for provision of other services such as connections to water supply, electricity, and waste disposal. They also determine the safety, health and well being of the occupants. Low provision of these essential services leads to higher incidence of diseases, fewer opportunities for business services and lack of a conducive environment for learning. It is important to note that availability of materials, costs, weather and cultural conditions have a major influence on the type of materials used.

Energy fuel for cooking and lighting

Lack of access to clean sources of energy is a major impediment to development through health related complications such as increased respiratory infections and air pollution. The type of cooking fuel or lighting fuel used by households is related to the socio-economic status of households. High level energy sources are cleaner but cost more and are used by households with higher levels of income compared with primitive sources of fuel like firewood which are mainly used by households with a lower socio-economic profile. Globally about 2.5 billion people rely on biomass such as fuel-wood, charcoal, agricultural waste and animal dung to meet their energy needs for cooking.

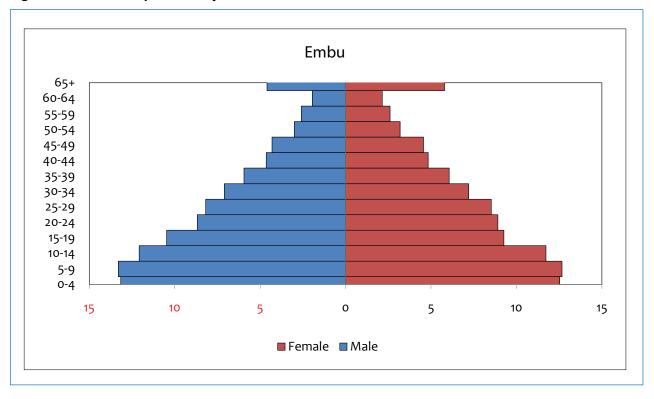


Embu County



EMBU COUNTY

Figure 6.1: Embu Population Pyramid



Population

Embu County has a transitional population structure due to shrinking population, where 0-14 year olds constitute 38% and an increasingly youthful population, where 15-34 year olds constitute 34% of the total population. This is due to declining fertility rates among women as shown by the percentage household sise of 0-3 members at 46%.

Employment

The 2009 population and housing census covered in brief the labour status as tabulated below. The main variable of interest for inequality discussed in the text is work for pay by level of education. The other variables, notably family business, family agricultural holdings, intern/volunteer, retired/homemaker, fulltime student, incapacitated and no work are tabulated and presented in the annex table 6.3 up to ward level.

Table 6: Overall Employment by Education Levels in Embu County

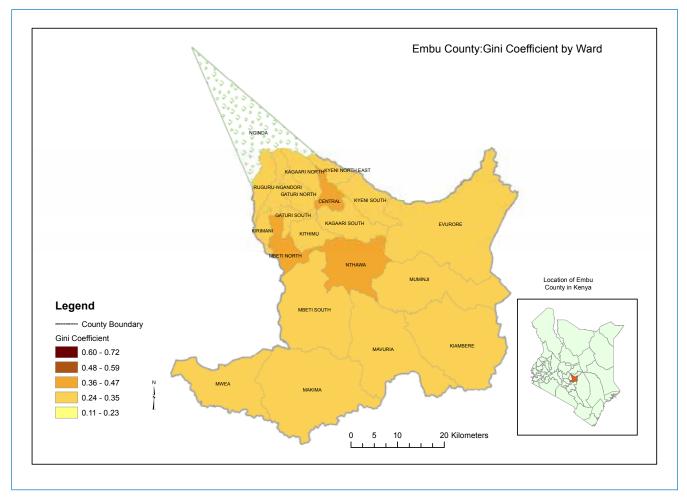
Education Level	Work for pay	Family Business	Family Agricul- tural Holding	Intern/ Volunteer	Retired/ Home- maker	Fulltime Student	Incapacitated	No work	Number of Individuals
Total	24.2	11.2	44.3	1.0	4.2	9.7	0.4	5.0	290,221
None	19.6	8.8	55.8	2.2	5.4	0.4	2.3	5.6	19,082
Primary	22.0	11.0	50.5	0.8	4.4	6.2	0.4	4.7	160,655
Secondary+	28.4	12.0	33.2	1.2	3.6	16.4	0.2	5.2	110,484

In Embu County, 20% of the residents with no formal education, 22% of those with a primary education and 28% of those with a secondary level of education or above are working for pay. Work for pay is highest in Nairobi at 49% and this is almost twice the level in Embu for those with a secondary level of education or above.

Gini Coefficient

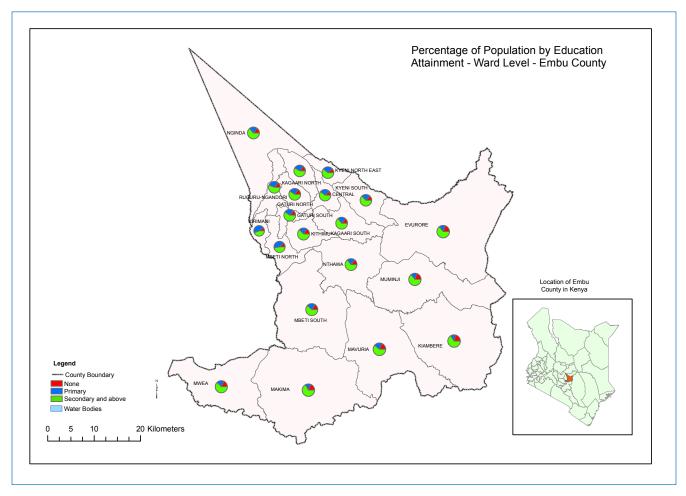
In this report the Gini index measures the extent to which the distribution of consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution. A Gini index of '0' represents perfect equality, while an index of '1' implies perfect inequality. Embu County's Gini index is 0.379 compared with Turkana County, which has the least inequality nationally (0.283).

Figure 6.2: Embu County-Gini Coefficient by Ward



Education

Figure 6.3: Embu County-Percentage of Population by Education Attainment by Ward



Only 25% of Embu county residents have a secondary level of education or above. Manyatta constituency has the highest share of residents with a secondary level of education or above at 32%. This is almost twice Mbeere North constituency, which has the lowest share of residents with a secondary level of education or above. Manyatta constituency is 7 percentage points above the county average. Kirimani ward has the highest share of residents with a secondary level of education or above at 45%. This is three times Kiambere ward, which has the lowest share of residents with a secondary level of education or above. Kirimani ward is 20 percentage points above the county average.

Some 60% of Embu county residents have a primary level of education only. Mbeere North constituency has the highest share of residents with a primary level of education only at 64%. This is 9 percentage points above Manyatta constituency, which has the lowest share of residents with a primary level of education only. Mbeere North constituency is 4 percentage points above the county average. Makima ward has the highest share of residents with a primary level of education only at 67%. This is 23 percentage points above Kirimani ward, which has the lowest share of residents with a primary level of education only. Makima ward is 7 percentage points above the county average.

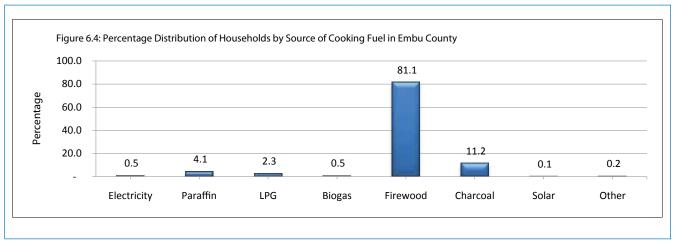
Some 15% of Embu county residents have no formal education. Two constituencies, Mbeere North and Mbeere South, have the highest share of residents with no formal education at 18% each. This is 5 percentage points above Manyatta constituency, which has the lowest share of residents with no formal education. Mbeere North and Mbeere South constituencies are 3 percentage points above the county average. Kiambere ward has the highest percentage of residents with no formal education at 22%. This is twice Kirimani ward, which has the lowest percentage of residents with no formal education. Kiambere ward is 7 percentage points above the county average.



Energy

Cooking Fuel

Figure 6.4: Percentage Distribution of Households by Source of Cooking Fuel in Embu County



Only 2% of residents in Embu County use liquefied petroleum gas (LPG), and 4% use paraffin, while 81% use firewood and 11% use charcoal. Firewood is the most common cooking fuel by gender with no variation for both male and female headed households at 81%.

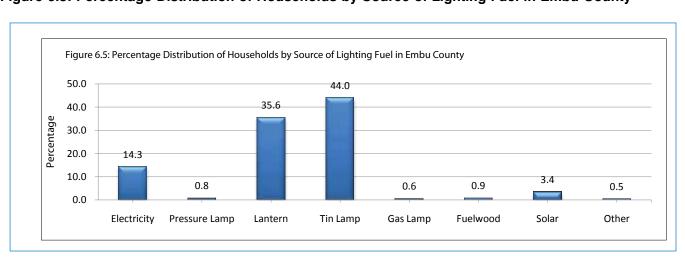
Runyenjes constituency has the highest level of firewood use in Embu County at 90%. This is 26 percentage points above Manyatta constituency, which has the lowest share. Runyenjes constituency is about 9 percentage points above the county average. Three wards, Miminji, Kithimu and Nginda, have the highest level of firewood use in Embu County at 91%. This is almost four times Kirimani ward, which has the lowest share at 24%. Miminji, Kithimu and Nginda are 10 percentage points above the county average.

Manyatta constituency has the highest level of charcoal use in Embu County at 20%. This is almost three times Mbeere South constituency at 7%. Manyatta constituency is about 9 percentage points above the county average. Kirimani ward has the highest level of charcoal use in Embu County at 38%. This is 36 percentage points more than Kiambere ward, which has the lowest share at 2%. Kirimani ward is 27 percentage points above the county average.

Manyatta constituency has the highest level of paraffin use in Embu County at 8%. This is 4 times more than Runyenjes Constituency that has the lowest share. Manyatta constituency is 4% points above the county average. Kirimani ward has the highest level of paraffin use in Embu County at 20%. This is 20 times Kiambere ward that has the lowest share of paraffin use. Kirimani ward is 16% points above the county average.

Lighting

Figure 6.5: Percentage Distribution of Households by Source of Lighting Fuel in Embu County



Only 14% of residents in Embu County use electricity as their main source of lighting. A further 36% use lanterns, and 44% use tin lamps, while 1% use fuel wood. Electricity use is equal in households headed by either gender with both male and female headed households at 14%.

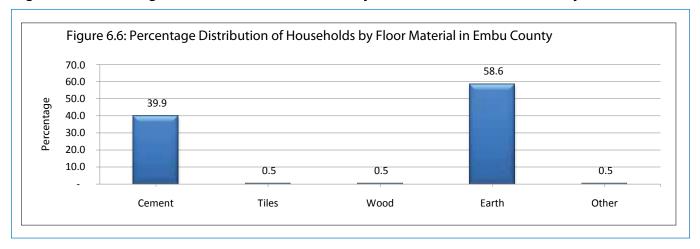
Manyatta constituency has the highest level of electricity use at 29%. That is 25 percentage points above Mbeere South constituency, which has the lowest level of electricity use. Manyatta constituency is 15 percentage points above the county average. Kirimani ward has the highest level of electricity use at 56%. That is 56 percentage points above Kiambere ward, which has the lowest level of electricity use. Kirimani ward is 42 percentage points above the county average.

Housing

Flooring

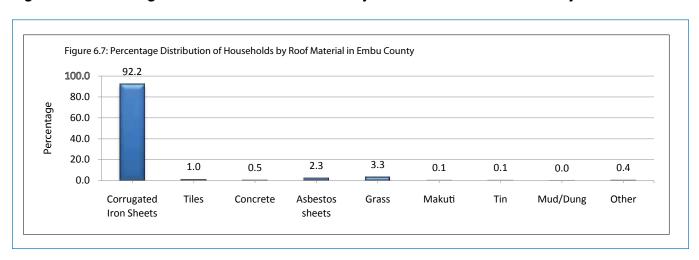
In Embu County, 40% of residents have homes with cement floors, while 59% have earth floors and 1% has wood and a similar percentage have tile floors. Manyatta constituency has the highest share of cement floors at 55%. That is almost twice Mbeere North constituency, which has the lowest share of cement floors. Manyatta constituency is 15 percentage points above the county average. Kirimani ward has the highest share of cement floors at 82%. That is almost seven times Makima ward, which has the lowest share of cement floors. Kirimani ward is 42 percentage points above the county average.

Figure 6.6: Percentage Distribution of Households by Floor Material in Embu County



Roofing

Figure 6.7: Percentage Distribution of Households by Roof Material in Embu County



In Embu County, only 1% of residents have homes with concrete roofs, while 92% have corrugated iron sheet roofs. Grass and makuti roofs cover 3% of homes, and none have mud/dung roofs.

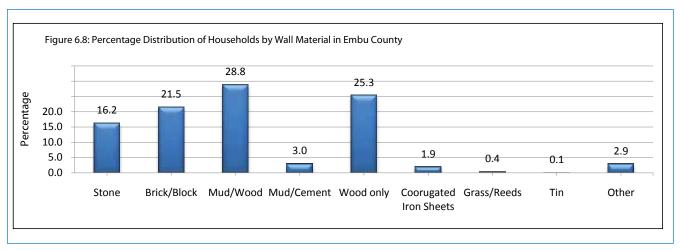


Runyenjes constituency has the highest share of corrugated iron sheet roofs at 96%. That is 9 percentage points above Mbeere South constituency, which has the lowest share of corrugated iron sheet roofs. Runyenjes constituency is 4 percentage points above the county average. Two wards, Central and Kyeni North West, have the highest share of corrugated iron sheet roofs at 98% each. That is 27 percentage points above Makima ward, which has the lowest share of corrugated iron sheet roofs. Central and Kyeni North West are 6 percentage points above the county average.

Mbeere South constituency has the highest share of grass/makuti roofs at 9%. That is 9 percentage points above Manyatta constituency, which has the lowest share of grass/makuti roofs. Mbeere South constituency is 6 percentage points above the county average. Makima ward has the highest share of grass/makuti roofs at 27%. This is 27 percentage points above Kirimani ward, which has no share of grass/makuti. Makima ward is 24 percentage points above the county average.

Walls

Figure 6.8: Percentage Distribution of Households by Wall Material in Embu County



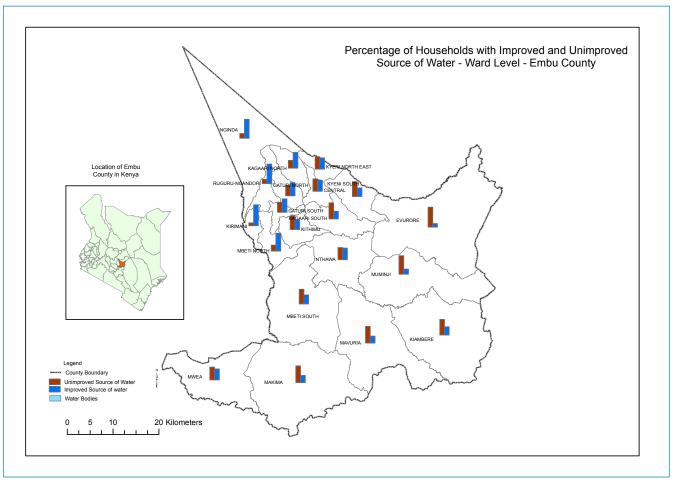
In Embu County, 38% of homes have either brick or stone walls,32% of homes have mud/wood or mud/cement walls,25% have wood walls, and 2% have corrugated iron walls. Less than 1% has grass/thatched walls, while 3% have tin or other walls.

Mbeere South constituency has the highest share of brick/stone walls at 52%. That is twice Runyenjes constituency, which has the lowest share of brick/stone walls. Mbeere South constituency is 14 percentage points above the county average. Mwea ward has the highest share of brick/stone walls at 81%. That is seven times Nginda ward, which has the lowest share of brick/stone walls. Mwea ward is 43 percentage points above the county average.

Mbeere North constituency has the highest share of mud with wood/cement walls at 57%. That is four times Manyatta constituency, which has the lowest share of mud with wood/cement walls. Mbeere North constituency is 25 percentage points above the county average. Evurore ward has the highest share of mud with wood/cement walls at 73%. That is nine times Ruguru-Ngandori ward, which has the lowest share of mud with wood/cement walls. Evurore ward is 41 percentage points above the county average.

Water

Figure 6.9: Embu County-Percentage of Households with Improved and Unimproved Sources of Water by Ward



Improved sources of water comprise protected spring, protected well, borehole, piped into dwelling, piped and rain water collection while unimproved sources include pond, dam, lake, stream/river, unprotected spring, unprotected well, jabia, water vendor and others.

In Embu County, 49% of residents use improved sources of water, with the rest relying on unimproved sources. Use of improved sources is slightly higher in male headed households at 50% as compared with female headed households at 46%.

Manyatta constituency has the highest share of residents using improved sources of water at 74%. That is almost three times Mbeere North constituency, which has the lowest share of residents using improved sources of water. Manyatta Constituency is 25 percentage points above the county average. Kirimani ward has the highest share of residents using improved sources of water at 87%. That is six times Evurore ward, which has the lowest share of residents using improved sources of water. Kirimani ward is 38 percentage points above the county average.

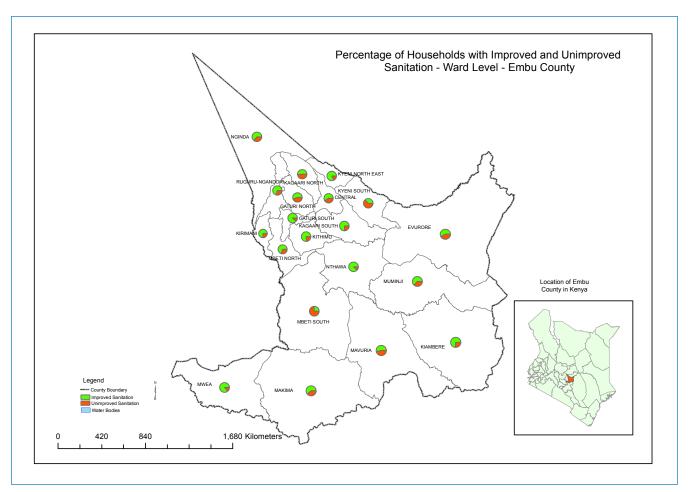
Sanitation

65% of residents in Embu county use improved sanitation, while the rest use unimproved sanitation. There is no significant gender differential in the use of improved sanitation at 65% of male headed households and 64% of female headed households.

Manyatta constituency has the highest share of residents using improved sanitation at 73%. That is 14 percentage points above Mbeere South constituency, which has the lowest share using improved sanitation. Manyatta constituency is 8 percentage points above the county average. Nthawa ward has the highest share of residents using improved sanitation at 89%. That is three times Mbeti South ward, which has the lowest share using improved sanitation. Nthawa ward is 24 percentage points above the county average.



Figure 6.10: Embu County –Percentage of Households with Improved and Unimproved Sanitation by Ward



Embu County Annex Tables

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Table 6.1: Gender, Age group, Demographic Indicators and Households Size by County Constituency and Wards

County		Gender				Age	Age group				Demographic indicators	c indicator	··		Portion	Portion of HH Members:	mbers:
Constituency	Total Pop	Male	Female	0-5 yrs	0-14 yrs	10-18 yrs	15-34 yrs	15-64 yrs	65+ yrs	sex Ratio	Total dependency	Child depen- dency	agec	0-3	4-6	+	total
											Ratio	Ratio	ratio				
Kenya	37,919,647	18,787,698	19,131,949	7,035,670	16,346,414	8,293,207	13,329,717	20,249,800	1,323,433	0.982	0.873	0.807	0.065	41.5	38.4	20.1	8,493,380
Rural	26,075,195	12,869,034	13,206,161	5,059,515	12,024,773	6,134,730	8,303,007	12,984,788	1,065,634	0.974	1.008	0.926	0.082	33.2	41.3	25.4	5,239,879
Urban	11,844,452	5,918,664	5,925,788	1,976,155	4,321,641	2,158,477	5,026,710	7,265,012	257,799	0.999	0.630	0.595	0.035	54.8	33.7	11.5	3,253,501
Embu County	508,356	250,123	258,233	79,241	191,697	101,581	173,680	290,221	26,438	696.0	0.752	0.661	0.091	45.8	41.7	12.6	128,079
Manyatta Constituency	150,534	73,917	76,617	20,630	51,055	28,146	55,528	92,313	7,166	0.965	0.631	0.553	0.078	51.2	39.2	9.6	40830
Ruguru-Ngandori	27,413	13,395	14,018	3,632	9,541	5,293	9,246	16,295	1,577	0.956	0.682	0.586	0.097	47.9	43.7	8.4	7302
Kithimu	18,997	9,327	9,670	2,891	7,200	3,938	6,107	10,657	1,140	0.965	0.783	0.676	0.107	44.1	43.9	12.0	4746
Nginda	28,338	13,994	14,344	3,994	10,533	5,863	9,276	16,170	1,635	0.976	0.753	0.651	0.101	43.3	45.4	11.3	7120
Mbeti North	32,098	15,751	16,347	4,276	10,109	5,688	13,004	20,811	1,178	0.964	0.542	0.486	0.057	52.0	36.3	11.8	8475
Kirimani	30,144	14,730	15,414	3,896	8,902	4,679	13,250	20,399	843	0.956	0.478	0.436	0.041	64.2	29.8	0.9	9737
Gaturi South	13,544	6,720	6,824	1,941	4,770	2,685	4,645	7,981	793	0.985	0.697	0.598	0.099	45.1	9.44	10.3	3450
Runyenjes Con- stituency	141,327	69,701	71,626	19,515	49,854	27,469	47,146	83,142	8,331	0.973	0.700	0.600	0.100	46.3	43.9	9.8	36510
Gaturi North	24,309	11,908	12,401	3,303	8,624	4,792	7,988	14,085	1,600	0.960	0.726	0.612	0.114	46.4	44.2	9.2	6302
Kagaari South	20,221	10,212	10,009	3,051	7,360	3,948	6,736	11,767	1,094	1.020	0.718	0.625	0.093	44.7	44.7	10.6	5139
Central	23,471	11,502	11,969	3,136	8,121	4,525	7,880	13,891	1,459	0.961	0.690	0.585	0.105	48.1	42.5	9.4	6195
Kagaari North	24,940	12,119	12,821	3,347	8,654	4,879	8,595	14,890	1,396	0.945	0.675	0.581	0.094	46.9	43.7	9.4	6479

Kveni North West	20.981	10.252	10.729	2.740	7.308	3.937	7.051	12.559	1,114	0.956	0.671	0.582	0.089	46.8	0.44	9.2	5447
Kyeni South	27,405	13,708	13,697	3,938	9,787	5,388	8,896	15,950	1,668	1.001	0.718	0.614	0.105	44.9	4.44	10.8	6948
Mbeere South Constituency	128,544	64,321	64,223	22,733	53,138	26,930	42,628	68,854	6,552	1.002	0.867	0.772	0.095	40.8	42.1	17.1	29929
Mwea	29,752	14,610	15,142	4,968	11,592	5,795	9,790	16,331	1,829	0.965	0.822	0.710	0.112	43.1	43.9	13.0	7303
Makima	21,173	10,733	10,440	4,072	9,496	4,583	6,592	10,773	904	1.028	0.965	0.881	0.084	37.8	45.0	17.3	4876
Mbeti South	29,223	15,067	14,156	4,694	11,142	5,969	10,348	16,730	1,351	1.064	0.747	0.666	0.081	45.1	40.1	14.8	7246
Mavuria	33,347	16,652	16,695	5,944	13,851	7,140	11,408	17,768	1,728	0.997	0.877	0.780	0.097	38.9	41.1	20.0	7469
Kiambere	15,049	7,259	7,790	3,055	7,057	3,443	4,490	7,252	740	0.932	1.075	0.973	0.102	34.2	40.9	24.9	3035
Mbeere North Constituency	87,951	42,184	45,767	16,363	37,650	19,036	28,378	45,912	4,389	0.922	0.916	0.820	960.0	41.5	41.9	16.6	20810
Nthawa	26,498	13,349	13,149	4,618	10,290	4,965	9,471	15,072	1,136	1.015	0.758	0.683	0.075	45.7	41.5	12.9	6730
Muminji	16,676	7,911	8,765	3,351	7,588	3,697	5,080	8,252	836	0.903	1.021	0.920	0.101	40.3	41.8	17.9	3869
Evurore	44,777	20,924	23,853	8,394	19,772	10,374	13,827	22,588	2,417	0.877	0.982	0.875	0.107	39.1	42.3	18.6	10211

Table 6.2: Employment by County, Constituency and Wards

County	Work for pay	Family Business	Family Agricultural	Intern/	Retired/	Fulltime Student	Incapaci- tated	No	No. of Indi- viduals
Constituency	, ,		Holding	Volunteer	Homemaker			work	
/Wards									
Kenya	23.7	13.1	32.0	1.1	9.2	12.8	0.5	7.7	20,249,800
Rural	15.6	11.2	43.5	1.0	8.8	13.0	0.5	6.3	12,984,788
Urban	38.1	16.4	11.4	1.3	9.9	12.2	0.3	10.2	7,265,012
Embu County	24.2	11.2	44.3	1.0	4.2	9.7	0.4	5.0	290,221
Manyatta Constituency	31.7	12.8	35.9	1.4	2.9	10.1	0.4	4.8	92,313
Ruguru-Ngandori	27.1	9.9	41.3	2.3	2.6	10.0	0.3	6.6	16,295
Kithimu	19.6	9.6	59.7	0.4	1.3	7.1	0.7	1.8	10,657
Nginda	17.6	8.1	57.9	0.6	2.4	10.8	0.5	2.2	16,170
Mbeti North	42.1	14.3	22.1	2.4	2.6	11.4	0.2	5.0	20,811
Kirimani	45.8	20.2	12.2	1.1	4.2	9.5	0.3	6.6	20,399
Gaturi South	23.3	10.3	44.8	1.1	3.5	11.0	0.4	5.6	7,981
Runyenjes Constituency	20.7	9.3	50.8	1.0	3.1	10.9	0.4	3.9	83,142
Gaturi North	21.1	10.5	50.0	1.7	0.9	10.2	0.5	5.0	14,085
Kagaari South	15.3	6.6	61.0	0.7	2.2	11.8	0.5	2.0	11,767
Central	21.6	11.8	44.0	1.9	2.8	11.4	0.4	6.2	13,891
Kagaari North	21.8	6.8	54.8	0.6	2.1	10.5	0.3	3.1	14,890
Kyeni North West	23.2	12.5	48.8	0.8	1.4	8.9	0.3	4.1	12,559
Kyeni South	20.2	8.2	47.5	0.6	7.9	12.2	0.7	2.8	15,950
Mbeere South Constituency	23.1	12.0	40.4	0.8	6.8	9.1	0.5	7.2	68,854
Mwea	22.5	12.8	41.5	0.7	7.9	7.7	0.7	6.3	16,331
Makima	25.1	8.7	36.0	1.2	7.7	13.3	0.5	7.4	10,773
Mbeti South	25.4	12.1	40.4	1.0	4.9	8.2	0.5	7.6	16,730
Mavuria	22.5	14.7	37.7	0.6	7.8	9.6	0.5	6.6	17,768
Kiambere	17.4	8.0	51.3	0.6	5.3	7.3	0.6	9.6	7,252
Mbeere North Constituency	17.5	10.2	55.3	0.4	4.9	7.5	0.4	3.8	45,912
Nthawa	20.0	12.7	54.4	0.4	4.5	5.1	0.5	2.5	15,072
Muminji	13.6	12.6	60.5	0.4	2.4	7.5	0.3	2.7	8,252
Evurore	17.2	7.8	53.9	0.5	6.1	9.0	0.4	5.1	22,588

Table 6.3: Employment and Education Levels by County, Constituency and Wards

County /	Education	Work	Family Business	Family Agricultural	Intern/	Retired/	Fulltime Student	Incapaci- tated	No	No. of Indi- viduals
constituency/	Total	for pay		Holding	Volunteer	Homemaker			work	
Wards	level									
Kenya	Total	23.7	13.1	32.0	1.1	9.2	12.8	0.5	7.7	20,249,800
Kenya	None	11.1	14.0	44.4	1.7	14.7	0.8	1.2	12.1	3,154,356
Kenya	Primary	20.7	12.6	37.3	0.8	9.6	12.1	0.4	6.5	9,528,270
Kenya	Secondary+	32.7	13.3	20.2	1.2	6.6	18.6	0.2	7.3	7,567,174
Rural	Total	15.6	11.2	43.5	1.0	8.8	13.0	0.5	6.3	12,984,788
Rural	None	8.5	13.6	50.0	1.4	13.9	0.7	1.2	10.7	2,614,951
Rural	Primary	15.5	10.8	45.9	0.8	8.4	13.2	0.5	5.0	6,785,745
Rural	Secondary+	21.0	10.1	34.3	1.0	5.9	21.9	0.3	5.5	3,584,092
Urban Urban	Total None	38.1 23.5	16.4 15.8	11.4	1.3 3.1	9.9	12.2	1.6	10.2 18.8	7,265,012 539,405
Urban	Primary	33.6	16.9	16.0	1.0	12.3	9.5	0.4	10.0	2,742,525
Urban	Secondary+	43.2	16.1	7.5	1.3	7.1	15.6	0.2	9.0	3,983,082
Embu	Total	24.2	11.2	44.3	1.0	4.2	9.7	0.4	5.0	290,221
Embu	None	19.6	8.8	55.8	2.2	5.4	0.4	2.3	5.6	19,082
Embu	Primary	22.0	11.0	50.5	0.8	4.4	6.2	0.4	4.7	160,655
Embu	Secondary+	28.4	12.0	33.2	1.2	3.6	16.4	0.2	5.2	110,484
Manyatta Constituency	Total	31.7	12.8	35.9	1.4	2.9	10.1	0.4	4.8	92,313
Manyatta Constituency	None	24.2	8.9	54.0	2.9	2.8	0.4	2.2	4.6	5,040
Manyatta Constituency	Primary	28.2	12.4	44.5	1.2	2.8	5.9	0.3	4.6	43,800
Manyatta Constituency	Secondary+	36.1	13.7	25.1	1.5	2.9	15.5	0.2	5.1	43,473
Ruguru-Ngandori Wards	Total	27.1	9.9	41.3	2.3	2.6	10.0	0.3	6.6	16,295
Ruguru-Ngandori Wards	None	19.7	6.3	60.6	4.0	2.6	0.2	1.1	5.5	1,137
Ruguru-Ngandori Wards	Primary	27.6	10.3	44.8	2.2	2.6	5.9	0.3	6.5	7,891
Ruguru-Ngandori Wards	Secondary+	27.7	10.1	34.6	2.1	2.6	16.0	0.2	6.9	7,267
Kithimu Wards	Total	19.6	9.6	59.7	0.4	1.3	7.1	0.7	1.8	10,657
Kithimu Wards	None	17.2	5.7	70.8	0.9	1.1	0.4	3.3	0.6	787
Kithimu Wards	Primary	19.8	10.1	61.8	0.3	1.2	4.8	0.5	1.6	6,383
Kithimu Wards	Secondary+	19.7	9.5	53.5	0.4	1.4	12.7	0.5	2.3	3,487
Nginda Wards	Total	17.6	8.1	57.9	0.6	2.4	10.8	0.5	2.2	16,170
Nginda Wards	None	17.1	6.1	67.1	1.7	2.8	0.1	2.9	2.2	957
Nginda Wards	Primary	16.7	8.8	62.9	0.4	2.2	6.8	0.3	2.0	9,693
Nginda Wards	Secondary+	19.4	7.1	47.4	0.8	2.8	19.5	0.3	2.7	5,520
Mbeti North Wards	Total	42.1	14.3	22.1	2.4	2.6	11.4	0.2	5.0	20,811

	1									
Mbeti North Wards	None	38.1	11.7	36.9	4.7	3.0	0.7	0.9	4.1	908
Mbeti North Wards	Primary	39.5	13.5	30.1	2.7	2.6	6.6	0.3	4.7	8,103
Mbeti North Wards	Secondary+	44.1	15.0	15.4	2.0	2.6	15.5	0.1	5.2	11,800
Kirimani Wards	Total	45.8	20.2	12.2	1.1	4.2	9.5	0.3	6.6	20,399
Kirimani Wards	None	34.9	16.4	26.8	3.4	4.2	0.9	2.9	10.4	787
Kirimani Wards	Primary	41.8	21.8	17.5	0.7	5.1	4.8	0.4	7.8	7,343
Kirimani Wards	Secondary+	48.8	19.4	8.1	1.3	3.7	12.9	0.1	5.7	12,269
Gaturi South Wards	Total	23.3	10.3	44.8	1.1	3.5	11.0	0.4	5.6	7,981
Gaturi South Wards	None	16.2	8.4	61.4	1.7	3.7	0.4	2.6	5.6	464
Gaturi South Wards	Primary	23.7	10.0	50.1	0.9	3.6	6.0	0.3	5.4	4,387
Gaturi South Wards	Secondary+	23.7	10.9	34.9	1.3	3.3	19.7	0.2	5.9	3,130
Runyenjes Constituency	Total	20.7	9.3	50.8	1.0	3.1	10.9	0.4	3.9	83,142
Runyenjes Constituency	None	17.9	7.9	62.1	2.4	3.3	0.4	2.5	3.5	5,231
Runyenjes Constituency	Primary	19.6	9.3	57.1	0.8	3.0	6.6	0.4	3.3	45,922
Runyenjes Constituency	Secondary+	22.7	9.7	39.8	1.2	3.0	18.6	0.2	4.8	31,989
Gaturi North Wards	Total	21.1	10.5	50.0	1.7	0.9	10.2	0.5	5.0	14,085
Gaturi North Wards	None	16.8	8.5	64.0	3.5	1.1	0.3	2.8	3.0	1,020
Gaturi North Wards	Primary	22.5	10.7	53.5	1.2	0.8	6.2	0.5	4.5	7,493
Gaturi North Wards	Secondary+	19.9	10.5	42.8	2.1	1.1	17.5	0.1	6.1	5,572
Kagaari South Wards	Total	15.3	6.6	61.0	0.7	2.2	11.8	0.5	2.0	11,767
Kagaari South Wards	None	14.0	6.2	70.4	1.8	1.8	0.3	3.0	2.6	774
Kagaari South Wards	Primary	13.3	6.4	67.8	0.5	1.9	8.3	0.4	1.5	7,247
Kagaari South Wards	Secondary+	19.6	7.1	45.9	0.8	2.8	20.8	0.2	2.9	3,746
Central Wards	Total	21.6	11.8	44.0	1.9	2.8	11.4	0.4	6.2	13,891
Central Wards	None	14.6	10.6	59.8	2.9	3.3	0.6	1.7	6.6	824
Central Wards	Primary	18.7	11.3	52.3	1.7	2.5	7.5	0.4	5.6	7,434
Central Wards	Secondary+	26.5	12.6	30.7	2.0	3.2	18.0	0.1	6.8	5,633
Kagaari North Wards	Total	21.8	6.8	54.8	0.6	2.1	10.5	0.3	3.1	14,890
Kagaari North Wards	None	20.3	5.6	67.3	1.3	2.1	0.2	1.9	1.5	962
Kagaari North Wards	Primary	21.4	6.2	60.8	0.4	2.4	6.2	0.3	2.6	7,702
Kagaari North Wards	Secondary+	22.7	7.7	45.5	0.7	1.9	17.4	0.1	4.1	6,226

Kyeni North West Wards	Total	23.2	12.5	48.8	0.8	1.4	8.9	0.3	4.1	12,559
Kyeni North West Wards	None	22.1	9.5	55.8	2.0	1.7	0.5	2.9	5.5	819
Kyeni North West Wards	Primary	22.1	12.9	55.5	0.4	1.2	4.5	0.1	3.4	6,764
Kyeni North West Wards	Secondary+	25.0	12.4	38.6	1.1	1.7	16.3	0.1	4.9	4,976
Kyeni South Wards	Total	20.2	8.2	47.5	0.6	7.9	12.2	0.7	2.8	15,950
Kyeni South Wards	None	19.2	7.3	54.6	2.6	10.5	0.5	3.1	2.2	832
Kyeni South Wards	Primary	19.5	8.7	53.4	0.4	8.1	6.9	0.7	2.3	9,282
Kyeni South Wards	Secondary+	21.5	7.6	37.0	0.6	7.3	22.2	0.3	3.6	5,836
Mbeere South Constit- uency	Total	23.1	12.0	40.4	0.8	6.8	9.1	0.5	7.2	68,854
Mbeere South Constit- uency	None	21.7	9.9	45.0	2.1	9.9	0.4	2.1	9.1	4,991
Mbeere South Constituency	Primary	22.7	11.9	43.4	0.7	7.1	6.5	0.5	7.3	42,474
Mbeere South Constituency	Secondary+	24.2	12.6	33.5	0.8	5.5	16.4	0.3	6.7	21,389
Mwea Wards	Total	22.5	12.8	41.5	0.7	7.9	7.7	0.7	6.3	16,331
Mwea Wards	None	21.2	9.7	46.1	1.8	10.2	0.4	2.4	8.3	1,086
Mwea Wards	Primary	23.4	12.1	44.0	0.6	7.8	5.3	0.6	6.2	10,173
Mwea Wards	Secondary+	21.1	14.9	35.4	0.7	7.5	14.0	0.4	6.1	5,072
Makima Wards	Total	25.1	8.7	36.0	1.2	7.7	13.3	0.5	7.4	10,773
Makima Wards	None	30.3	8.5	36.6	3.3	9.2	0.1	2.1	9.8	868
Makima Wards	Primary	25.7	8.9	37.9	1.1	8.4	10.2	0.4	7.4	7,286
Makima Wards	Secondary+	21.5	8.3	30.5	1.0	5.1	26.5	0.3	6.8	2,619
Mbeti South Wards	Total	25.4	12.1	40.4	1.0	4.9	8.2	0.5	7.6	16,730
Mbeti South Wards	None	22.6	10.2	46.8	2.6	6.3	0.3	2.2	9.0	1,032
Mbeti South Wards	Primary	24.2	12.8	43.0	0.7	5.6	5.5	0.4	7.9	9,814
Mbeti South Wards	Secondary+	27.9	11.2	35.0	1.1	3.6	14.0	0.3	6.9	5,884
Mavuria Wards	Total	22.5	14.7	37.7	0.6	7.8	9.6	0.5	6.6	17,768
Mavuria Wards	None	19.3	14.2	41.8	1.7	15.3	0.7	1.7	5.4	1,236
Mavuria Wards	Primary	21.2	14.9	42.0	0.5	7.9	6.5	0.5	6.5	10,382
Mavuria Wards	Secondary+	25.2	14.6	29.5	0.7	6.2	16.7	0.3	7.0	6,150
Kiambere Wards	Total	17.4	8.0	51.3	0.6	5.3	7.3	0.6	9.6	7,252
Kiambere Wards	None	15.2	4.4	55.4	0.9	6.1	0.1	2.2	15.6	769
Kiambere Wards	Primary	16.6	7.9	53.9	0.5	5.3	5.8	0.5	9.7	4,819

Kiambere Wards	Secondary+	20.8	10.2	41.8	0.6	4.9	15.0	0.2	6.4	1,664
Mbeere North Constit- uency	Total	17.5	10.2	55.3	0.4	4.9	7.5	0.4	3.8	45,912
Mbeere North Constit- uency	None	13.1	8.3	63.7	1.1	6.0	0.4	2.2	5.2	3,820
Mbeere North Constit- uency	Primary	15.1	10.2	60.0	0.3	5.1	5.4	0.3	3.7	28,459
Mbeere North Constit- uency	Secondary+	23.6	10.8	43.0	0.7	4.1	13.8	0.2	3.8	13,633
Nthawa Wards	Total	20.0	12.7	54.4	0.4	4.5	5.1	0.5	2.5	15,072
Nthawa Wards	None	13.0	8.7	63.2	1.5	5.6	1.1	3.2	3.7	748
Nthawa Wards	Primary	17.6	12.0	60.1	0.2	4.5	2.9	0.5	2.2	9,292
Nthawa Wards	Secondary+	25.4	14.5	42.6	0.5	4.2	9.7	0.3	2.9	5,032
Muminji Wards	Total	13.6	12.6	60.5	0.4	2.4	7.5	0.3	2.7	8,252
Muminji Wards	None	9.7	10.4	70.0	0.5	2.4	0.5	1.8	4.7	762
Muminji Wards	Primary	10.9	12.9	65.4	0.2	2.3	5.8	0.2	2.4	5,172
Muminji Wards	Secondary+	20.7	12.6	46.7	0.7	2.5	13.8	0.1	2.9	2,318
Evurore Wards	Total	17.2	7.8	53.9	0.5	6.1	9.0	0.4	5.1	22,588
Evurore Wards	None	14.2	7.5	61.8	1.2	7.3	0.1	2.0	5.8	2,310
Evurore Wards	Primary	14.9	8.1	58.0	0.3	6.5	6.9	0.3	5.1	13,995
Evurore Wards	Secondary+	23.3	7.2	41.9	0.8	4.7	17.1	0.1	4.9	6,283

Table 6.4: Employment and Education Levels in Male Headed Household by County, Constituency and Wards

County /constit-	Education Level	Work for Pay	Family Business	Family	Internal/	Retired/	Fulltime Student	Incapaci- tated	No	Population
uency	reached			Agricultural	Volunteer	Home-	Student	lateu	work	(15-64)
				holding		maker				
Kenya National	Total	25.5	13.5	31.6	1.1	9.0	11.4	0.4	7.5	14,757,992
Tronya Hadionai	Total	2010	10.0	0110		0.0		0	110	2,183,284
Kenya National	None	11.4	14.3	44.2	1.6	13.9	0.9	1.0	12.6	
Kenya National	Primary	22.2	12.9	37.3	0.8	9.4	10.6	0.4	6.4	6,939,667
Maria Mada ad	0	05.0	40.0	40.0	4.4	0.5	40.5		7.0	5,635,041
Kenya National	Secondary+	35.0	13.8	19.8	1.1	6.5	16.5	0.2	7.0	
Rural Rural	Total	16.8	11.6	43.9	1.0	8.3	11.7	0.5	6.3	9,262,744
Rural Rural	None	8.6	14.1	49.8	1.4	13.0	0.8	1.0	11.4	1,823,487
David David	Daimon	40.5	44.0	40.7	0.0	0.0	44.6	0.4	4.0	4,862,291
Rural Rural	Primary	16.5	11.2	46.7	0.8	8.0	11.6	0.4	4.9	
Rural Rural	Secondary+	23.1	10.6	34.7	1.0	5.5	19.6	0.2	5.3	2,576,966
										5,495,248
Urban Urban	Total	40.2	16.6	10.9	1.3	10.1	10.9	0.3	9.7	

Urban Urban	None	25.8	15.5	16.1	3.0	18.2	1.4	1.3	18.7	359,797
Urban Urban	Primary	35.6	16.9	15.4	1.0	12.8	8.1	0.3	9.9	2,077,376
Urban Urban	Secondary+	45.1	16.6	7.3	1.2	7.4	13.8	0.1	8.5	3,058,075
Embu	Total	24.8	11.6	44.6	1.0	4.0	9.0	0.4	4.7	213,189
Embu	None	20.5	8.7	56.2	2.1	4.9	0.4	2.0	5.3	11,963
Embu	Primary	22.2	11.3	51.2	0.7	4.2	5.5	0.3	4.5	119,762
Embu	Secondary+	29.3	12.3	33.3	1.1	3.4	15.3	0.2	4.9	81,464
Manyatta Constit- uency	Total	32.1	13.3	36.0	1.3	2.9	9.5	0.3	4.6	68,989
Manyatta Constit- uency	None	24.9	9.2	53.9	2.8	2.6	0.3	1.7	4.6	3,267
Manyatta Constit- uency	Primary	28.4	12.8	45.0	1.1	2.8	5.2	0.2	4.4	33,177
Manyatta Constit- uency	Secondary+	36.6	14.2	25.1	1.4	3.0	14.8	0.2	4.8	32,545
Ruguru-Ngandori Ward	Total	28.0	10.3	41.2	2.1	2.7	9.0	0.2	6.5	12,106
Ruguru-Ngandori Ward	None	19.1	6.2	61.6	4.5	2.5	0.3	0.4	5.5	764
Ruguru-Ngandori Ward	Primary	27.7	10.6	45.2	2.0	2.6	5.1	0.2	6.5	5,904
Ruguru-Ngandori Ward		29.6	10.4	33.9	2.0	2.8	14.4	0.2	6.6	
	Secondary+									5,438
Kithimu Ward	Total	20.1	10.6	58.9	0.4	1.3	6.5	0.6	1.7	7,878
Kithimu Ward	None	17.7	6.0	70.0	1.2	1.4	-	3.1	0.6	514
Kithimu Ward	Primary	19.9	11.0	61.4	0.3	1.2	4.3	0.4	1.4	4,753
Kithimu Ward	Secondary+	20.8	10.8	52.0	0.5	1.5	11.6	0.4	2.4	2,611
Nginda Ward	Total	17.9	8.4	58.2	0.5	2.2	10.2	0.4	2.2	12,466
Nginda Ward	None	16.5	6.5	66.6	1.6	2.7	-	3.1	3.1	620
Nginda Ward	Primary	16.6	9.1	63.7	0.3	2.0	6.2	0.3	1.9	7,559
Nginda Ward	Secondary+	20.4	7.4	47.3	0.7	2.5	18.6	0.3	2.7	4,287
Mbeti North Ward	Total	42.9	14.5	22.0	2.3	2.8	10.7	0.1	4.7	15,542
Mbeti North Ward	None	41.4	11.6	34.3	4.0	3.4	0.7	0.5	4.1	580
Mbeti North Ward	Primary	40.2	13.5	30.6	2.5	2.5	5.8	0.1	4.7	6,189
	,									
Mbeti North Ward	Secondary+	44.8	15.4	15.2	2.0	2.9	14.8	0.1	4.8	8,773
Kirimani Ward	Total	45.4	20.9	12.4	1.0	4.3	9.8	0.2	6.0	14,911
Kirimani Ward	None	37.7	17.5	27.0	2.9	2.9	0.8	1.6	9.7	486
Kirimani Ward	Primary	42.0	22.4	17.9	0.7	5.3	4.2	0.3	7.1	5,395
Kirimani Ward	Secondary+	47.8	20.2	8.3	1.1	3.8	13.5	0.1	5.2	9,030

Gaturi South Ward	Total	25.0	10.9	44.3	1.1	3.3	9.6	0.3	5.5	6,086
Gaturi South Ward	None	17.2	9.9	61.7	1.3	2.6	0.3	2.0	5.0	303
Gaturi South Ward	Primary	25.0	10.8	49.4	0.8	3.6	5.2	0.1	5.2	3,377
Gaturi South Ward	Secondary+	26.1	11.3	34.9	1.4	3.0	17.1	0.2	6.0	2,406
Runyenjes Con- stituency	Total	20.7	9.6	51.4	1.0	3.0	10.1	0.4	3.7	63,337
Runyenjes Constituency	None	17.6	8.1	62.7	2.3	3.1	0.4	2.5	3.3	3,463
Runyenjes Con- stituency	Primary	19.3	9.6	57.9	0.7	3.0	6.0	0.3	3.1	35,516
Runyenjes Con- stituency	Secondary+	23.3	10.0	40.3	1.2	2.9	17.5	0.1	4.7	24,358
Gaturi North Ward	Total	21.2	10.7	50.2	1.8	0.9	9.9	0.4	4.9	10,630
Gaturi North Ward	None	15.3	9.6	65.0	4.0	0.9	0.1	2.5	2.6	680
Gaturi North Ward	Primary	22.3	10.9	54.6	1.3	0.8	5.6	0.3	4.2	5,717
Gaturi North Ward	Secondary+	20.6	10.7	41.9	2.2	0.9	17.4	0.1	6.2	4,233
Kagaari South Ward	Total	15.5	6.8	62.1	0.6	2.3	10.5	0.4	1.9	8,993
Kagaari South Ward	None	14.9	5.6	71.6	1.2	1.8	0.4	2.2	2.4	503
Kagaari South Ward	Primary	13.0	6.5	68.8	0.5	2.1	7.3	0.3	1.5	5,667
Kagaari South Ward	Secondary+	20.5	7.5	47.0	0.7	2.7	18.8	0.1	2.7	2,823
Central Ward	Total	21.9	12.1	44.4	1.9	2.9	10.3	0.3	6.1	10,479
Central Ward	None	13.1	11.4	61.4	2.9	2.4	0.7	1.8	6.3	544
Central Ward	Primary	18.9	11.6	52.8	1.7	2.7	6.5	0.4	5.5	5,673
Central Ward	Secondary+	27.1	12.9	30.9	2.1	3.4	16.6	0.1	6.9	4,262
Kagaari North Ward	Total	21.5	7.0	55.6	0.5	2.2	10.0	0.3	3.0	11,438
Kagaari North Ward	None	19.1	5.4	69.1	1.3	1.6	0.3	1.9	1.3	632
Kagaari North Ward	Primary	20.4	6.2	62.2	0.3	2.4	5.8	0.2	2.5	5,993
Kagaari North Ward	Secondary+	23.2	8.0	45.5	0.6	2.1	16.5	0.1	3.9	4,813
Kyeni North West Ward	Total	23.0	13.0	49.4	0.7	1.4	8.3	0.2	3.9	9,811
Kyeni North West Ward	None	22.9	9.5	55.8	2.0	1.4	0.5	2.5	5.4	559
Kyeni North West Ward	Primary	21.5	13.5	56.0	0.4	1.1	4.2	0.1	3.2	5,382
Kyeni North West Ward	Secondary+	25.1	12.8	39.4	1.1	1.8	15.1	0.1	4.7	3,870
Kyeni South Ward	Total	20.6	8.4	48.2	0.6	7.6	11.5	0.6	2.6	11,986
Kyeni South Ward	None	20.6	7.2	52.8	1.8	11.2	0.6	3.9	2.0	545
Kyeni South Ward	Primary	19.5	9.0	53.9	0.4	8.0	6.6	0.5	2.1	7,084

Kyeni South Ward	Secondary+	22.4	7.6	38.5	0.6	6.4	20.7	0.3	3.4	4,357
Mbeere South Constituency	Total	23.8	12.3	41.1	0.8	6.5	8.3	0.4	6.9	49,170
Mbeere South Constituency	None	23.3	9.3	45.2	1.9	9.1	0.4	2.1	8.8	3,012
Mbeere South Constituency	Primary	23.0	12.3	44.0	0.7	6.9	5.7	0.4	7.0	30,964
Mbeere South Constituency	Secondary+	25.5	12.7	34.2	0.8	5.1	15.2	0.3	6.2	15,194
Mwea Ward	Total	23.1	12.7	42.4	0.6	7.4	7.2	0.5	6.0	11,220
Mwea Ward	None	20.9	10.4	47.2	1.3	9.9	0.2	2.0	8.2	598
Mwea Ward	Primary	23.3	12.0	45.5	0.6	7.7	4.5	0.4	6.1	7,109
Mwea Ward	Secondary+	23.2	14.7	35.2	0.7	6.5	14.1	0.3	5.5	3,513
Makima Ward	Total	26.0	9.1	37.1	1.1	7.2	11.6	0.5	7.4	7,684
Makima Ward	None	34.2	7.9	35.7	3.1	7.3	0.2	2.3	9.4	521
Makima Ward	Primary	26.1	9.4	39.0	1.0	8.0	8.7	0.4	7.5	5,334
Makima Ward	Secondary+	23.3	8.3	32.2	0.8	5.0	23.5	0.2	6.7	1,829
Mbeti South Ward	Total	25.1	12.5	41.3	0.9	5.1	7.4	0.3	7.4	12,579
Mbeti South Ward	None	24.0	9.8	46.1	2.4	6.8	0.4	1.7	8.8	696
Mbeti South Ward	Primary	23.8	13.3	43.5	0.7	5.6	5.0	0.3	7.7	7,593
Mbeti South Ward	Secondary+	27.7	11.4	36.6	1.0	3.8	12.9	0.3	6.5	4,290
Mavuria Ward	Total	23.5	15.0	38.3	0.6	7.2	8.8	0.5	6.1	12,853
Mavuria Ward	None	20.0	12.5	43.0	1.5	14.7	0.7	2.0	5.6	746
Mavuria Ward	Primary	22.0	15.3	42.4	0.5	7.4	5.9	0.5	6.0	7,693
Mavuria Ward	Secondary+	26.8	14.9	30.5	0.5	5.5	15.1	0.2	6.4	4,414
Kiambere Ward	Total	18.8	8.5	51.1	0.7	5.0	6.8	0.5	8.7	4,834
Kiambere Ward	None	18.2	3.3	55.9	1.3	4.7	0.2	2.4	14.0	451
Kiambere Ward	Primary	17.5	8.5	54.3	0.6	5.0	4.9	0.4	8.9	3,235
Kiambere Ward Mbeere North	Secondary+	22.5	10.5	40.2	0.6	5.1	14.7	0.2	6.3	1,148
Constituency	Total	18.9	10.7	55.4	0.4	4.4	6.4	0.3	3.5	31,693
Mbeere North Constituency	None	14.7	7.9	64.3	0.9	5.5	0.5	1.5	4.6	2,221
Mbeere North Constituency	Primary	16.0	10.5	60.4	0.2	4.7	4.5	0.3	3.4	20,105
Mbeere North Constituency	Secondary+	26.1	11.6	42.6	0.6	3.7	11.8	0.2	3.4	9,367
Nthawa Ward	Total	20.6	12.6	54.9	0.4	4.5	4.5	0.4	2.2	11,486
Nthawa Ward	None	14.8	7.5	64.7	1.3	5.3	1.3	2.0	3.1	453

Nthawa Ward	Primary	18.2	11.6	60.5	0.2	4.7	2.4	0.4	2.0	7,277
Nillawa Walu	Fillidiy	10.2	11.0	00.5	0.2	4.7	2.4	0.4	2.0	1,211
Nthawa Ward	Secondary+	25.9	14.9	43.0	0.6	4.0	8.8	0.3	2.5	3,756
Muminji Ward	Total	15.1	13.3	59.5	0.3	2.3	6.6	0.2	2.7	5,569
Muminji Ward	None	10.6	11.8	69.2	0.7	2.2	0.4	1.3	3.8	451
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Muminji Ward	Primary	11.8	13.4	64.9	0.1	2.3	5.0	0.2	2.3	3,544
Muminji Ward	Secondary+	23.6	13.7	44.6	0.6	2.3	11.9	0.1	3.2	1,574
Evurore Ward	Total	19.1	8.2	54.2	0.4	5.2	7.8	0.3	4.8	14,638
Evurore Ward	None	16.1	6.7	62.5	0.9	6.7	0.2	1.4	5.5	1,317
Evurore Ward	Primary	16.0	8.6	58.7	0.2	5.5	5.9	0.2	5.0	9,284
Evurore Ward	Secondary+	27.3	7.7	41.3	0.6	4.0	14.6	0.1	4.3	4,037

Table 6.5: Employment and Education Levels in Female Headed Households by County, Constituency and Wards

	Education Level reached	Work for Pay	Family Business	Family Agricultural	Internal/ Volunteer	Retired/	Fulltime Student	Incapacitated	No work	Population
	Leverreactica	ı ay	Dusiness	holding	Volunteer	Homemaker	Otudent		WOIR	(15-64)
Kenya National	Total	18.87	11.91	32.74	1.20	9.85	16.66	0.69	8.08	5,518,645
Kenya National	None	10.34	13.04	44.55	1.90	16.45	0.80	1.76	11.17	974,824
Kenya National	Primary	16.74	11.75	37.10	0.89	9.82	16.23	0.59	6.89	2,589,877
Kenya National	Secondary+	25.95	11.57	21.07	1.27	6.59	25.16	0.28	8.11	1,953,944
Rural Rural	Total	31.53	15.66	12.80	1.54	9.33	16.99	0.54	11.60	1,781,078
Rural Rural	None	8.36	12.26	50.31	1.60	15.77	0.59	1.67	9.44	794,993
Rural Rural	Primary	13.02	9.90	43.79	0.81	9.49	17.03	0.60	5.36	1,924,111
Rural Rural	Secondary+	15.97	8.87	33.03	1.06	6.80	27.95	0.34	5.98	1,018,463
Urban Urban	Total	12.83	10.12	42.24	1.04	10.09	16.51	0.76	6.40	3,737,567
Urban Urban	None	19.09	16.50	19.04	3.22	19.45	1.70	2.18	18.83	179,831
Urban Urban	Primary	27.49	17.07	17.79	1.13	10.76	13.93	0.55	11.29	665,766
Urban Urban	Secondary+	36.81	14.50	8.06	1.51	6.36	22.11	0.22	10.43	935,481
Embu	Total	24.8	11.6	44.6	1.0	4.0	9.0	0.4	4.7	213,189
Embu	None	20.5	8.7	56.2	2.1	4.9	0.4	2.0	5.3	11,963
Embu	Primary	22.2	11.3	51.2	0.7	4.2	5.5	0.3	4.5	119,762
Embu	Secondary+	29.3	12.3	33.3	1.1	3.4	15.3	0.2	4.9	81,464
Manyatta Constit- uency	Total	32.1	13.3	36.0	1.3	2.9	9.5	0.3	4.6	68,989

Manyatta Constit- uency	None	24.9	9.2	53.9	2.8	2.6	0.3	1.7	4.6	3,267
Manyatta Constit- uency	Primary	28.4	12.8	45.0	1.1	2.8	5.2	0.2	4.4	33,177
Manyatta Constit- uency	Secondary+	36.6	14.2	25.1	1.4	3.0	14.8	0.2	4.8	32,545
Ruguru-Ngandori Ward	Total	28.0	10.3	41.2	2.1	2.7	9.0	0.2	6.5	12,106
Ruguru-Ngandori Ward	None	19.1	6.2	61.6	4.5	2.5	0.3	0.4	5.5	764
Ruguru-Ngandori Ward	Primary	27.7	10.6	45.2	2.0	2.6	5.1	0.2	6.5	5,904
Ruguru-Ngandori Ward	Secondary+	29.6	10.4	33.9	2.0	2.8	14.4	0.2	6.6	5,438
Kithimu Ward	Total	20.1	10.6	58.9	0.4	1.3	6.5	0.6	1.7	7,878
Kithimu Ward	None	17.7	6.0	70.0	1.2	1.4	-	3.1	0.6	514
Kithimu Ward	Primary	19.9	11.0	61.4	0.3	1.2	4.3	0.4	1.4	4,753
Kithimu Ward	Secondary+	20.8	10.8	52.0	0.5	1.5	11.6	0.4	2.4	2,611
Nginda Ward	Total	17.9	8.4	58.2	0.5	2.2	10.2	0.4	2.2	12,466
Nginda Ward	None	16.5	6.5	66.6	1.6	2.7	-	3.1	3.1	620
Nginda Ward	Primary	16.6	9.1	63.7	0.3	2.0	6.2	0.3	1.9	7,559
Nginda Ward	Secondary+	20.4	7.4	47.3	0.7	2.5	18.6	0.3	2.7	4,287
Mbeti North Ward	Total	42.9	14.5	22.0	2.3	2.8	10.7	0.1	4.7	15,542
Mbeti North Ward	None	41.4	11.6	34.3	4.0	3.4	0.7	0.5	4.1	580
Mbeti North Ward	Primary	40.2	13.5	30.6	2.5	2.5	5.8	0.1	4.7	6,189
Mbeti North Ward	Secondary+	44.8	15.4	15.2	2.0	2.9	14.8	0.1	4.8	8,773
Kirimani Ward	Total	45.4	20.9	12.4	1.0	4.3	9.8	0.2	6.0	14,911
Kirimani Ward	None	37.7	17.5	27.0	2.9	2.9	0.8	1.6	9.7	486
Kirimani Ward	Primary	42.0	22.4	17.9	0.7	5.3	4.2	0.3	7.1	5,395
Kirimani Ward	Secondary+	47.8	20.2	8.3	1.1	3.8	13.5	0.1	5.2	9,030
Gaturi South Ward	Total	25.0	10.9	44.3	1.1	3.3	9.6	0.3	5.5	6,086
Gaturi South Ward	None	17.2	9.9	61.7	1.3	2.6	0.3	2.0	5.0	303
Gaturi South Ward	Primary	25.0	10.8	49.4	0.8	3.6	5.2	0.1	5.2	3,377
Gaturi South Ward	Secondary+	26.1	11.3	34.9	1.4	3.0	17.1	0.2	6.0	2,406
Runyenjes Constituency	Total	20.7	9.6	51.4	1.0	3.0	10.1	0.4	3.7	63,337
Runyenjes Constit- uency	None	17.6	8.1	62.7	2.3	3.1	0.4	2.5	3.3	3,463
Runyenjes Constit- uency	Primary	19.3	9.6	57.9	0.7	3.0	6.0	0.3	3.1	35,516
Runyenjes Constit- uency	Secondary+	23.3	10.0	40.3	1.2	2.9	17.5	0.1	4.7	24,358

Gaturi North Ward	Total	21.2	10.7	50.2	1.8	0.9	9.9	0.4	4.9	10,630
Gaturi North Ward	None	15.3	9.6	65.0	4.0	0.9	0.1	2.5	2.6	680
Gaturi North Ward	Primary	22.3	10.9	54.6	1.3	0.8	5.6	0.3	4.2	5,717
Gaturi North Ward	Secondary+	20.6	10.7	41.9	2.2	0.9	17.4	0.1	6.2	4,233
Kagaari South Ward	Total	15.5	6.8	62.1	0.6	2.3	10.5	0.4	1.9	8,993
Kagaari South Ward	None	14.9	5.6	71.6	1.2	1.8	0.4	2.2	2.4	503
Kagaari South Ward	Primary	13.0	6.5	68.8	0.5	2.1	7.3	0.3	1.5	5,667
Kagaari South Ward	Secondary+	20.5	7.5	47.0	0.7	2.7	18.8	0.1	2.7	2,823
Central Ward	Total	21.9	12.1	44.4	1.9	2.9	10.3	0.3	6.1	10,479
Central Ward	None	13.1	11.4	61.4	2.9	2.4	0.7	1.8	6.3	544
Central Ward	Primary	18.9	11.6	52.8	1.7	2.7	6.5	0.4	5.5	5,673
Central Ward	Secondary+	27.1	12.9	30.9	2.1	3.4	16.6	0.1	6.9	4,262
Kagaari North Ward	Total	21.5	7.0	55.6	0.5	2.2	10.0	0.3	3.0	11,438
Kagaari North Ward	None	19.1	5.4	69.1	1.3	1.6	0.3	1.9	1.3	632
Kagaari North Ward	Primary	20.4	6.2	62.2	0.3	2.4	5.8	0.2	2.5	5,993
Kagaari North Ward	Secondary+	23.2	8.0	45.5	0.6	2.1	16.5	0.1	3.9	4,813
Kyeni North West Ward	Total	23.0	13.0	49.4	0.6	1.4	8.3	0.1	3.9	
Kyeni North West										9,811
Ward Kyeni North West	None	22.9	9.5	55.8	2.0	1.4	0.5	2.5	5.4	559
Ward Kyeni North West	Primary	21.5	13.5	56.0	0.4	1.1	4.2	0.1	3.2	5,382
Ward	Secondary+	25.1	12.8	39.4	1.1	1.8	15.1	0.1	4.7	3,870
Kyeni South Ward	Total	20.6	8.4	48.2	0.6	7.6	11.5	0.6	2.6	11,986
Kyeni South Ward	None	20.6	7.2	52.8	1.8	11.2	0.6	3.9	2.0	545
Kyeni South Ward	Primary	19.5	9.0	53.9	0.4	8.0	6.6	0.5	2.1	7,084
Kyeni South Ward Mbeere South	Secondary+	22.4	7.6	38.5	0.6	6.4	20.7	0.3	3.4	4,357
Constituency Mbeere South	Total	23.8	12.3	41.1	0.8	6.5	8.3	0.4	6.9	49,170
Constituency Mbeere South	None	23.3	9.3	45.2	1.9	9.1	0.4	2.1	8.8	3,012
Constituency	Primary	23.0	12.3	44.0	0.7	6.9	5.7	0.4	7.0	30,964
Mbeere South Constituency	Secondary+	25.5	12.7	34.2	0.8	5.1	15.2	0.3	6.2	15,194
Mwea Ward	Total	23.1	12.7	42.4	0.6	7.4	7.2	0.5	6.0	11,220
Mwea Ward	None	20.9	10.4	47.2	1.3	9.9	0.2	2.0	8.2	598
Mwea Ward	Primary	23.3	12.0	45.5	0.6	7.7	4.5	0.4	6.1	7,109

Mwea Ward	Secondary+	23.2	14.7	35.2	0.7	6.5	14.1	0.3	5.5	3,513
Makima Ward	Total	26.0	9.1	37.1	1.1	7.2	11.6	0.5	7.4	7,684
Makima Ward	None	34.2	7.9	35.7	3.1	7.3	0.2	2.3	9.4	521
Makima Ward	Primary	26.1	9.4	39.0	1.0	8.0	8.7	0.4	7.5	5,334
Makima Ward	Secondary+	23.3	8.3	32.2	0.8	5.0	23.5	0.2	6.7	1,829
Mbeti South Ward	Total	25.1	12.5	41.3	0.9	5.1	7.4	0.3	7.4	12,579
Mbeti South Ward	None	24.0	9.8	46.1	2.4	6.8	0.4	1.7	8.8	696
Mbeti South Ward	Primary	23.8	13.3	43.5	0.7	5.6	5.0	0.3	7.7	7,593
Mbeti South Ward	Secondary+	27.7	11.4	36.6	1.0	3.8	12.9	0.3	6.5	4,290
Mavuria Ward	Total	23.5	15.0	38.3	0.6	7.2	8.8	0.5	6.1	12,853
Mavuria Ward	None	20.0	12.5	43.0	1.5	14.7	0.7	2.0	5.6	746
Mavuria Ward	Primary	22.0	15.3	42.4	0.5	7.4	5.9	0.5	6.0	7,693
Mavuria Ward	Secondary+	26.8	14.9	30.5	0.5	5.5	15.1	0.2	6.4	4,414
Kiambere Ward	Total	18.8	8.5	51.1	0.7	5.0	6.8	0.5	8.7	4,834
Kiambere Ward	None	18.2	3.3	55.9	1.3	4.7	0.2	2.4	14.0	451
Kiambere Ward	Primary	17.5	8.5	54.3	0.6	5.0	4.9	0.4	8.9	3,235
Kiambere Ward	Secondary+	22.5	10.5	40.2	0.6	5.1	14.7	0.2	6.3	1,148
Mbeere North Constituency	Total	18.9	10.7	55.4	0.4	4.4	6.4	0.3	3.5	31,693
Mbeere North Constituency	None	14.7	7.9	64.3	0.9	5.5	0.5	1.5	4.6	2,221
Mbeere North Constituency	Primary	16.0	10.5	60.4	0.2	4.7	4.5	0.3	3.4	20,105
Mbeere North Constituency	Secondary+	26.1	11.6	42.6	0.6	3.7	11.8	0.2	3.4	9,367
Nthawa Ward	Total	20.6	12.6	54.9	0.4	4.5	4.5	0.4	2.2	11,486
Nthawa Ward	None	14.8	7.5	64.7	1.3	5.3	1.3	2.0	3.1	453
Nthawa Ward	Primary	18.2	11.6	60.5	0.2	4.7	2.4	0.4	2.0	7,277
Nthawa Ward	Secondary+	25.9	14.9	43.0	0.6	4.0	8.8	0.3	2.5	3,756
Muminji Ward	Total	15.1	13.3	59.5	0.3	2.3	6.6	0.2	2.7	5,569
Muminji Ward	None	10.6	11.8	69.2	0.7	2.2	0.4	1.3	3.8	451
Muminji Ward	Primary	11.8	13.4	64.9	0.1	2.3	5.0	0.2	2.3	3,544
Muminji Ward	Secondary+	23.6	13.7	44.6	0.6	2.3	11.9	0.1	3.2	1,574
Evurore Ward	Total	19.1	8.2	54.2	0.4	5.2	7.8	0.3	4.8	14,638

	Evurore Ward	None	16.1	6.7	62.5	0.9	6.7	0.2	1.4	5.5	1,317
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	Evurore Ward	Primary	16.0	8.6	58.7	0.2	5.5	5.9	0.2	5.0	9,284
Ì											
	Evurore Ward	Secondary+	27.3	7.7	41.3	0.6	4.0	14.6	0.1	4.3	4,037

Table 6.6: Gini Coefficient by county Constituency and Ward

County/Constituency/Wards	Pop. Share	Mean	Consump. Share	Gini
Kenya	1	3,440	1	0.445
Rural	0.688	2,270	0.454	0.361
Urban	0.312	6,010	0.546	0.368
Embu County	0.014	3,330	0.013	0.379
Manyatta Constituency	0.004	4,590	0.0054	0.366
Ruguru-Ngandori	0.001	3,390	0.0007	0.269
Kithimu	0.001	2,950	0.0004	0.309
Nginda	0.001	3,300	0.0007	0.279
Mbeti North	0.001	6,290	0.0016	0.356
Kirimani	0.001	6,640	0.0016	0.311
Gaturi South	0.000	3,440	0.0004	0.278
Runyenjes Constituency	0.004	3,430	0.0038	0.309
Gaturi North	0.001	3,280	0.0006	0.274
Kagaari South	0.001	2,950	0.0005	0.299
Central	0.001	4,170	0.0008	0.352
Kagaari North	0.001	3,460	0.0007	0.276
Kyeni North West	0.001	3,730	0.0006	0.305
Kyeni South	0.001	3,020	0.0006	0.298
Mbeere South Constituency	0.003	2,450	0.0024	0.351
Mwea	0.001	2,560	0.0006	0.342
Makima	0.001	1,710	0.0003	0.300
Mbeti South	0.001	2,980	0.0007	0.340
Mavuria	0.001	2,670	0.0007	0.334
Kiambere	0.000	1,760	0.0002	0.320
Mbeere North Constituency	0.002	2,300	0.0016	0.376
Nthawa	0.001	3,240	0.0007	0.378
Muminji	0.000	1,840	0.0002	0.321
Evurore	0.001	1,920	0.0007	0.337

Table 6.7: Education by County, Constituency and Wards

County/Constituency /Wards	None	Primary	Secondary+	Total Pop
Kenya	25.2	52.0	22.8	34,024,396
Rural	29.5	54.7	15.9	23,314,262
Urban	15.8	46.2	38.0	10,710,134
Embu County	15.3	60.2	24.5	464,681
Manyatta Constituency	13.3	54.5	32.2	139,012



Ruguru-Ngandori	14.3	56.1	29.6	25,426
Kithimu	16.4	62.9	20.7	17,547
Nginda	14.4	63.8	21.8	26,200
Mbeti North	11.7	47.3	41.0	29,518
Kirimani	10.4	44.4	45.1	27,837
Gaturi South	14.1	59.8	26.1	12,484
Runyenjes Constituency	13.4	61.2	25.5	130,199
Gaturi North	14.7	59.6	25.8	22,438
Kagaari South	14.1	64.8	21.1	18,418
Central	11.9	60.9	27.1	21,446
Kagaari North	13.8	58.5	27.6	23,215
Kyeni North West	12.6	60.7	26.7	19,372
Kyeni South	13.2	62.8	24.0	25,310
Mbeere South Constituency	18.0	63.1	18.9	116,213
Mwea	18.1	62.6	19.4	27,046
Makima	18.6	67.2	14.2	18,830
Mbeti South	15.4	61.9	22.8	26,607
Mavuria	18.2	60.9	20.9	30,288
Kiambere	21.6	65.7	12.7	13,442
Mbeere North Constituency	18.2	64.2	17.6	79,257
Nthawa	14.3	64.2	21.6	24,049
Muminji	19.8	64.3	15.9	14,879
Evurore	19.9	64.1	15.9	40,329

Table 6.8: Education for Male and Female Headed Households by County, Constituency and Ward

County/Constituency/Wards	None	Primary	Secondary+	Total Pop	None	Primary	Secondary+	Total Pop
			Male				Female	
Kenya	23.5	51.8	24.7	16,819,031	26.8	52.2	21.0	17,205,365
Rural	27.7	54.9	17.4	11,472,394	31.2	54.4	14.4	11,841,868
Urban	14.4	45.2	40.4	5,346,637	17.2	47.2	35.6	5,363,497
Embu County	13.0	61.9	25.1	227,984	17.6	58.5	23.9	236,697
Manyatta Constituency	11.3	56.6	32.1	68,076	15.1	52.5	32.3	70,936
Ruguru-Ngandori	12.0	58.4	29.7	12,416	16.6	53.9	29.6	13,010
Kithimu	13.4	65.3	21.3	8,625	19.4	60.6	20.0	8,922
Nginda	11.7	66.0	22.3	12,899	17.0	61.7	21.3	13,301
Mbeti North	10.7	48.9	40.4	14,442	12.7	45.7	41.6	15,076
Kirimani	9.7	45.7	44.6	13,527	11.2	43.2	45.6	14,310
Gaturi South	11.1	63.0	25.9	6,167	17.0	56.7	26.3	6,317
Runyenjes Constituency	11.0	63.1	25.9	64,084	15.7	59.2	25.0	66,115

Gaturi North	12.2	61.9	25.9	10,919	17.0	57.3	25.7	11,519
Kagaari South	11.8	67.0	21.2	9,309	16.4	62.6	21.0	9,109
Central	9.5	63.2	27.3	10,525	14.3	58.8	27.0	10,921
Kagaari North	11.4	60.2	28.5	11,239	16.2	57.0	26.9	11,976
Kyeni North West	10.5	62.3	27.2	9,465	14.6	59.2	26.2	9,907
Kyeni South	10.6	64.5	24.9	12,627	15.9	61.2	23.0	12,683
Mbeere South Constituency	15.6	64.5	20.0	57,990	20.4	61.8	17.9	58,223
Mwea	15.7	63.7	20.6	13,236	20.4	61.4	18.2	13,810
Makima	16.7	67.6	15.7	9,484	20.4	66.9	12.5	9,346
	-							
Mbeti South	13.3	63.7	23.1	13,712	17.7	59.9	22.4	12,895
Mavuria	15.4	62.8	21.8	15,103	21.0	59.1	20.0	15,185
Kiambere	19.1	66.8	14.2	6,455	23.9	64.8	11.3	6,987
Mbeere North Constituency	15.5	65.5	19.0	37,834	20.6	63.0	16.4	41,423
Nthawa	12.0	65.6	22.3	12,102	16.5	62.8	20.8	11,947
Muminji	16.8	65.3	18.0	7,032	22.6	63.4	14.1	7,847
Evurore	17.3	65.5	17.2	18,700	22.2	63.0	14.9	21,629

Table 6.9: Cooking Fuel by County, Constituency and Wards

County/Constituency/Wards	Electricity	Paraffin	LPG	Biogas	Firewood	Charcoal	Solar	Other	Households
Kenya	0.8	11.7	5.1	0.7	64.4	17.0	0.1	0.3	8,493,380
Rural	0.2	1.4	0.6	0.3	90.3	7.1	0.1	0.1	5,239,879
Urban	1.8	28.3	12.3	1.4	22.7	32.8	0.0	0.6	3,253,501
Embu County	0.5	4.1	2.3	0.5	81.1	11.2	0.1	0.2	128,079
Manyatta Constituency	0.9	8.1	5.4	0.9	64.1	20.1	0.0	0.4	40,830
Ruguru-Ngandori	0.7	3.3	1.3	0.5	81.6	12.2	0.1	0.2	7,302
Kithimu	0.3	1.2	0.7	0.2	91.0	6.1	0.0	0.4	4,746
Nginda	0.2	1.1	0.8	0.4	90.5	6.9	0.1	0.1	7,120
Mbeti North	1.8	10.8	8.8	1.4	46.9	30.0	0.0	0.4	8,475
Kirimani	1.2	20.4	12.7	2.0	24.3	38.4	0.0	1.0	9,737
Gaturi South	1.0	1.3	0.9	0.3	89.5	6.8	0.1	0.0	3,450
Runyenjes Constituency	0.3	1.7	0.9	0.4	89.5	7.0	0.0	0.2	36,510

Gaturi North	0.3	1.5	0.7	0.4	86.9	9.7	0.0	0.4	6,302
Kagaari South	0.1	1.0	0.5	0.5	95.0	2.8	0.1	0.0	5,139
Central	0.5	3.3	1.8	0.4	80.7	12.9	0.1	0.2	6,195
Kagaari North	0.4	1.5	0.6	0.3	89.6	7.5	0.0	0.0	6,479
Kyeni North West	0.3	1.2	1.2	0.3	91.3	5.8	-	0.1	5,447
Kyeni South	0.1	1.6	0.4	0.3	94.3	3.1	0.0	0.1	6,948
Mbeere South Constituency	0.3	2.7	0.8	0.2	88.9	6.9	0.1	0.2	29,929
Mwea	0.1	5.2	1.2	0.2	85.2	7.5	0.1	0.4	7,303
Makima	_	0.9	0.4	0.1	95.1	3.1	0.1	0.3	4,876
Mbeti South	0.3	3.0	0.9	0.2	86.0	9.4	0.2	0.1	7,246
Mavuria	0.6	2.2	0.8	0.2	87.7	8.4	0.1	0.1	7,469
		0.2		0.2					
Kiambere	0.0		0.1		97.7	1.9	0.0	0.0	3,035
Mbeere North Constituency	0.5	2.1	1.0	0.4	88.7	7.1	0.1	0.1	20,810
Nthawa	0.2	3.8	2.1	0.3	84.8	8.5	0.1	0.2	6,730
Muminji	2.0	0.8	0.3	0.2	91.1	5.6	0.1	0.1	3,869
Evurore	0.2	1.6	0.5	0.5	90.4	6.7	0.1	0.1	10,211

Table 6.10: Cooking Fuel for Male Headed Households by County, Constituency and Wards

County/Constituency/Wards	Electricity	Paraffin	LPG	Biogas	Firewood	Charcoal	Solar	Other	Households
Kenya	0.9	13.5	5.3	0.8	61.4	17.7	0.1	0.4	5,762,320
Rural	0.2	1.6	0.6	0.3	89.6	7.5	0.1	0.1	3,413,616
Urban	1.9	30.9	12.0	1.4	20.4	32.5	0.0	0.7	2,348,704
Embu County	0.6	4.2	2.2	0.5	81.2	10.9	0.1	0.3	86,215
Manyatta Constituency	1.1	8.4	5.0	0.9	64.3	19.8	0.1	0.6	28,078
Ruguru-Ngandori	0.8	3.6	1.0	0.6	81.6	12.0	0.1	0.3	4,985
Kithimu	0.4	1.3	0.7	0.2	90.2	6.5	0.1	0.7	3,174
Nginda	0.3	1.2	0.9	0.4	90.8	6.2	0.1	0.1	5,058
Mbeti North	1.9	10.9	8.4	1.2	47.3	29.7	0.0	0.5	5,908
Kirimani	1.4	21.3	11.8	1.8	24.0	38.4	0.0	1.3	6,528
Gaturi South	1.3	1.4	0.8	0.3	89.0	7.0	0.1	0.0	2,425
Runyenjes Constituency	0.3	1.7	0.8	0.4	90.0	6.6	0.1	0.2	25,528
Gaturi North	0.3	1.5	0.8	0.6	87.0	9.3	0.0	0.5	4,308
Kagaari South	0.2	0.8	0.5	0.4	95.1	2.9	0.1	0.0	3,634
Central	0.6	3.4	1.7	0.4	81.3	12.3	0.2	0.3	4,285
Kagaari North	0.4	1.4	0.7	0.3	90.4	6.7	0.0	0.0	4,539
Kyeni North West	0.4	1.1	0.8	0.3	92.1	5.2	0.0	0.1	3,922
Kyeni South	0.1	1.7	0.5	0.4	94.3	2.9	0.0	0.2	4,840
Mbeere South Constituency	0.3	2.7	0.7	0.2	89.6	6.2	0.1	0.2	19,686

Mwea	0.1	5.7	1.1	0.3	85.3	6.9	0.1	0.5	4,606
Makima	0.0	1.0	0.4	0.1	95.2	2.8	0.1	0.4	3,243
Mbeti South	0.3	2.7	0.7	0.1	88.4	7.5	0.1	0.1	5,079
Mavuria	0.6	2.0	0.9	0.2	88.3	7.9	0.1	0.1	4,911
Kiambere	0.0	0.1	0.0	0.1	97.6	2.2	0.0	0.1	1,847
Mbeere North Constituency	0.7	2.6	0.9	0.4	88.1	7.2	0.1	0.2	12,923
Nthawa	0.2	3.8	1.6	0.3	86.1	7.6	0.1	0.3	4,750
Muminji	2.7	1.0	0.3	0.2	89.7	5.9	0.1	0.1	2,349
Evurore	0.2	2.2	0.6	0.5	89.0	7.3	0.1	0.2	5,824

Table 6.11: Cooking Fuel for Female Headed Households by County, Constituency and Wards

County/Constituency/Wards	Electricity	Paraffin	LPG	Biogas	Firewood	Charcoal	Solar	Other	Households
Kenya	0.6	7.9	4.6	0.7	70.6	15.5	0.0	0.1	2,731,060
Rural	0.1	1.0	0.5	0.3	91.5	6.5	0.0	0.1	1,826,263
Urban	1.6	21.7	13.0	1.5	28.5	33.6	0.0	0.3	904,797
Embu County	0.4	3.7	2.6	0.5	80.9	11.7	0.1	0.1	41,864
Manyatta Constituency	0.6	7.6	6.2	1.0	63.7	20.7	0.0	0.1	12,752
Ruguru-Ngandori	0.4	2.8	2.0	0.3	81.7	12.8	-	0.1	2,317
Kithimu	-	1.1	0.7	0.1	92.8	5.3	-	-	1,572
Nginda	-	0.8	0.7	0.2	89.7	8.4	0.0	0.0	2,062
Mbeti North	1.5	10.4	9.5	1.7	46.0	30.7	-	0.0	2,567
Kirimani	0.9	18.6	14.5	2.3	25.1	38.3	0.0	0.3	3,209
Gaturi South	0.4	1.1	1.1	0.1	90.7	6.4	0.2	-	1,025
Runyenjes Constituency	0.2	1.8	1.0	0.3	88.5	8.1	0.0	0.1	10,982
Gaturi North	0.2	1.5	0.6	0.2	86.7	10.5	0.1	0.2	1,994
Kagaari South	-	1.5	0.5	0.6	94.8	2.6	0.1	-	1,505
Central	0.4	3.0	2.0	0.5	79.5	14.4	-	0.2	1,910
Kagaari North	0.5	1.9	0.6	0.3	87.5	9.3	-	-	1,940
Kyeni North West	0.1	1.2	2.1	0.3	89.0	7.3	-	0.1	1,525
Kyeni South	0.1	1.5	0.4	0.1	94.4	3.5	-	0.0	2,108
Mbeere South Constituency	0.2	2.7	0.9	0.2	87.6	8.2	0.1	0.1	10,243
Mwea	0.1	4.3	1.5	0.2	85.2	8.4	0.1	0.1	2,697
Makima	-	0.7	0.3	0.1	95.0	3.7	0.1	0.1	1,633
Mbeti South	0.3	3.6	1.5	0.3	80.3	13.8	0.2	0.0	2,167

Mavuria	0.5	2.6	0.6	0.1	86.7	9.4	0.0	0.1	2,558
Kiambere	0.1	0.3	0.2	-	98.0	1.4	0.1	-	1,188
Mbeere North Constituency	0.3	1.5	1.0	0.3	89.8	7.0	0.1	0.1	7,887
Nthawa	0.1	3.7	3.1	0.3	81.7	10.7	0.2	0.2	1,980
Muminji	0.8	0.5	0.2	0.1	93.2	5.1	0.1	-	1,520
Evurore	0.1	0.8	0.4	0.4	92.2	5.9	0.1	0.0	4,387

Table 6.12: Lighting Fuel by County, Constituency and Wards

County/Constituency/Wards	Electricity	Pressure Lamp	Lantern	Tin Lamp	Gas Lamp	Fuelwood	Solar	Other	Households
Kenya	22.9	0.6	30.6	38.5	0.9	4.3	1.6	0.6	5,762,320
Rural	5.2	0.4	34.7	49.0	1.0	6.7	2.2	0.7	3,413,616
Urban	51.4	0.8	23.9	21.6	0.6	0.4	0.7	0.6	2,348,704
Embu County	14.3	0.8	35.6	44.0	0.6	0.9	3.4	0.5	86,215
Manyatta Constituency	28.6	0.8	29.1	37.9	0.6	0.5	2.2	0.3	28,078
Ruguru-Ngandori	16.9	0.7	40.9	36.6	0.5	1.2	3.0	0.2	4,985
Kithimu	7.1	0.1	23.1	65.5	0.4	0.2	3.4	0.1	3,174
Nginda	6.4	0.9	28.2	60.4	0.6	0.5	2.7	0.1	5,058
Mbeti North	44.9	1.1	25.7	24.7	1.0	0.3	1.8	0.5	5,908
Kirimani	56.4	0.9	22.5	18.1	0.2	0.2	1.0	0.7	6,528
Gaturi South	10.3	0.3	41.0	43.8	0.9	0.8	2.8	0.1	2,425
Runyenjes Constituency	11.1	1.0	39.1	44.2	0.6	0.6	3.3	0.2	25,528
Gaturi North	13.5	1.3	38.8	42.2	1.0	0.3	2.6	0.3	4,308
Kagaari South	5.4	0.1	26.6	64.2	0.5	0.3	2.9	0.1	3,634
Central	16.4	2.3	35.1	41.7	0.5	1.2	2.6	0.1	4,285
Kagaari North	11.4	1.0	43.4	38.4	0.5	0.9	4.3	0.1	4,539
Kyeni North West	12.7	0.4	48.3	33.9	0.6	0.3	3.7	0.1	3,922
Kyeni South	6.6	0.7	41.0	46.8	0.4	0.4	3.8	0.3	4,840
Mbeere South Constituency	4.3	0.4	41.3	46.6	0.6	1.0	5.2	0.5	19,686
Mwea	7.5	0.2	39.7	46.8	0.8	0.2	4.4	0.3	4,606
Makima	0.4	1.0	36.1	57.4	0.6	0.6	3.3	0.8	3,243
Mbeti South	3.8	0.3	47.7	40.6	0.3	0.6	6.4	0.4	5,079
Mavuria	6.1	0.3	42.7	42.6	0.4	0.9	6.7	0.4	4,911
Kiambere	0.1	0.6	35.0	53.4	1.4	5.0	3.6	0.9	1,847
Mbeere North Constituency	5.9	0.8	34.1	51.9	0.7	1.8	3.5	1.3	12,923
Nthawa	8.8	1.7	30.5	52.5	0.8	0.5	4.3	0.8	4,750
Muminji	3.1	0.1	34.9	51.3	1.0	3.3	4.4	2.0	2,349
Evurore	5.0	0.4	36.1	51.8	0.5	2.1	2.6	1.4	5,824

Table 6.13: Lighting Fuel for Male Headed Households by County, Constituency and Wards

County/Constituency/ Wards	Electricity	Pressure Lamp	Lantern	Tin Lamp	Gas Lamp	Fuelwood	Solar	Other	Households
Kenya	24.6	0.6	30.4	36.8	0.9	4.2	1.7	0.7	5,762,320
Rural	5.6	0.5	35.3	47.5	1.1	6.8	2.4	0.7	3,413,616
Urban	52.4	0.9	23.3	21.2	0.6	0.4	0.7	0.7	2,348,704
Embu County	14.4	0.8	36.1	43.1	0.6	0.8	3.8	0.5	86,215
Manyatta Constituency	28.4	0.8	29.8	37.0	0.6	0.5	2.5	0.4	28,078
Ruguru-Ngandori	17.1	0.9	42.0	34.9	0.5	1.2	3.3	0.3	4,985
Kithimu	7.6	0.2	24.5	63.4	0.4	0.2	3.6	0.2	3,174
Nginda	6.5	0.9	28.9	59.2	0.6	0.5	3.1	0.1	5,058
Mbeti North	44.2	1.1	26.5	24.4	0.9	0.3	2.0	0.5	5,908
Kirimani	56.1	1.0	22.4	18.1	0.3	0.2	1.1	0.9	6,528
Gaturi South	11.3	0.2	41.7	41.9	0.8	0.8	3.2	0.0	2,425
Runyenjes Constituency	10.9	1.0	39.9	43.1	0.6	0.5	3.7	0.1	25,528
Gaturi North	13.5	1.3	39.9	40.8	0.9	0.3	2.9	0.3	4,308
Kagaari South	5.5	0.1	27.1	63.2	0.6	0.4	3.1	0.1	3,634
Central	16.6	2.6	35.5	40.5	0.4	1.2	3.0	0.1	4,285
Kagaari North	11.4	1.0	44.8	36.5	0.5	0.7	5.0	0.1	4,539
Kyeni North West	11.8	0.4	49.4	33.3	0.7	0.2	4.1	0.1	3,922
Kyeni South	6.7	0.7	41.1	46.5	0.4	0.4	4.0	0.2	4,840
Mbeere South Constituency	4.2	0.4	41.5	46.2	0.6	0.9	5.5	0.6	19,686
Mwea	7.8	0.3	39.3	47.0	0.8	0.2	4.3	0.3	4,606
Makima	0.4	1.0	35.8	57.2	0.6	0.6	3.4	0.9	3,243
Mbeti South	3.3	0.3	48.0	40.7	0.3	0.5	6.3	0.5	5,079
Mavuria	5.9	0.3	42.8	41.7	0.4	0.8	7.7	0.5	4,911
Kiambere	0.0	0.5	35.4	52.4	1.6	4.9	4.0	1.4	1,847
Mbeere North Constituency	6.5	1.0	33.7	51.3	0.7	1.5	3.8	1.4	12,923
Nthawa	8.1	1.9	31.4	51.9	0.7	0.5	4.6	0.9	4,750
Muminji	4.1	0.1	34.5	51.1	1.0	2.8	4.3	2.1	2,349
Evurore	6.1	0.6	35.3	51.0	0.5	1.9	3.0	1.6	5,824

Table 6.14: Lighting Fuel for Female Headed Households by County, Constituency and Wards

County/Constituency/ Wards	Electricity	Pressure Lamp	Lantern	Tin Lamp	Gas Lamp	Fuelwood	Solar	Other	Households
Kenya	19.2	0.5	31.0	42.1	0.8	4.5	1.4	0.5	2,731,060
Rural	4.5	0.4	33.7	51.8	0.8	6.5	1.8	0.5	1,826,263
Urban	48.8	0.8	25.4	22.6	0.7	0.6	0.6	0.5	904,797
Embu County	13.9	0.6	34.7	45.9	0.6	1.1	2.8	0.4	41,864
Manyatta Constituency	29.2	0.7	27.4	39.8	0.6	0.5	1.6	0.2	12,752
Ruguru-Ngandori	16.7	0.4	38.5	40.5	0.5	1.3	2.2	-	2,317
Kithimu	6.2	0.1	20.4	69.8	0.3	0.3	2.9	-	1,572
Nginda	6.2	1.0	26.4	63.5	0.6	0.6	1.5	0.2	2,062
Mbeti North	46.6	1.1	24.0	25.4	1.1	0.3	1.2	0.4	2,567
Kirimani	57.1	0.8	22.5	18.1	0.2	0.2	0.8	0.3	3,209
Gaturi South	8.1	0.3	39.5	48.2	1.1	0.9	1.9	0.1	1,025
Runyenjes Constituency	11.3	0.9	37.3	46.6	0.6	0.7	2.4	0.2	10,982

Gaturi North	13.5	1.3	36.5	45.3	1.0	0.3	1.9	0.3	1,994
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Kagaari South	5.1	0.1	25.2	66.6	0.3	0.3	2.3	0.2	1,505
Central	16.1	1.7	34.2	44.6	0.7	1.2	1.5	-	1,910
Kagaari North	11.3	1.1	40.2	42.7	0.6	1.3	2.7	0.1	1,940
Kyeni North West	15.3	0.3	45.5	35.2	0.5	0.5	2.6	0.2	1,525
Kyeni South	6.5	0.7	40.6	47.5	0.6	0.6	3.3	0.3	2,108
Mbeere South Constituency	4.5	0.4	40.9	47.4	0.6	1.1	4.6	0.3	10,243
Mwea	7.0	0.1	40.3	46.5	0.9	0.1	4.7	0.4	2,697
Makima	0.4	1.0	36.5	57.7	0.4	0.6	2.9	0.6	1,633
Mbeti South	4.8	0.3	46.8	40.2	0.3	0.8	6.6	0.3	2,167
Mavuria	6.5	0.4	42.5	44.3	0.4	1.1	4.8	0.1	2,558
Kiambere	0.2	0.8	34.4	55.1	1.3	5.1	2.9	0.2	1,188
Mbeere North Constituency	4.9	0.5	34.7	52.9	0.6	2.3	3.0	1.2	7,887
Nthawa	10.6	1.5	28.4	53.9	0.8	0.8	3.5	0.5	1,980
Muminji	1.5	-	35.4	51.7	1.0	4.1	4.6	1.7	1,520
Evurore	3.5	0.2	37.2	52.8	0.4	2.4	2.2	1.3	4,387

Table 6:15: Main material of the Floor by County, Constituency and Wards

County/Constituency/ wards	Cement	Tiles	Wood	Earth	Other	Households
Kenya	41.2	1.6	0.7	56.0	0.5	8,493,380
Rural	22.1	0.3	0.7	76.5	0.4	5,239,879
Urban	71.8	3.5	0.9	23.0	0.8	3,253,501
Embu County	39.9	0.5	0.5	58.6	0.5	128,079
Manyatta Constituency	54.9	0.7	0.6	43.2	0.7	40,830
Ruguru-Ngandori	44.7	0.4	0.8	53.9	0.3	7,302
Kithimu	30.7	0.2	0.3	65.1	3.7	4,746
Nginda	29.5	0.3	1.3	68.6	0.3	7,120
Mbeti North	73.0	1.6	0.2	25.2	0.1	8,475
Kirimani	81.6	1.1	0.4	16.7	0.2	9,737
Gaturi South	42.0	0.2	0.2	56.8	0.7	3,450
Runyenjes Constituency	35.9	0.3	0.6	62.2	0.9	36,510
Gaturi North	35.4	0.3	0.5	61.3	2.5	6,302
Kagaari South	28.2	0.2	0.4	71.1	0.1	5,139
Central	43.8	0.5	0.5	54.9	0.2	6,195
Kagaari North	36.3	0.2	0.7	61.7	1.2	6,479
Kyeni North West	38.6	0.2	1.4	59.5	0.3	5,447
Kyeni South	32.7	0.5	0.4	65.7	0.7	6,948
Mbeere South Constituency	32.7	0.4	0.4	66.4	0.1	29,929
Mwea	33.6	0.5	0.1	65.6	0.2	7,303
Makima	11.9	0.2	0.2	87.6	0.1	4,876
Mbeti South	41.9	0.4	0.2	57.5	0.0	7,246
Mavuria	42.7	0.6	0.2	56.5	0.1	7,469
Kiambere	17.1	0.3	2.2	79.9	0.5	3,035
Mbeere North Constituency	27.7	0.4	0.3	71.5	0.1	20,810
Nthawa	39.5	0.3	0.1	60.0	0.1	6,730

Muminji	23.5	1.1	0.3	75.0	0.1	3,869
Evurore	21.4	0.2	0.4	77.8	0.1	10,211

Table 6.16: Main Material of the Floor in Male and Female Headed Households by County, Constituency and Ward

County/Constituency/ wards	Ce- ment	Tiles	Wood	Earth	Other	House- holds	Ce- ment	Tiles	Wood	Earth	Other	Households
			М	ale						Female		
Kenya	42.8	1.6	0.8	54.2	0.6	5,762,320	37.7	1.4	0.7	59.8	0.5	2,731,060
Rural	22.1	0.3	0.7	76.4	0.4	3,413,616	22.2	0.3	0.6	76.6	0.3	1,826,263
Urban	72.9	3.5	0.9	21.9	0.8	2,348,704	69.0	3.6	0.9	25.8	0.8	904,797
Embu County	39.8	0.5	0.5	58.8	0.4	86,215	40.0	0.5	0.5	58.4	0.6	41,864
Manyatta Constituency	54.3	0.8	0.5	43.8	0.6	28,078	56.1	0.7	0.6	41.8	0.8	12,752
Ruguru-Ngandori	44.4	0.4	0.8	54.1	0.3	4,985	45.2	0.4	0.8	53.5	0.1	2,317
Kithimu	31.1	0.2	0.3	65.5	3.0	3,174	29.9	0.2	0.4	64.4	5.2	1,572
Nginda	29.1	0.3	1.2	69.1	0.3	5,058	30.4	0.3	1.6	67.4	0.3	2,062
Mbeti North	72.1	1.5	0.3	26.0	0.1	5,908	74.9	1.6	0.1	23.3	0.1	2,567
Kirimani	80.9	1.2	0.4	17.3	0.2	6,528	83.1	0.9	0.3	15.6	0.1	3,209
Gaturi South	42.4	0.2	0.2	56.5	0.7	2,425	41.0	0.3	0.3	57.6	0.9	1,025
Runyenjes Constit- uency	35.8	0.3	0.6	62.6	0.7	25,528	36.4	0.3	0.7	61.4	1.2	10,982
Gaturi North	35.8	0.3	0.5	61.2	2.2	4,308	34.5	0.4	0.6	61.3	3.3	1,994
Kagaari South	27.7	0.2	0.4	71.7	0.1	3,634	29.4	0.2	0.5	69.6	0.3	1,505
Central	43.9	0.6	0.4	54.9	0.2	4,285	43.7	0.5	0.7	55.0	0.2	1,910
Kagaari North	36.3	0.2	0.7	61.9	0.9	4,539	36.2	0.2	0.6	61.3	1.8	1,940
Kyeni North West	38.6	0.2	1.3	59.7	0.3	3,922	38.8	0.2	1.8	58.8	0.4	1,525
Kyeni South	31.8	0.5	0.4	66.7	0.6	4,840	34.8	0.4	0.5	63.5	0.8	2,108
Mbeere South Con- stituency	31.7	0.4	0.4	67.4	0.1	19,686	34.5	0.4	0.4	64.5	0.2	10,243
Mwea	31.8	0.5	0.2	67.4	0.1	4,606	36.6	0.5	0.1	62.5	0.3	2,697
Makima	10.7	0.1	0.2	88.8	0.1	3,243	14.3	0.2	0.1	85.2	0.1	1,633
Mbeti South	39.7	0.4	0.2	59.7	0.1	5,079	47.1	0.4	0.2	52.3	-	2,167
Mavuria	42.7	0.5	0.1	56.5	0.1	4,911	42.6	0.7	0.3	56.3	0.1	2,558
Kiambere	17.4	0.3	2.2	79.8	0.3	1,847	16.8	0.3	2.2	80.1	0.7	1,188
Mbeere North Constituency	28.7	0.5	0.3	70.4	0.1	12,923	26.1	0.3	0.3	73.3	0.1	7,887
Nthawa	39.2	0.3	0.1	60.2	0.1	4,750	40.3	0.3	0.1	59.4	-	1,980

Muminji	23.0	1.5	0.3	75.1	0.1	2,349	24.3	0.6	0.3	74.8	0.1	1,520
Evurore	22.3	0.3	0.4	76.9	0.1	5,824	20.3	0.2	0.3	79.1	0.1	4,387

Table 6.17: Main Roofing Material by County Constituency and Wards

County/Constituency/ Wards	Corrugated Iron Sheets	Tiles	Concrete	Asbestos sheets	Grass	Makuti	Tin	Mud/Dung	Other	Households
Kenya	73.5	2.2	3.6	2.2	13.3	3.2	0.3	0.8	1.0	8,493,380
Rural	70.3	0.7	0.2	1.8	20.2	4.2	0.2	1.2	1.1	5,239,879
Urban	78.5	4.6	9.1	2.9	2.1	1.5	0.3	0.1	0.9	3,253,501
Embu County	92.2	1.0	0.5	2.3	3.3	0.1	0.1	0.0	0.4	128,079
Manyatta Constituency	94.3	1.6	1.2	2.0	0.1	0.1	0.0	0.0	0.5	40,830
Ruguru-Ngandori	96.2	8.0	0.0	2.8	0.1	0.0	0.0	0.0	0.0	7,302
Kithimu	92.5	0.9	0.1	2.1	0.7	0.1	0.0	0.0	3.6	4,746
Nginda	96.5	0.9	0.1	2.3	0.1	0.0	0.0	0.1	0.1	7,120
Mbeti North	93.5	3.2	1.1	1.8	0.1	0.1	0.0	0.0	0.1	8,475
Kirimani	92.8	2.0	3.9	1.1	0.0	0.0	0.1	0.0	0.1	9,737
Gaturi South	94.7	1.0	0.0	3.4	0.1	0.1	0.0	0.1	0.6	3,450
Runyenjes Constituency	95.5	0.7	0.1	2.1	0.5	0.1	0.3	0.1	0.8	36,510
Gaturi North	95.5	0.4	0.0	0.3	0.0	0.0	1.4	0.0	2.4	6,302
Kagaari South	90.5	0.4	0.0	7.2	1.6	0.2	0.1	0.0	0.1	5,139
Central	98.0	0.7	0.2	0.5	0.1	0.0	0.0	0.3	0.1	6,195
Kagaari North	96.0	0.5	0.0	2.2	0.1	0.0	0.0	0.1	1.1	6,479
Kyeni North West	98.1	1.1	0.0	0.3	0.2	0.1	0.0	0.0	0.1	5,447
Kyeni South	94.6	0.9	0.1	2.6	0.9	0.1	0.1	0.0	0.7	6,948
Mbeere South Constituency	87.0	0.8	0.2	3.2	8.3	0.3	0.1	0.0	0.1	29,929
Mwea	90.4	1.3	0.5	1.6	6.0	0.1	0.0	0.0	0.0	7,303
Makima	71.1	0.6	0.1	1.3	26.3	0.5	0.1	0.0	0.0	4,876
Mbeti South	90.4	0.8	0.1	6.2	2.2	0.2	0.0	0.0	0.1	7,246
Mavuria	91.5	0.5	0.2	3.6	3.6	0.4	0.1	0.0	0.1	7,469
Kiambere	85.0	1.0	0.2	1.6	11.4	0.3	0.1	0.0	0.4	3,035
Mbeere North Constituency	89.9	0.6	0.1	1.7	7.5	0.1	0.0	0.0	0.0	20,810
Nthawa	95.9	1.0	0.2	0.4	2.2	0.3	0.0	0.0	0.0	6,730
Muminji	89.0	0.3	0.0	0.5	10.0	0.1	0.0	0.0	0.0	3,869
Evurore	86.3	0.4	0.0	3.1	10.0	0.1	0.0	0.0	0.1	10,211

Table 6.18: Main Roofing Material in Male Headed Households by County, Constituency and Wards

County/Constit- uency/	Corrugated Iron Sheets	Tiles	Concrete	Asbestos sheets	Grass	Makuti	Tin	Mud/ Dung	Other	House- holds
Wards										
Kenya	73.0	2.3	3.9	2.3	13.5	3.2	0.3	0.5	1.0	5,762,320
Rural	69.2	0.8	0.2	1.8	21.5	4.4	0.2	0.9	1.1	3,413,616
Urban	78.5	4.6	9.3	2.9	2.0	1.4	0.3	0.1	0.9	2,348,704

Embu County	92.5	1.1	0.5	2.2	3.1	0.1	0.1	0.0	0.4	86,215
Manyatta Con- stituency	94.3	1.8	1.1	2.1	0.2	0.0	0.1	0.0	0.4	28,078
Ruguru-Ngandori	95.6	1.0	0.1	3.1	0.1	0.1	0.0	0.0	0.0	4,985
Kithimu	93.1	1.0	0.2	2.0	0.8	0.1	0.1	-	2.8	3,174
Nginda	96.8	0.8	0.0	2.2	0.1	-	0.1	0.0	0.1	5,058
Mbeti North	93.1	3.6	1.0	2.0	0.1	0.1	0.0	0.0	0.1	5,908
Kirimani	92.9	2.1	3.8	0.9	0.0	0.0	0.1	0.0	0.1	6,528
Gaturi South	94.5	1.2	0.0	3.3	0.1	0.0	0.0	0.2	0.5	2,425
Runyenjes Constituency	95.6	0.7	0.0	2.1	0.4	0.1	0.3	0.1	0.6	25,528
Gaturi North	95.8	0.4	0.0	0.3	-	0.0	1.3	-	2.1	4,308
Kagaari South	90.6	0.5	-	7.3	1.4	0.1	0.0	-	0.1	3,634
Central	97.9	0.7	0.1	0.5	0.2	0.1	0.0	0.2	0.2	4,285
Kagaari North	96.2	0.6	0.0	2.3	0.1	-	-	0.1	0.7	4,539
Kyeni North West	98.2	1.1	-	0.4	0.2	0.1	-	0.1	-	3,922
Kyeni South	94.7	1.0	0.1	2.6	0.8	0.2	0.1	-	0.6	4,840
Mbeere South Constituency	87.4	0.9	0.2	3.0	7.9	0.4	0.1	0.0	0.1	19,686
Mwea	90.1	1.3	0.6	1.7	6.0	0.2	0.0	0.0	0.0	4,606
Makima	71.8	0.7	0.1	1.2	25.3	0.7	0.2	-	0.1	3,243
Mbeti South	91.5	0.7	0.1	5.3	2.1	0.2	0.1	0.0	0.1	5,079
Mavuria	92.1	0.6	0.1	3.5	3.0	0.5	0.0	0.0	0.1	4,911
Kiambere	84.5	1.1	0.3	1.8	11.5	0.3	0.2	-	0.4	1,847
Mbeere North Constituency	90.4	0.6	0.1	1.7	7.1	0.1	0.0	0.0	0.0	12,923
Nthawa	96.3	0.9	0.2	0.5	1.9	0.1	0.0	-	-	4,750
Muminji	88.7	0.3	-	0.6	10.2	0.1	-	0.0	0.0	2,349
Evurore	86.3	0.4	0.1	3.1	10.1	0.1	0.0	0.0	0.0	5,824

Table 6.19: Main Roofing Material in Female Headed Households by County, Constituency and Wards

County/Constituency/ Wards	Corrugated Iron Sheets	Tiles	Concrete	Asbestos sheets	Grass	Makuti	Tin	Mud/ Dung	Other	House- holds
Kenya	74.5	2.0	3.0	2.2	12.7	3.2	0.3	1.2	1.0	2,731,060
Rural	72.5	0.7	0.1	1.8	17.8	3.9	0.3	1.8	1.1	1,826,263



Urban	78.6	4.5	8.7	2.9	2.3	1.6	0.3	0.1	0.9	904,797
Embu County	91.6	0.9	0.5	2.3	3.9	0.1	0.1	0.0	0.5	41,864
Manyatta Constituency	94.4	1.3	1.4	2.0	0.1	0.1	0.0	0.0	0.7	12,752
Ruguru-Ngandori	97.5	0.4	-	2.0	0.0	-	-	-	-	2,317
Kithimu	91.3	0.5	0.1	2.5	0.4	0.1	-	-	5.1	1,572
Nginda	95.6	1.2	0.1	2.5	0.1	0.1	-	0.2	0.1	2,062
Mbeti North	94.5	2.5	1.3	1.4	0.1	0.2	-	-	-	2,567
Kirimani	92.5	1.8	4.3	1.4	-	-	0.0	-	0.0	3,209
Gaturi South	95.0	0.4	-	3.5	-	0.2	-	-	0.9	1,025
Runyenjes Constit- uency	95.2	0.6	0.1	1.9	0.6	0.1	0.3	0.1	1.1	10,982
Gaturi North	94.7	0.4	0.1	0.2	-	0.1	1.6	0.1	3.1	1,994
Kagaari South	90.3	0.3	-	6.8	1.9	0.3	0.1	-	0.2	1,505
Central	98.2	0.5	0.4	0.4	0.1	-	-	0.4	0.1	1,910
Kagaari North	95.5	0.4	0.1	2.1	0.1	0.1	-	-	1.8	1,940
Kyeni North West	97.9	1.1	0.1	0.1	0.3	0.2	0.1	-	0.2	1,525
Kyeni South	94.3	0.9	-	2.7	1.2	0.1	-	-	0.9	2,108
Mbeere South Constituency	86.2	0.8	0.2	3.5	9.0	0.2	0.1	0.0	0.1	10,243
Mwea	91.0	1.1	0.4	1.4	5.9	0.0	0.0	0.0	-	2,697
Makima	69.6	0.3	0.1	1.3	28.3	0.2	0.1	-	-	1,633
Mbeti South	87.8	1.0	0.2	8.4	2.3	0.2	-	-	0.1	2,167
Mavuria	90.4	0.5	0.3	3.8	4.6	0.1	0.1	-	0.1	2,558
Kiambere	85.8	0.8	-	1.3	11.4	0.3	-	-	0.5	1,188
Mbeere North Constituency	89.0	0.6	0.1	1.9	8.1	0.2	0.0	0.0	0.1	7,887
Nthawa	94.8	1.2	0.2	0.3	2.9	0.5	-	0.1	0.1	1,980
Muminji	89.6	0.2	0.1	0.3	9.7	-	0.1	-	-	1,520
Evurore	86.3	0.5	0.0	3.1	9.9	0.1	0.0	-	0.1	4,387

Table 6:20: Main material of the wall by County, Constituency and Wards

County/Constituency/ Wards	Stone	Brick/ Block	Mud/ Wood	Mud /Cement	Wood only	Corrugat- ed Iron Sheets	Grass /Reeds	Tin	Other	Households
Kenya	16.7	16.9	36.5	7.7	11.1	6.7	3.0	0.3	1.2	8,493,380
Rural	5.7	13.8	50.0	7.6	14.4	2.5	4.4	0.3	1.4	5,239,879

Urban	34.5	21.9	14.8	7.8	5.8	13.3	0.8	0.3	0.9	3,253,501
Embu County	16.2	21.5	28.8	3.0	25.3	1.9	0.4	0.1	2.9	128,079
Manyatta Constituency	28.6	7.1	12.6	1.8	43.6	3.9	0.0	0.1	2.3	40,830
Ruguru-Ngandori	16.0	2.9	7.3	0.9	71.7	0.5	0.0	0.1	0.5	7,302
Kithimu	9.9	23.5	30.8	4.2	17.4	1.0	0.1	0.1	13.0	4,746
Nginda	9.5	1.8	9.3	1.1	77.7	0.4	0.0	0.0	0.2	7,120
Mbeti North	43.5	10.1	9.5	1.1	27.6	6.0	0.0	0.0	2.1	8,475
Kirimani	53.0	3.7	6.4	2.6	23.7	9.7	0.0	0.2	0.6	9,737
Gaturi South	15.0	6.1	30.4	1.2	45.9	0.6	0.1	0.1	0.6	3,450
Runyenjes Constituency	10.0	16.3	25.6	1.6	37.9	0.9	0.1	0.1	7.5	36,510
Gaturi North	10.1	7.0	27.8	2.7	47.7	0.4	0.0	0.1	4.3	6,302
Kagaari South	7.4	27.9	45.7	2.0	14.0	1.1	0.1	0.1	1.8	5,139
Central	16.5	10.4	18.0	1.1	30.6	2.3	0.2	0.2	20.8	6,195
Kagaari North	11.5	3.6	10.2	1.0	72.0	0.3	0.0	0.0	1.5	6,479
Kyeni North West	9.1	9.0	25.0	1.2	49.9	0.6	0.1	0.0	5.2	5,447
Kyeni South	5.5	39.2	30.5	1.4	12.3	0.6	0.1	0.1	10.3	6,948
Mbeere South Constituency	12.2	39.7	38.2	5.8	1.6	1.3	1.2	0.1	0.1	29,929
Mwea	15.2	66.1	12.7	2.5	1.0	2.0	0.4	0.1	0.1	7,303
Makima	3.9	43.9	41.9	2.3	1.2	1.2	5.6	0.0	0.1	4,876
Mbeti South	18.6	26.9	43.4	6.3	3.0	1.6	0.2	0.1	0.1	7,246
Mavuria	12.3	30.4	44.8	10.8	0.6	0.7	0.2	0.1	0.1	7,469
Kiambere	2.5	22.7	64.9	6.1	2.7	0.2	0.6	0.0	0.2	3,035
Mbeere North Constituency	8.5	32.8	52.8	3.8	1.1	0.7	0.3	0.0	0.1	20,810
Nthawa	17.9	55.0	23.1	1.6	1.2	1.0	0.1	0.1	0.0	6,730
Muminji	4.6	24.7	62.7	6.0	0.9	0.2	0.8	0.0	0.1	3,869
Evurore	3.8	21.2	68.7	4.3	1.0	0.6	0.2	0.0	0.1	10,211

Table 6.21: Main Material of the Wall in Male Headed Households by County, Constituency and Ward

County/ Constituency/ Wards	Stone	Brick/	Mud/	Mud/	Wood only	Corrugated	Grass	Tin	Other	Households
County/ Constituency/ Wards	Storie	Block	Wood	Cement	vvood only	Iron Sheets	/Reeds	1111	Other	nousenoius
Kenya	17.5	16.6	34.7	7.6	11.4	7.4	3.4	0.3	1.2	5,762,320
Rural	5.8	13.1	48.9	7.3	15.4	2.6	5.2	0.3	1.4	3,413,616
Urban	34.6	21.6	14.0	7.9	5.6	14.4	0.7	0.3	0.9	2,348,704



Embu County	15.8	22.0	27.6	2.8	26.6	1.9	0.4	0.1	2.8	86,215
Manyatta Constituency	27.8	7.4	12.4	1.7	44.6	3.8	0.1	0.1	2.1	28,078
Ruguru-Ngandori	15.4	3.0	7.4	0.9	72.2	0.4	0.0	0.1	0.5	4,985
Kithimu	10.5	25.0	30.6	4.1	17.1	0.9	0.2	0.1	11.4	3,174
Nginda	9.0	2.0	8.6	1.2	78.6	0.4	0.0	-	0.2	5,058
Mbeti North	42.1	11.0	9.6	1.1	28.1	5.8	0.1	0.1	2.3	5,908
Kirimani	52.1	3.6	6.4	2.5	24.7	9.8	0.0	0.2	0.6	6,528
Gaturi South	15.5	6.6	29.3	1.0	46.4	0.6	0.0	0.1	0.5	2,425
Runyenjes Constituency	9.8	16.7	25.2	1.5	38.7	0.7	0.1	0.1	7.2	25,528
Gaturi North	9.8	7.1	27.7	2.7	48.2	0.4	0.0	0.1	3.9	4,308
Kagaari South	7.3	29.0	44.6	2.0	14.1	0.9	0.2	0.1	1.8	3,634
Central	16.2	10.5	18.0	1.0	32.0	2.0	0.1	0.2	20.1	4,285
Kagaari North	11.3	3.8	10.4	0.9	72.2	0.2	0.0	-	1.1	4,539
Kyeni North West	8.6	8.8	24.1	1.1	52.0	0.4	0.1	0.0	4.9	3,922
Kyeni South	5.4	40.0	29.7	1.3	12.6	0.6	0.1	0.1	10.2	4,840
Mbeere South Constituency	11.1	40.1	38.5	5.8	1.7	1.4	1.2	0.1	0.1	19,686
Mwea	14.0	66.2	13.3	2.7	1.0	2.1	0.5	0.1	0.1	4,606
Makima	3.5	44.2	42.2	2.1	1.0	1.4	5.5	0.0	0.1	3,243
Mbeti South	15.7	28.5	44.1	6.1	3.3	1.8	0.3	0.1	0.0	5,079
Mavuria	11.5	31.4	44.4	10.7	0.7	0.8	0.2	0.1	0.2	4,911
Kiambere	3.1	22.5	64.0	6.2	2.9	0.4	0.8	-	0.2	1,847
Mbeere North Constituency	8.8	36.6	48.8	3.4	1.2	0.8	0.3	0.1	0.1	12,923
Nthawa	16.0	58.8	21.3	1.6	1.1	0.9	0.1	0.1	0.0	4,750
Muminji	5.4	26.1	60.4	5.7	1.1	0.1	1.1	0.0	0.1	2,349
Evurore	4.2	22.8	66.6	3.9	1.2	0.9	0.2	-	0.1	5,824

Table 6:22: Main Material of the Wall in Female Headed Households by County, Constituency and Ward

County/ Constituency	Stone	Brick/ Block	Mud/ Wood	Mud/ Cement	Wood only	Corrugated Iron Sheets	Grass /Reeds	Tin	Other	Households
Kenya	15.0	17.5	40.4	7.9	10.5	5.1	2.1	0.3	1.2	2,731,060
Rural	5.4	14.9	52.1	8.0	12.6	2.4	2.8	0.4	1.4	1,826,263
Urban	34.2	22.6	16.9	7.6	6.2	10.5	0.8	0.3	0.9	904,797

Embu County	17.0	20.5	31.3	3.2	22.6	1.9	0.3	0.1	3.0	41,864
Manyatta Constituency	30.3	6.3	13.1	1.8	41.6	4.0	0.0	0.1	2.7	12,752
Ruguru-Ngandori	17.3	2.8	7.2	0.9	70.5	0.6	-	0.1	0.5	2,317
Kithimu	8.9	20.4	31.0	4.3	18.0	1.1	-	0.1	16.2	1,572
Nginda	10.7	1.4	11.1	0.7	75.3	0.4	0.0	0.0	0.4	2,062
Mbeti North	46.9	8.2	9.3	1.1	26.5	6.3	-	-	1.7	2,567
Kirimani	54.8	4.0	6.5	2.7	21.5	9.6	0.0	0.2	0.6	3,209
Gaturi South	14.0	5.2	32.9	1.7	44.8	0.5	0.1	-	0.9	1,025
Runyenjes Constituency	10.6	15.5	26.6	1.7	36.1	1.1	0.1	0.0	8.3	10,982
Gaturi North	10.8	6.7	28.0	2.6	46.6	0.4	0.1	-	5.0	1,994
Kagaari South	7.4	25.2	48.4	1.9	13.7	1.4	0.1	0.1	1.9	1,505
Central	17.1	10.3	18.0	1.6	27.3	2.9	0.3	0.1	22.5	1,910
Kagaari North	11.8	3.1	9.6	1.1	71.4	0.6	-	-	2.3	1,940
Kyeni North West	10.6	9.2	27.3	1.2	44.4	1.0	0.1	-	6.0	1,525
Kyeni South	5.6	37.5	32.4	1.5	11.8	0.5	0.0	0.0	10.5	2,108
Mbeere South Constituency	14.3	38.9	37.5	5.8	1.4	1.0	1.1	0.0	0.1	10,243
Mwea	17.2	65.9	11.7	2.2	1.1	1.7	0.3	-	-	2,697
Makima	4.7	43.3	41.3	2.5	1.5	0.8	5.8	-	0.1	1,633
Mbeti South	25.2	23.0	41.6	6.6	2.1	1.2	0.1	0.0	0.1	2,167
Mavuria	14.0	28.3	45.4	11.0	0.5	0.5	0.1	0.1	0.0	2,558
Kiambere	1.6	23.1	66.2	5.8	2.4	-	0.4	0.1	0.3	1,188
Mbeere North Constituency	8.1	26.5	59.4	4.4	0.9	0.5	0.2	0.0	0.0	7,887
Nthawa	22.3	45.9	27.5	1.7	1.5	1.0	0.1	0.1	0.1	1,980
Muminji	3.4	22.6	66.2	6.6	0.6	0.3	0.4	-	-	1,520
Evurore	3.3	19.2	71.4	4.9	0.7	0.3	0.2	0.0	0.0	4,387

Table 6.23: Source of Water by county, Constituency and Ward

County/Constituency/ Wards	Pond	Dam	Lake	Stream/River	Unprotect- ed Spring	Unprotected	Jabia	Water	Other	Unim- proved Sources	Protected Spring	Pro- tected Well	Bore- hole	Piped into Dwelling	Piped	Rain Water Collec- tion	lm- proved Sources	Number of Individuals
Kenya	2.7	2.4	1.2	23.2	5.0	6.9	0.3	5.2	0.4	47.4	7.6	7.7	11.6	5.9	19.2	0.7	52.6	37,919,647
Rural	3.6	3.2	1.5	29.6	6.4	8.7	0.4	2.2	0.5	56.0	9.2	8.1	12.0	1.8	12.1	0.8	44.0	26,075,195
Urban	0.9	0.7	0.5	9.2	1.9	2.9	0.2	11.8	0.1	28.3	4.0	6.8	10.7	14.7	34.9	0.5	71.7	11,844,452
Embu County	9.0	3.5	0.1	32.7	2.5	9.2	0.2	2.4	0.1	51.2	1.1	4.5	8.9	8.1	25.9	0.2	48.8	508,356
Manyatta Constituency	0.3	0.0	0.0	19.4	1.2	3.1	0.3	1.5	0.1	26.1	1.2	2.7	1.0	19.7	49.1	0.1	73.9	150,534
Ruguru-Ngandori	0.2	0.0	0.0	16.2	0.3	9.0	0.0	0.3	0.2	17.8	7.0	0.2	0.3	23.3	57.5	0.1	82.2	27,413
Kithimu	0.9	0.1	0.0	43.8	2.9	9.4	0.3	1.4	0.0	58.9	0.5	14.5	9.0	6.3	18.9	0.3	41.1	18,997
Nginda	0.1	0.0	0.0	18.7	0.3	0.7	0.0	0.0	0.0	19.9	0.2	0.0	0.0	7.8	72.0	0:0	80.1	28,338
Mbeti North	0.3	0.0	0.0	16.0	1.3	4.7	1.1	0.8	0.4	24.7	1.7	2.2	2.1	20.8	48.4	0.1	75.3	32,098
Kirimani	0.4	0:0	0.0	6.4	0.3	0.8	0.2	4.6	0.0	12.8	1.0	0.1	9.0	38.3	47.3	0:0	87.2	30,144
Gaturi South	0.2	0:0	0.0	30.6	3.6	6.2	0.2	1.9	0.0	42.7	5.1	4.1	3.6	12.5	31.9	0.1	57.3	13,544
Runyenjes Constituency	9.0	0.0	0.0	39.9	3.4	7.8	0.1	0.4	0.0	52.3	1.4	7.3	5.1	5.8	28.0	0.2	47.7	141,327
Gaturi North	0.1	0.0	0.0	37.0	1.5	5.9	0.1	0.1	0.0	44.6	0.5	1.5	2.2	6.3	44.8	0.1	55.4	24,309
Kagaari South	0.5	0.1	0.0	46.2	2.1	20.2	0.1	0.3	0.0	69.5	1.	7.2	13.0	0.5	8.5	0.2	30.5	20,221
Central	0.2	0:0	0.0	41.3	4.7	5.3	0.1	1.7	0.0	53.3	2.8	0.9	4.6	13.4	19.5	0.3	46.7	23,471
Kagaari North	0.1	0:0	0.0	29.5	3.2	0.3	0.0	0.1	0.0	33.3	0.2	0.0	1.2	7.6	56.9	0.1	66.7	24,940
Kyeni North West	0.1	0:0	0:0	47.1	4.0	0.0	0.0	0.2	0.0	52.4	2.1	4.7	8.9	3.1	28.6	0.1	47.6	20,981
Kyeni South	2.2	0.1	0.1	40.5	4.5	14.6	0.3	0.2	0.1	62.7	1.6	21.4	2.9	3.0	8.3	0.2	37.3	27,405

Mbeere South Constituency	1.1	12.5	0.3	28.6	2.1	14.4	0.1	4.8	0.1	63.9	9.0	3.4	24.9	0.9	5.8	0.5	36.1	128,544
Mwea	0.1	7.0	0.1	29.5	1.6	7.2	0.1	7.9	0.4	53.9	6:0	3.9	39.0	0.5	1.5	0.3	46.1	29,752
Makima	0.0	10.2	0.2	41.6	4.1	10.4	0.1	1.3	0.0	0.89	0.5	1.1	30.2	0.1	0.1	0.0	32.0	21,173
Mbeti South	3.5	2.9	0:0	23.3	2.5	20.0	0.2	9.1	0.1	61.5	0.3	3.4	21.1	1.6	11.5	9.0	38.5	29,223
Mavuria	6:0	29.0	0.8	20.4	9.0	16.6	0.3	2.6	0.0	71.2	9.0	3.6	11.4	1.6	10.8	8.0	28.8	33,347
Kiambere	0.0	8.4	0:0	36.9	2.4	18.5	0.0	0.5	0.0	8.99	0.3	5.0	27.4	0.0	0.0	9.0	33.2	15,049
Mbeere North Constit- uency	0.2	2.0	0.0	49.6	4.2	14.4	0.1	3.5	0.1	74.1	7:1	4.5	5.1	2.5	12.0	0.2	25.9	87,951
Nthawa	0.1	7.0	0.1	15.9	2.9	23.7	0.3	7.0	0.1	50.8	6.1	8.8	15.1	4.2	19.0	0.3	49.2	26,498
Muminji	0:0	9.0	0:0	34.3	13.9	21.5	0.0	0.3	0.0	79.1	4.0	7.3	1.6	2.6	5.0	0.4	20.9	16,676
Evurore	0.3	0.1	0.0	75.2	1.3	6.3	0.0	2.7	0.2	86.0	0.3	1.0	0.5	1.5	10.6	0.0	14.0	44,777

Table 6.24: Source of Water of Male headed Household by County Constituency and Ward

Improved Number of Sources Individuals	53.6 26,755,066	18,016,471	72.5 8,738,595	49.7	74.3	82.6	-
Rain Water Sollection S	0.7	0.8	0.5	0.2	0.1	0.1	
Piped	19.9	12.2	35.8	26.6	49.4	57.0	
Piped into Dwell- ing	6.2	1.9	14.9	8.4	19.9	24.1	
Bore- hole	11.7	12.1	10.8	8.8	1.0	0.4	
Protect- ed Well	7.7	8.2	6.7	4.6	2.7	0.2	:
Protected Spring	7.4	9.2	3.8	1.2	1.1	0.7	
Unim- proved Sources	46.4	55.6	27.5	50.3	25.7	17.4	
Other	0.4	0.5	0.1	0.1	0.1	0.1	
Water vendor	5.6	2.4	12.1	2.2	1.4	0.3	
Jabia	0.4	0.4	0.2	0.2	0.3	0.0	
Unprotect- ed Well	6.7	8.6	2.8	9.2	3.1	0.5	
Unprotect- ed Spring	4.8	6.3	1.8	2.6	1.2	0.3	
Stream/River	22.4	29.1	8.5	32.1	19.3	15.9	
Lake	7:	1.4	0.5	0.1	0.0	1	
Dam	2.3	3.1	9.0	3.4	0.0	-	•
Pond	2.7	3.7	0.8	9:0	0.3	0.2	•
County/Constituency/Wards	Kenya	Rural	Urban	Embu County	Manyatta Constituency	Ruguru-Ngan- dori	



Nginda	0.1	0:0	•	18.4	0.3	0.7	0.0	•	0.0	19.6	0.2	0.1	0.0	7.7	72.5	0.0	80.4	21,319
Mbeti North	0.3	0.1	0.1	16.0	1.4	4.9	1.0	0.8	0.2	24.8	1.7	2.2	2.2	20.7	48.4	0.1	75.2	23,447
Kirimani	0.3			5.8	0.3	6.0	0.1	4.2	0.1	11.6	0.8	0.1	0.4	39.6	47.5	0.0	88.4	21,192
Gaturi South	0.2	ı	0.0	30.3	3.9	6.4	0.2	1.8	1	42.8	4.4	4.2	3.6	12.6	32.3	0.1	57.2	10,063
Runyenjes Constituency	9.0	0.0	0.0	39.8	3.4	7.6	0.1	0.4	0.0	52.0	1.4	7.3	5.2	5.8	28.1	0.2	48.0	104,585
Gaturi North	0.1	0.0	0.1	37.0	1.4	5.5	0.0	0.0	0.0	44.1	0.4	1.6	2.4	6.2	45.2	0.1	55.9	17,773
Kagaari South	0.5	0.1	0.0	44.9	2.0	20.0	0.1	0.3	0.0	67.9	1.3	8.0	13.5	0.5	8.6	0.2	32.1	15,069
Central	0.1	0.0	0.0	41.1	4.6	5.3	0.1	1.5	0.0	52.8	2.8	0.9	4.6	14.2	19.3	0.2	47.2	17,235
Kagaari North	0.1	0.0	0.0	29.6	3.3	0.3	0.0	0.1	,	33.3	0.2	1.0	1.2	7.5	56.6	0.1	2.99	18,673
Kyeni North West	0.2	0.0	1	47.2	4.0	0.7	0.0	0.1		52.2	2.1	5.0	9.2	3.0	28.4	0.1	47.8	15,899
Kyeni South	2.2	0.1	0.1	40.9	4.8	14.7	0.2	0.2	0.1	63.3	1.9	21.0	2.6	2.8	8.2	0.2	36.7	19,936
Mbeere South Constituency	17	12.3	0.3	28.9	2.1	14.5	0.1	4.7	0.1	64.2	9.0	3.4	24.4	0.0	0.9	9.0	35.8	88,914
Mwea	0.1	7.3	0.1	30.2	1.7	6.8	0.0	7.3	0.4	53.8	1.0	3.7	38.8	9.0	1.6	0.4	46.2	19,731
Makima	'	11.3	0.3	43.9	4.1	9.3	0.1	1.2		70.3	0.4	1.2	28.0	0.1	0.1	0.0	29.7	14,577
Mbeti South	3.5	2.8	0.0	23.2	2.5	20.6	0.2	9.0	0.2	62.0	0.4	3.5	21.4	4:	10.7	9.0	38.0	21,668
Mavuria	1.0	27.8	0.8	20.9	9.0	16.9	0.2	2.4	0.0	9.07	0.5	3.3	11.4	1.7	11.6	6:0	29.4	23,356
Kiambere	•	8.0	0.1	35.8	2.4	18.5	0.1	0.7	1	65.5	0.4	5.5	27.8	-	'	8.0	34.5	9,582
Mbeere North Constituency	0.5	1.8	0.1	46.8	4.4	15.2	0.1	3.5	0.1	72.2	1.6	4.9	5.8	2.7	12.6	0.2	27.8	58,344
Nthawa	0.1	7.0	0.1	16.7	2.9	23.8	0.3	6.4	0.1	51.2	2.0	8.5	15.1	4.2	18.7	0.3	48.8	19,884
Muminji	0.0	8.2	1	33.4	14.5	22.1	•	0.2	,	78.5	3.9	8.0	1.6	3.0	4.8	0.2	21.5	10,875
Evurore	0.3	0.1	0.0	73.7	1.5	6.4	1	2.6	0.2	84.8	0.4	1.	0.7	1.5	11.4	0.0	15.2	27,585

Table 6.25: Source of Water of Female headed Household by County Constituency and Ward

County/Constituen- cy/Wards	Pond	Dam	Lake	Stream /River	Unpro- tected Spring	Unpro- tected Well	Jabia	Water	Other	Unimproved Sources	Protected Spring	Protected Well	Borehole	Piped into Dwelling	Piped	Rain Water Collection	Improved Sources	Number of Individuals
Kenya	2.8	2.7	1.3	25.2	5.3	7.4	0.3	4.4	0.3	49.7	8.1	7.7	11.3	5.1	17.5	0.7	50.3	11,164,581
Rural	3.4	3.5	1.6	30.6	6.5	8.9	0.3	1.8	0.4	57.0	9.5	8.0	11.5	1.6	11.7	0.8	43.0	8,058,724
Urban	1.0	0.8	0.6	11.1	2.3	3.4	0.2	11.1	0.1	30.5	4.7	7.0	10.5	14.2	32.5	9.0	69.5	3,105,857
Embu County	9:0	3.9	0.1	34.1	2.5	9.3	0.2	2.8	0.1	53.6	1.1	4.3	9.3	7.5	24.1	0.2	46.4	147,171
Manyatta Constit- uency	0.3	0.0	0.0	19.7	1.2	3.2	0.4	1.8	0.3	27.0	1.5	2.8	1.0	19.3	48.3	0.1	73.0	41,192
Ruguru-Ngandori	0.1	0.1	'	16.9	0.2	0.8	0.0	0.5	0.3	18.8	0.7	0.1	0.1	21.3	58.8	0.2	81.2	7,688
Kithimu	0.9	0.0	'	42.6	3.5	11.3	0.2	1.5		0.09	0.4	15.0	0.4	6.0	17.8	0.3	40.0	5,401
Nginda	0.1	'	'	19.6	0.4	9.0	'	0.1	0.0	20.9	0.2	•	•	8.2	7.07	•	79.1	7,019
Mbeti North	0.1	1	0.0	15.9	1.3	4.1	1.2	6:0	0.9	24.3	1.8	2.3	1.9	21.2	48.3	0.1	75.7	8,651
Kirimani	9.0	0.0	'	7.7	0.5	2.0	0.4	5.4	0.0	15.4	1.4	0.2	0.9	35.1	46.9	0.0	84.6	8,952
Gaturi South	0.4	1	1	31.4	2.6	5.6	0.3	2.1	1	42.5	7.0	3.7	3.6	12.3	30.7	0.1	57.5	3,481
Runyenjes Constit- uency	9.0	0.0	0.0	40.1	3.3	8.3	0.2	9.0	0.0	53.2	1.2	7.1	4.7	5.7	27.9	0.2	46.8	36,742
Gaturi North	0.0	-	-	37.0	1.7	6.9	0.1	0.1	0.0	45.9	0.8	1.5	1.6	6.6	43.6	0.1	54.1	6,536
Kagaari South	0.5	0.2	'	49.8	2.3	20.9	0.1	0.4	0.1	74.2	0.4	4.9	11.5	0.6	8.2	0.1	25.8	5,152
Central	0.3	1	'	41.7	4.8	5.4	0.1	2.4	1	54.7	2.8	6.0	4.3	11.3	20.2	9.0	45.3	6,236
Kagaari North	0.2	0.0	'	29.2	3.0	0.5	0.1	•	'	33.0	0:0	0.4	1.1	7.9	57.5	0.1	67.0	6,267
Kyeni North West	•	'	'	46.8	4.2	1.3	0.1	0.4	0.1	53.0	2.2	3.8	8.2	3.5	29.4	0.1	47.0	5,082
Kyeni South	2.2	'	0.2	39.3	3.8	14.6	0.5	0.2	0.1	61.0	1.	22.2	3.5	3.5	9.8	0.1	39.0	7,469

Mbeere South Constituency	0.9	12.7	0.2	28.0	2.1	14.1	0.2	5.2	0.1	63.4	0.5	3.4	26.2	6.0	5.2	0.4	36.6	39,630
Мwea	0.2	6.3	'	28.3	1.5	7.9	0.2	9.2	0.3	53.9	9:0	4.3	39.3	0.4	1.3	0.2	46.1	10,021
Makima	0:0	7.8	0.1	36.5	4.2	12.9	0.1	1.5	1	63.0	9.0	6:0	35.2	0.1	0.1	0.0	37.0	965'9
Mbeti South	3.5	3.0	'	23.4	2.5	18.0	0.1	9.4	0.1	60.1	0.3	3.0	20.1	2.1	13.9	9.0	39.9	7,555
Mavuria	9.0	31.7	0.8	19.5	0.7	15.8	0.4	3.1	0.0	72.6	0.8	4.2	11.4	1.4	8.9	9.0	27.4	9,991
Kiambere	1	9.1	'	38.9	2.4	18.4	1	0.2	0:0	69.1	1	4.1	26.6	1	,	0.2	30.9	5,467
Mbeere North Constituency	0.3	2.2	0.0	55.0	3.7	12.7	0.1	3.6	0.2	77.9	1.3	3.8	3.8	2.1	10.9	0.2	22.1	29,607
Nthawa	0.1	0.7	0.0	13.6	2.8	23.3	0.3	8.8	0.1	49.7	1.5	9.6	15.2	4.1	19.8	0.1	50.3	6,614
Muminji	0.0	10.6	0.0	35.9	12.9	20.4	,	0.4	,	80.1	4.2	5.9	1.7	1.9	5.5	7.0	19.9	5,801
Evurore	0.4	'	0.0	77.4	1.0	6.1		2.8	0.2	87.9	0.3	6:0	0.2	1.4	9.3	'	12.1	17,192

Table 6:26: Human Waste Disposal by County, Constituency and Ward

County/ Constituency	Main Sewer	Main Sewer Septic Tank	Cess Pool	VIP Latrine	Pit Latrine	Improved Sanitation	Pit Latrine Uncovered	Bucket	Bush	Other	Unimproved Sanitation	Number of HH Members
Kenya	5.91	2.76	0.27	4.57	47.62	61.14	20.87	0.27	17.58	0.14	98'86	37,919,647
Rural	0.14	0.37	0.08	3.97	48.91	53.47	22.32	0.07	24.01	0.13	46.53	26,075,195
Urban	18.61	8.01	0.70	2.90	44.80	78.02	17.67	0.71	3.42	0.18	21.98	11,844,452
Embu County	1.82	2.68	0.31	8.70	51.13	64.64	33.74	90.0	1.51	0.05	35.36	508,356
Manyatta Constituency	5.32	7.55	0.82	8.80	50.18	72.67	27.08	0.02	0.15	0.05	27.33	150,534
Ruguru-Ngandori	2.21	2.55	0.09	11.37	54.99	71.21	28.56	0.09	0.08	90.0	28.79	27,413
Kithimu	0.08	0.13	0.12	14.20	62.19	76.72	22.85	0.17	0.26	00.0	23.28	18,997
Nginda	0.24	0.74	0.01	6.87	56.20	64.06	35.79	0.03	0.11	0.02	35.94	28,338
Mbeti North	3.51	15.47	09.0	8.79	42.05	70.42	29.34	0.08	0.15	00'0	29.58	32,098
Kirimani	20.36	17.32	3.25	6.93	27.01	74.87	24.87	0.04	0.22	0.01	25.13	30,144
Gaturi South	0.38	1.82	0.08	4.28	81.87	88.42	11.40	0.04	0.13	0.01	11.58	13,544
Runyenjes Constituency	0.21	0.86	0.10	13.69	44.06	58.93	40.72	90.0	0.25	0.04	41.07	141,327
Gaturi North	0.26	1.02	0.14	17.11	37.19	55.72	44.04	0.03	0.19	0.03	44.28	24,309

Kagaari South	0.04	0.55	0.04	9.26	66.23	76.12	23.47	0.07	0.23	0.10	23.88	20,221
Central	0.31	1.67	0.08	13.69	43.97	59.72	39.67	0.11	0.50	00.00	40.28	23,471
Kagaari North	0.28	0.97	0.23	17.24	32.29	51.01	48.85	0.05	0.08	0.02	48.99	24,940
Kyeni North West	0.11	0.59	90:0	14.46	68.20	83.42	16.39	0.02	0.11	0.05	16.58	20,981
Kyeni South	0.20	0.38	90.0	10.13	26.12	36.90	62.65	0.08	0.34	0.03	63.10	27,405
Mbeere South Constituency	0.23	0.59	0.02	4.91	53.03	58.81	37.38	0.03	3.70	0.07	41.19	128,544
Mwea	0.18	0.14	90.0	6.75	79.16	86.28	10.71	0.05	2.78	0.17	13.72	29,752
Makima	00.00	0.03	0.17	1.65	00.09	61.85	30.35	0.09	7.63	60.0	38.15	21,173
Mbeti South	0.35	2.05	0.03	80.9	17.95	26.47	72.47	0.02	1.04	00'0	73.53	29,223
Mavuria	0.41	0.30	0.01	5.53	47.52	53.77	45.00	0.00	1.19	0.04	46.23	33,347
Kiambere	00:00	0.05	0.03	2.23	71.85	74.16	15.02	0.03	10.74	0.05	25.84	15,049
Mbeere North Constituency	0.73	0.33	0.14	6.03	61.35	68.57	28.59	0.09	2.67	0.08	31.43	87,951
Nthawa	0.46	0.77	0.13	6.91	80.94	89.20	10.08	0.00	0.67	0.05	10.80	26,498
Muminji	2.29	0.02	0.10	4.14	56.49	63.04	31.30	0.34	5.28	0.05	36.96	16,676
Evurore	0.31	0.18	0.16	6.21	51.56	58.43	38.53	0.05	2.88	0.11	41.57	44,777

Table 6.27: Human Waste Disposal in Male Headed household by County, Constituency and Ward

County/ Constituen- cy/wards	Main Sewer	Septic Tank	Cess Pool	VIP Latrine	Pit Latrine	Improved Sanitation	Pit Latrine Uncovered	Bucket	Bush	Other	Unimproved Sanitation	Number of HH Members
Kenya	6.30	2.98	0.29	4.60	47.65	61.81	20.65	0.28	17.12	0.14	38.19	26,755,066
Rural	0.15	0.40	0.08	3.97	49.08	53.68	22.22	0.07	23.91	0.12	46.32	18,016,471
Urban	18.98	8.29	0.73	5.89	44.69	78.58	17.41	0.70	3.13	0.18	21.42	8,738,595
Embu County	1.79	2.65	0.31	22.8	51.21	64.74	33.82	90:0	1.34	0.04	35.26	361,185
Manyatta Constituency	5.12	7.36	08'0	8.89	50.36	72.54	27.23	0.07	0.14	0.05	27.46	109,342
Ruguru-Ngandori	2.00	2.36	0.12	11.29	55.62	71.40	28.39	0.09	0.02	0.08	28.60	19,725
Kithimu	0.12	0.15	0.12	14.03	62.20	76.63	22.98	0.16	0.24	0.00	23.37	13,596
Nginda	0.15	0.74	0.00	7.15	55.69	63.74	36.16	0.01	0.07	0.05	36.26	21,319
Mbeti North	3.45	15.02	0.74	8.95	42.26	70.42	29.33	0.11	0.14	0.00	29.58	23,447
Kirimani	20.30	17.41	3.10	7.26	26.99	75.07	24.65	90.0	0.22	0.01	24.93	21,192
Gaturi South	0.40	1.96	0.07	4.22	98.08	15.78	12.34	0.02	0.13	0.00	12.49	10,063
Runyenjes Constitu- ency	0.20	0.88	0.11	13.66	44.55	59.40	40.29	0.06	0.23	0.03	40.60	104,585
Gaturi North	0.25	1.04	0.15	17.27	38.17	56.88	42.90	0.02	0.20	0.00	43.12	17,773
Kagaari South	0.01	0.59	0.05	9.48	66.10	76.23	23.39	0.00	0.16	0.13	23.77	15,069

Central	0.30	1.60	90:0	13.70	43.60	59.25	40.12	0.15	0.48	0.00	40.75	17,235
Kagaari North	0.25	1.01	0.20	17.08	32.34	50.89	49.02	0.00	0.09	0.00	49.11	18,673
Kyeni North West	0.15	0.55	0.08	13.93	69.41	84.12	15.72	0.03	0.11	0.03	15.88	15,899
Kyeni South	0.24	0.47	0.09	10.13	26.37	37.29	62.28	0.08	0.32	0.03	62.71	19,936
Mbeere South Constituency	0.19	0.52	0.04	4.82	52.09	57.65	38.84	0.03	3.43	0.04	42.35	88,914
Мwea	0.15	0.18	90.0	6.89	79.39	86.67	10.63	0.02	2.57	0.11	13.33	19,731
Makima	00:00	10.0	0.11	1.95	60.25	62.32	29.70	0.09	7.81	0.08	37.68	14,577
Mbeti South	0.21	1.64	0.01	5.31	17.07	24.24	74.77	0.03	96:0	00:00	75.76	21,668
Mavuna	0.39	0.26	0.02	5.48	47.55	53.69	45.14	0.00	1.15	0.02	46.31	23,356
Kiambere	00:00	90:0	0.04	2.20	73.71	76.02	14.26	0.00	9.70	0.03	23.98	9,582
Mbeere North Constituency	0.84	0.27	0.14	5.83	63.41	70.49	26.94	0.11	2.40	20:0	29.51	58,344
Nthawa	0.43	0.61	0.07	19.9	81.47	89.19	10.05	0.00	0.70	90'0	10.81	19,884
Muminji	2.79	0:03	0.12	3.71	58.08	64.73	29.87	0.40	4.99	0.05	35.27	10,875
Evurore	0.38	0.12	0.20	6.10	52.49	59.29	37.95	0.08	2.60	60:0	40.71	27,585

Table 6.28: Human Waste Disposal in Female Headed Household by County, Constituency and Ward

County/ Constituency	Main Sewer	Septic Tank Cess Pool	Cess Pool	VIP Latrine	Pit Latrine	Improved Sanitation	Pit Latrine Uncovered	Bucket	Bush	Other	Unimproved Sanitation	Number of HH Members
Kenya	2.0	2.2	0.7	4.5	47.6	59.5	21.4	0.3	18.7	0.2	40.5	11,164,581.0
Rural	0.1	0.3	0.1	4.0	48.5	53.0	22.6	0.1	24.2	0.1	47.0	8,058,724.0
Urban	17.6	7.2	9.0	5.9	45.1	76.4	18.4	7.0	4.3	0.2	23.6	3,105,857.0
Embu	1.9	2.7	0.3	8.5	6.03	64.4	33.5	0.1	1.9	0.1	35.6	147,171.0
Manyatta	5.8	8.0	6.0	8.6	49.7	73.0	26.7	0.1	0.2	0.0	27.0	41,192.0
Ruguru-Ngandori	2.7	3.0	0.0	11.6	53.4	70.7	29.0	0.1	0.2	0.0	29.3	7,688.0
Kithimu	0.0	0.1	0.1	14.6	62.2	77.0	22.5	0.2	6.0	0.0	23.0	5,401.0
Nginda	0.5	0.7	0.0	0.9	57.7	65.0	34.6	0.1	0.2	0.0	35.0	7,019.0
Mbeti North	3.7	16.7	0.2	8.4	41.5	70.4	29.4	0.0	0.2	0.0	29.6	8,651.0
Kirimani	20.5	17.1	3.6	6.1	27.1	74.4	25.4	0.0	0.2	0.0	25.6	8,952.0
Gaturi South	0.3	4.1	0.1	4.5	84.8	91.1	8.7	0.1	0.1	0.0	8.9	3,481.0
Runyenjes	0.2	0.8	0.1	13.8	42.7	57.6	42.0	0.1	0.3	0.1	42.4	36,742.0
Gaturi North	0.3	6.0	0.1	16.7	34.5	52.6	47.1	0.1	0.1	0.1	47.4	6,536.0
Kagaari South	0.1	0.4	0.0	8.6	9.99	75.8	23.7	0.0	4.0	0.0	24.2	5,152.0
Central	6.0	1.9	0.1	13.7	45.0	61.0	38.4	0.0	9.0	0.0	39.0	6,236.0

Kagaari North	0.4	6.0	0.3	17.7	32.1	51.3	48.3	0.2	0.1	0.1	48.7	6,267.0
Kyeni North West	0.0	2.0	0.0	16.1	4.49	81.2	18.5	0.0	0.1	1.0	18.8	5,082.0
Kyeni South	0.1	0.2	0.0	10.1	25.4	35.8	63.6	0.1	0.4	0'0	64.2	7,469.0
Mbeere South	0.3	0.7	0.1	5.1	55.1	61.4	34.1	0.0	4.3	0.1	38.6	39,630.0
Мwea	0.2	0.1	0.0	6.5	7.87	85.5	10.9	0.1	3.2	6.0	14.5	10,021.0
Makima	0.0	1.0	6.0	1.0	59.4	8.09	31.8	0.1	7.2	1.0	39.2	6,596.0
Mbeti South	8.0	3.2	0.1	8.3	20.5	32.9	62.9	0.0	1.3	0'0	1.79	7,555.0
Mavuria	9.0	4.0	0.0	2.2	47.5	54.0	44.7	0.0	1.3	1.0	46.0	9,991.0
Kiambere	0.0	0'0	0.0	2.3	9.89	70.9	16.4	0.1	12.6	1.0	29.1	5,467.0
Mbeere North	0.5	4'0	0.1	6.4	27.3	64.8	31.8	0.1	3.2	1.0	35.2	29,607.0
Nthawa	9.0	1.3	0.3	7.8	2.67	89.3	10.2	0.0	9.0	0'0	10.7	6,614.0
Muminji	1.4	0.0	0.1	4.9	53.5	59.9	34.0	0.2	5.8	0.1	40.1	5,801.0
Evurore	0.2	0.3	0.1	6.4	50.1	57.1	39.5	0.0	3.3	0.2	42.9	17,192.0



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