

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)
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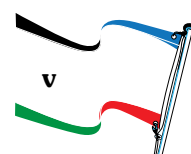


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Stefano Prato
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Striking Features on Intra-County Inequality in Kenya

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 x_i be a point on the X-axis, and y_i a point on the Y-axis, the Gini coefficient formula is:

$$Gini = 1 - \frac{2}{N} \sum_{i=1}^N (x_i - x_{i-1}) (y_i + y_{i-1})$$

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 equivalent¹ 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.

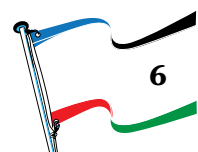
Spatial Dimensions

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.

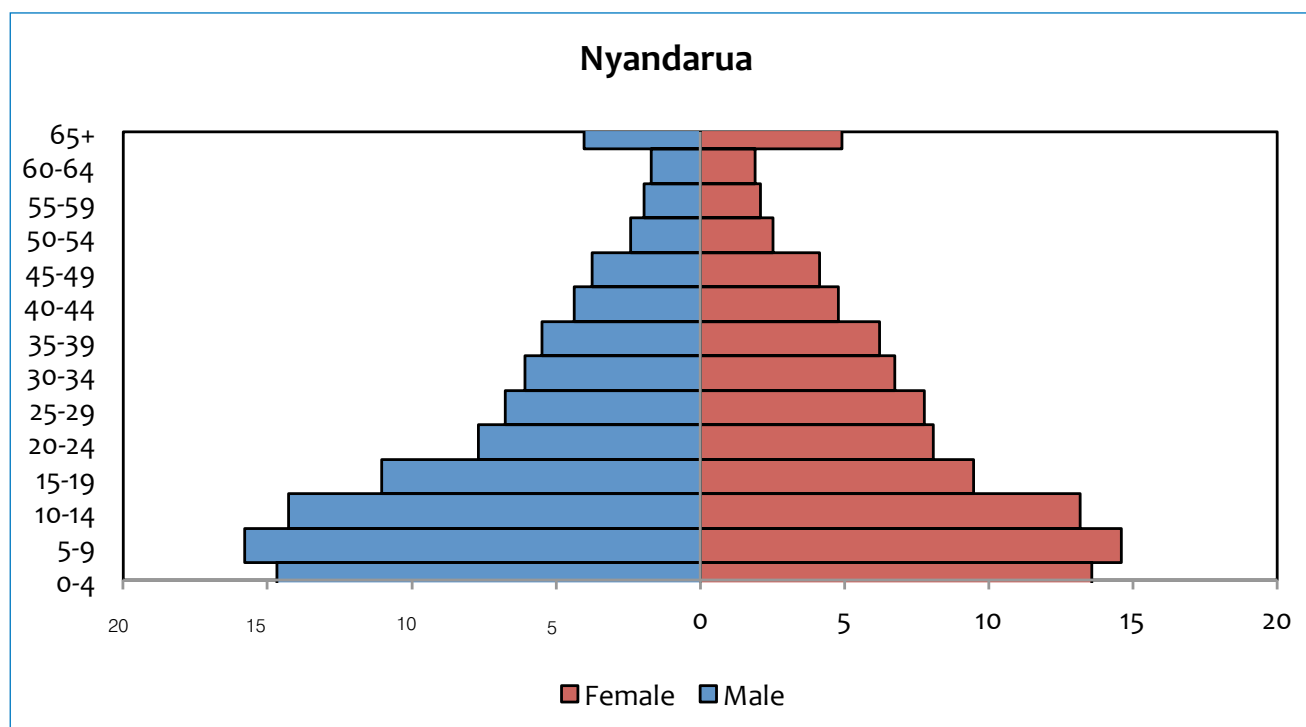


Nyandarua County



NYANDARUA COUNTY

Figure 35.1: Nyandarua Population Pyramid



Population

Nyandarua County has a child rich population where 0-14 year olds constitute 43% of the total population. However, the county is at the onset of a fertility decline as 43% of households have 0-3 household members.

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 35.3 up to ward level.

Table 35: overall Employment by Education Levels in Nyandarua County

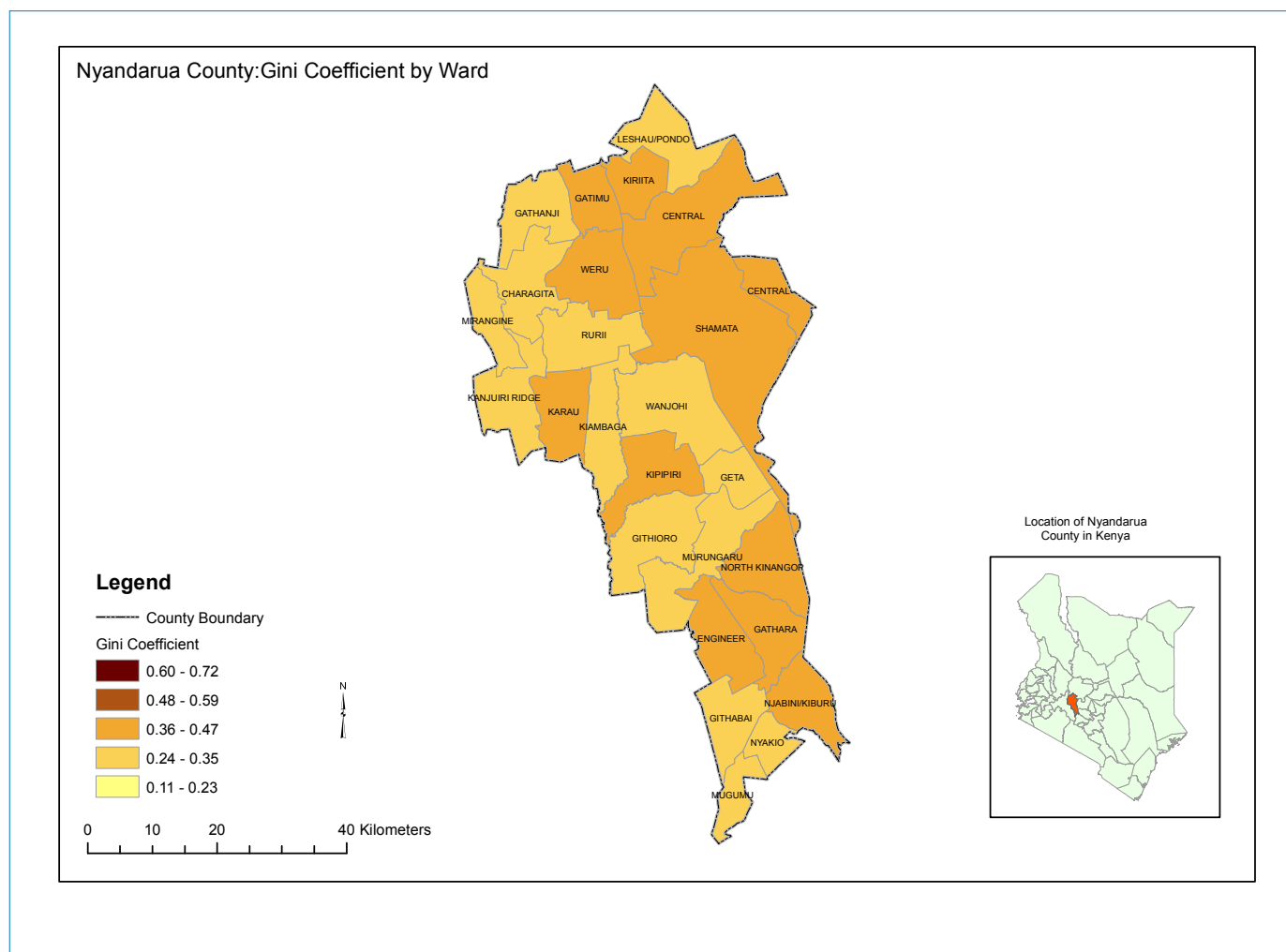
Education Level	Work for pay	Family Business	Family Agricultural Holding	Intern/ Volunteer	Retired/ Home-maker	Fulltime Student	Incapacitated	No work	Number of Individuals
Total	18.0	9.1	50.0	0.7	4.6	13.7	0.5	3.5	309,605
None	16.5	7.3	60.0	2.5	6.1	1.1	3.5	3.0	14,381
Primary	16.0	8.6	58.4	0.6	4.5	8.5	0.4	3.1	179,270
Secondary+	21.3	10.2	35.7	0.8	4.4	23.3	0.2	4.2	115,954

In Nyandarua County, 17% of the residents with no formal education 16% of those with a primary education and 21% for those with secondary level of education or above are working for pay. Work for pay is highest in Nairobi at 49% and this is twice the level in Nyandarua for those with secondary or above level of education.

Gini Coefficient

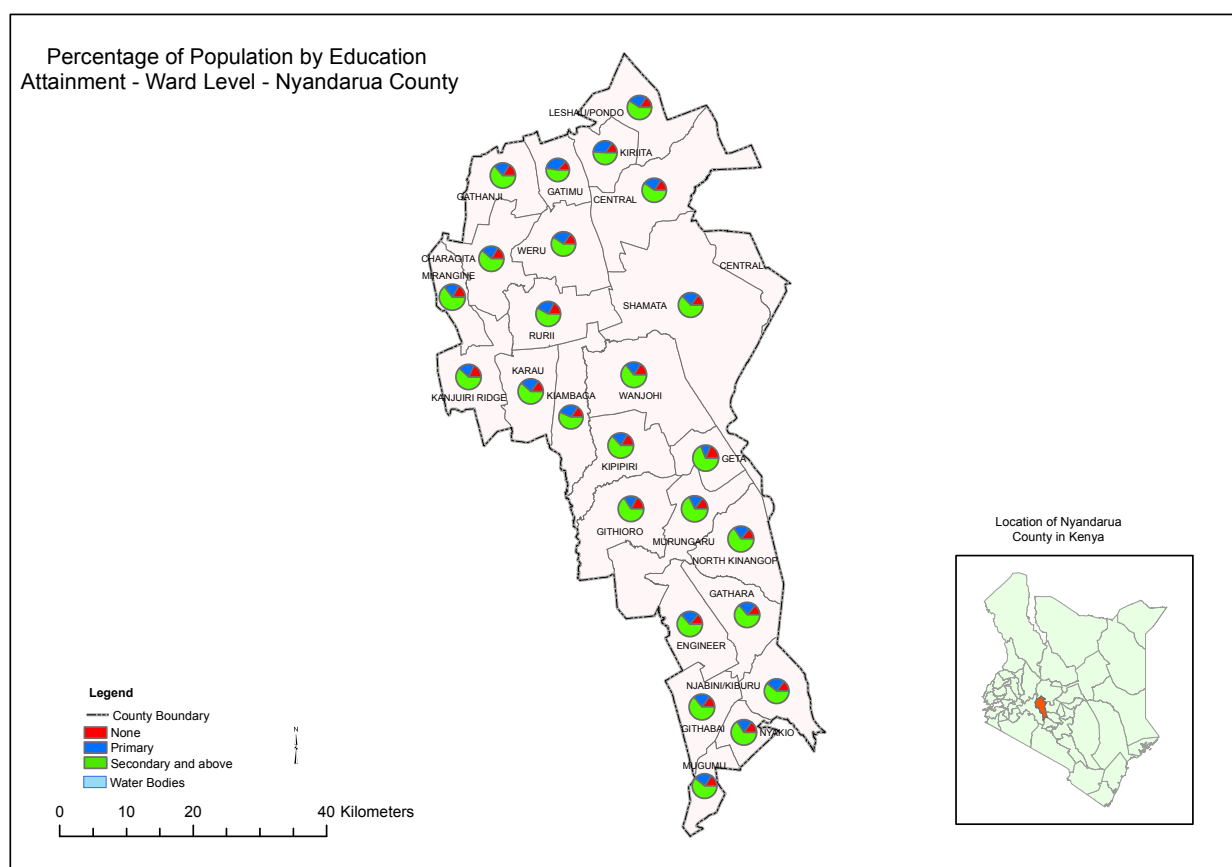
In this report, the Gini index measures the extent to which the distribution of consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution. A Gini index of '0' represents perfect equality, while an index of '1' implies perfect inequality. Nyandarua County's Gini index is 0.394 compared with Turkana County, which has the least inequality nationally (0.283).

Figure 35.2: Nyandarua County-Gini Coefficient by Ward



Education

Figure 35.3: Nyandarua County-Percentage of Population by Education Attainment by Ward



A total of 22% of Nyandarua County residents have a secondary level of education or above. Ol Jorok constituency has the highest share of residents with a secondary level of education or above at 26%. This is 8 percentage points above Kipipiri constituency, which has the lowest share of residents with a secondary level of education or above. Ol Jorok constituency is 4 percentage points above the county average. Gatimu and Kiriita wards have the highest share of residents with a secondary level of education or above at 34% each. This is almost three times Geta ward, which has the lowest share of residents with a secondary level of education or above. Gatimu and Kiriita wards are 12 percentage points above the county average.

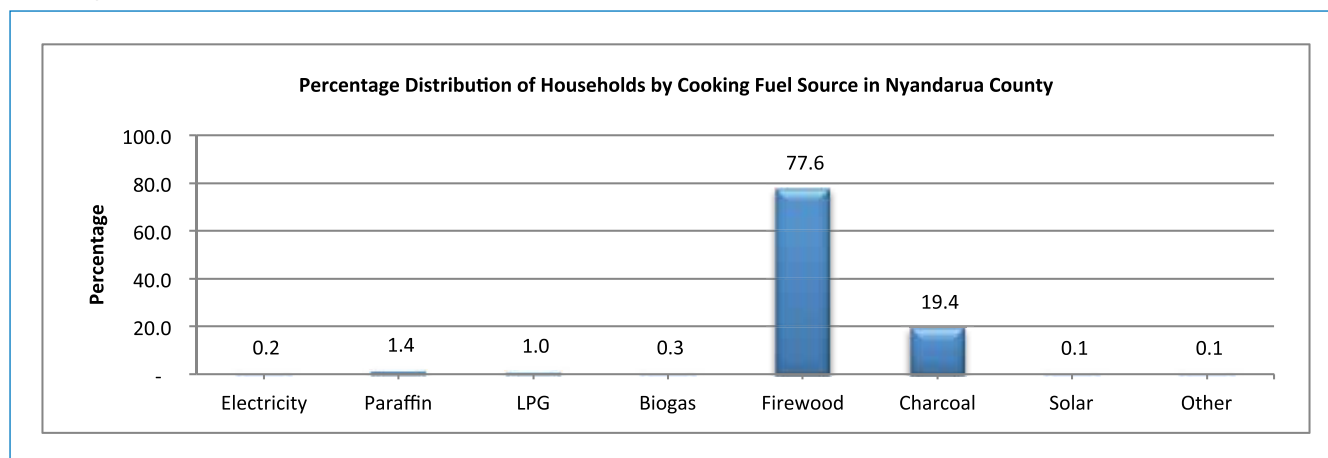
A total of 62% of Nyandarua County residents have a primary level of education only. Kipipiri constituency has the highest share of residents with a primary level of education only at 65%. This is 6 percentage points above Ndaragwa constituency, which has the lowest share of residents with a primary level of education only. Kipipiri constituency is 3 percentage points above the county average. Geta ward has the highest share of residents with a primary level of education only at 69%. This is 18 percentage points above Kiriita ward, which has the lowest share of residents with a primary level of education only. Geta ward is 5 percentage points above the county average.

A total of 16% of Nyandarua County residents have no formal education. Kipipiri and Ol Kalou constituency has the highest share of residents with no formal education at 17% each. This is 2 percentage points above Kinangop constituency, which has the lowest share of residents with no formal education. Kipipiri and Ol Kalou constituency are 1 percentage points above the county average. Geta ward has the highest percentage of residents with no formal education at 19%. This is 6 percentage points above Gatimu ward, which has the lowest percentage of residents with no formal education. Geta ward is 3 percentage points above the county average.

Energy

Cooking Fuel

Figure 35.4: Percentage Distribution of Households by Source of Cooking Fuel in Nyandarua County



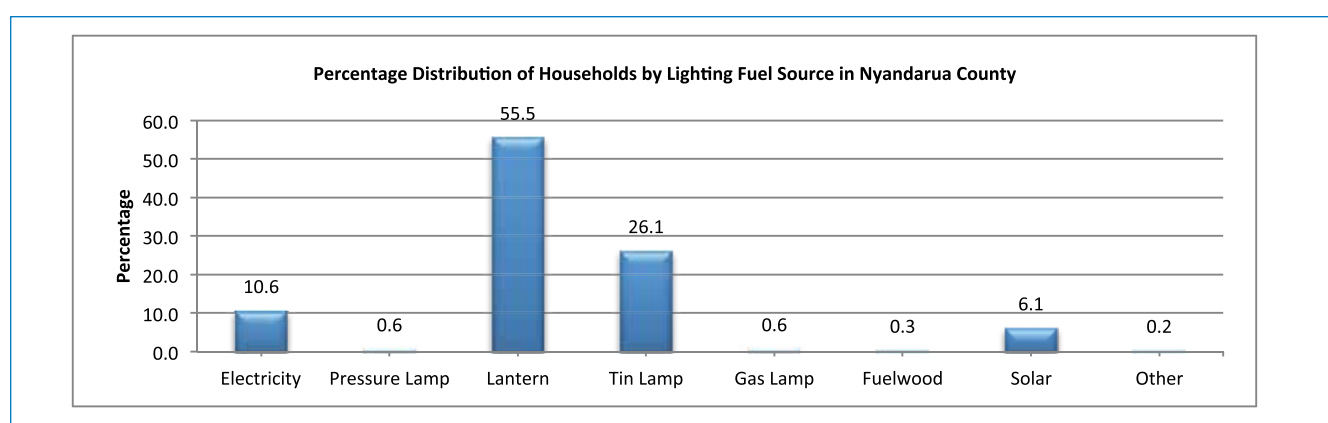
Just 1% of residents in Nyandarua County use liquefied petroleum gas (LPG), and 1% use paraffin. 78% use firewood and 19% use charcoal. The most common cooking fuel is firewood among male headed households at 77%, while female headed households are at 79%.

Kipipiri constituency has the highest level of use of firewood at 86%. This is 12 percentage points above Kinangop constituency, which has the lowest share at 74%. Kipipiri constituency is 8 percentage points below the county average. Geta ward has the highest level of use of firewood in Nyandarua County at 85%. This is almost twice Gatimu ward. Geta ward is 7 percentage points above the county average.

OI Jorok and Kinangop constituencies have the highest level of charcoal use in Nyandarua County at 23% each. This is 11 percentage points above Kipipiri constituency, which has the lowest share at 12%. This is about 4 percentage points above the county average. Gatimu ward has the highest level of charcoal use in Nyandarua County at 50%. This is six times Charagita ward, which has the lowest share at 8%. Gatimu ward is 31 percentage points above the county average.

Lighting

Figure 35.5: Percentage Distribution of Households by Source of Lighting Fuel in Nyandarua County



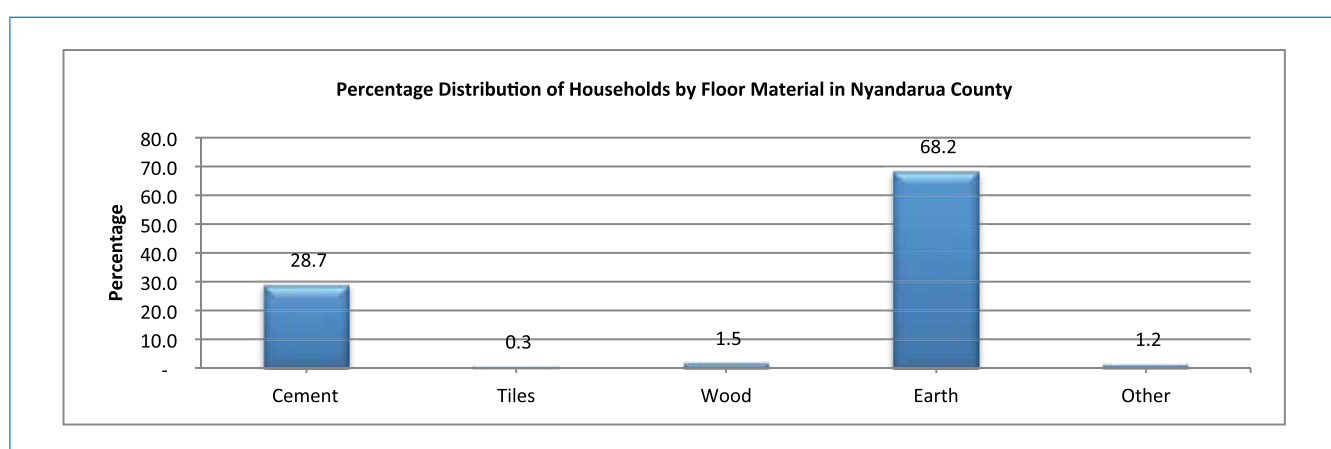
A total of 11% of residents in Nyandarua County use electricity as their main source of lighting. A further 56% use lanterns, and 26% use tin lamps. Less than 1% use fuel wood. The most common lighting source among male headed households is lanterns at 56% and the same holds for female headed households at 55%.

OI Jorok and OI Kalou constituencies have the highest level of electricity use at 14% each. That is almost three times Kipipiri constituency has the lowest level of electricity use. OI Jorok and OI Kalou constituencies are 3 percentage points above the county average. Gatimu ward has the highest level of electricity use at 32%. That is 31 percentage points above Gathanji ward, which has the lowest level of electricity use. Gatimu ward is 21 percentage points above the county average.

Housing

Flooring

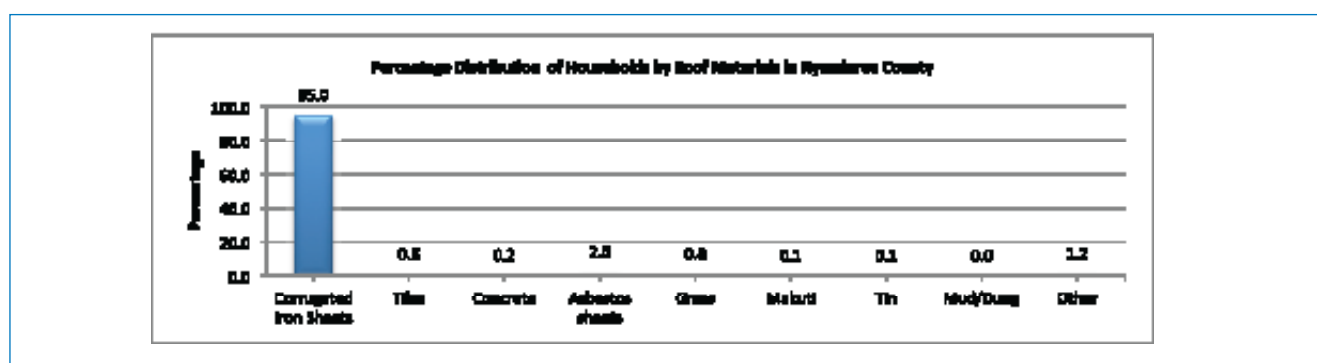
Figure 35.6: Percentage Distribution of Households by Floor Material in Nyandarua County



In Nyandarua County, 29% of residents have homes with cement floors, while 68 have earth floors. Less than 1% has tiles and 2% have wood floors. OI Jorok constituency with the highest share of cement floors at 33%. That is 13 percentage points above Kipipiri constituency, which has the lowest share. OI Jorok constituency is 4 percentage points above the county average. Gatimu ward has the highest share of cement floors at 56%. That is seven times Geta ward, which has the lowest share of cement floors. Gatimu ward is 27 percentage points above the county average.

Roofing

Figure 35.7: Percentage Distribution of Households by Roof Material in Nyandarua County



In Nyandarua County, less than 1% of residents have homes with concrete roofs, while 95% have corrugated iron sheet roofs. Grass and makuti roofs constitute 1% of homes, and mud/dung roofs are absent. Invariably and across all constituencies and wards use of other roofing materials is insignificant.

Kinangop and OI Jorok constituencies have the highest share of corrugated iron sheet roofs at 96% each. That is 4 percentage points above Ndaragwa constituency, which has the lowest share. Kinangop and OI Jorok constituencies 1 percentage point above the county average. Githabai ward has the highest share of corrugated iron sheet roofs at 99%. That is 110 percentage Kiriita ward, which has the lowest share. Githabai ward is 4 percentage points above the county average.

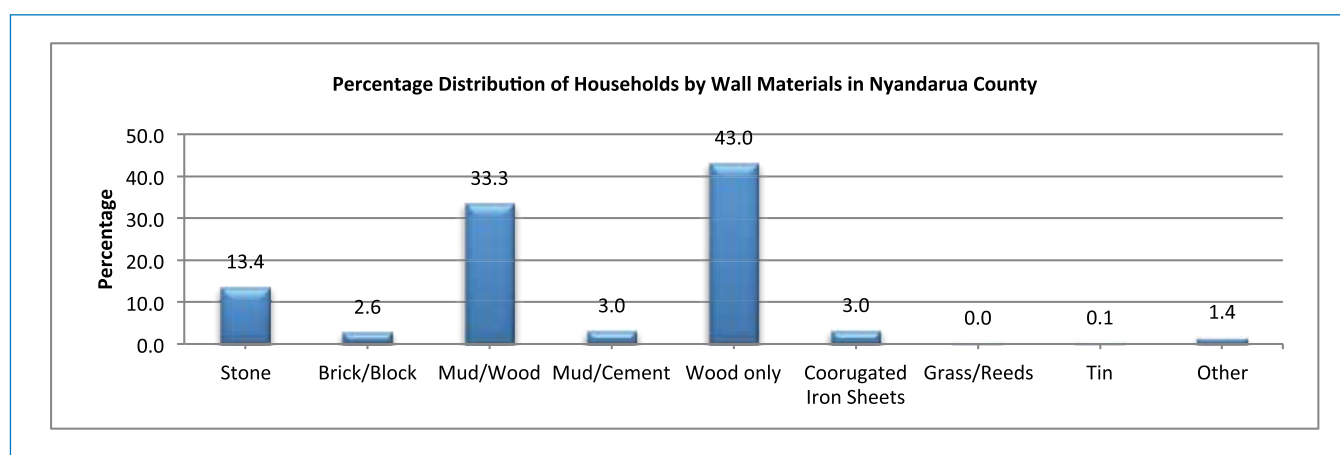
Walls

In Nyandarua County, 16% of homes have either brick or stone walls. 36% of homes have mud/wood or mud/cement walls. 43% have wood walls. 3% have corrugated iron sheet walls. None have grass/thatched walls. 2% have tin or other walls.

OI Kalou constituency has the highest share of brick/stone walls at 21%. That is twice Ndaragwa constituency, which has the lowest share of brick/stone walls. OI Kalou constituency is 5 percentage points above the county average. Kiambaga ward has the highest share of brick/stone walls at 36%. That is more than 12 times Geta ward, which has the lowest share of brick/stone walls. Kiambaga ward is 20 percentage points above the county average.

Ndaragwa and OI Jorok constituency has the highest share of wood walls at 61%. That is twice OI Kalou constituency, which has the lowest share. OI Jorok constituency is 18 percentage points above the county average. Gathanji ward has the highest share of wood walls at 80%. That is eight times Engineer ward, which has the lowest share. Gathanji ward is 37 percentage points above the county average.

Figure 35.8: Percentage Distribution of Households by Wall Material in Nyandarua County



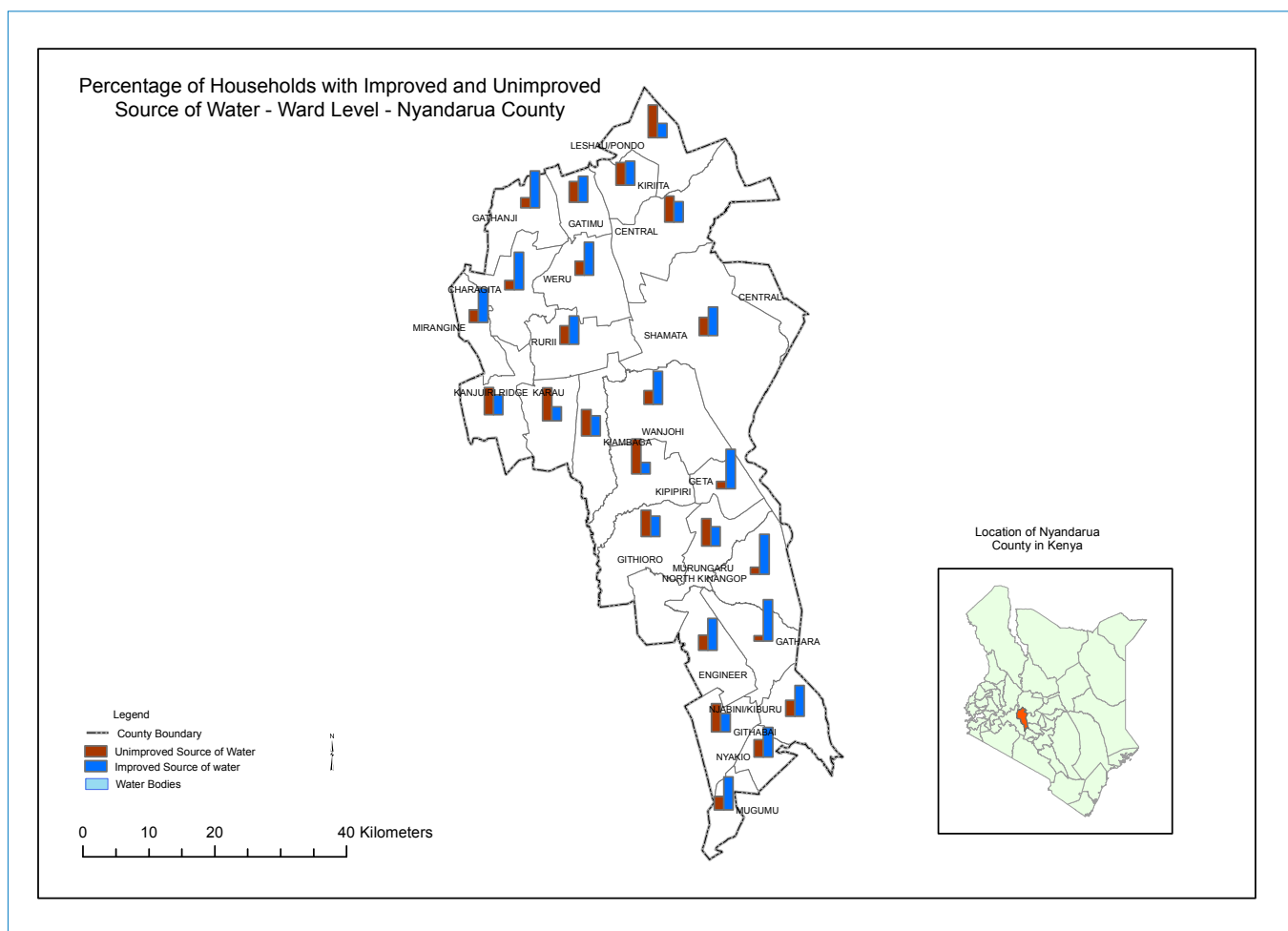
Water

Improved sources of water comprise protected springs, protected wells, boreholes, piped water into dwellings, collected piped and rain water; while unimproved sources include ponds, dams, lake, stream/river, unprotected springs, unprotected wells, jabia, water vendors and other.

In Nyandarua County, 59% of residents use improved sources of water, with the rest relying on unimproved sources. Improved sources are mainly common in male headed households at 59% as compared with female headed households at 58%.

OI Jorok constituency has the highest share of residents using improved sources of water at 70%. That is 23 percentage points above Ndaragwa constituency, which has the lowest share using improved sources of water. OI Jorok constituency is 11 percentage points above the county average. Gathara ward has the highest share of residents using improved sources of water at 89%. That is almost four times Kipipiri ward, which has the lowest share using improved sources of water. Gathara ward is 30 percentage points above the county average.

Figure 35.9: Nyandarua County-Percentage of Households with Improved and Unimproved Sources of Water by Ward

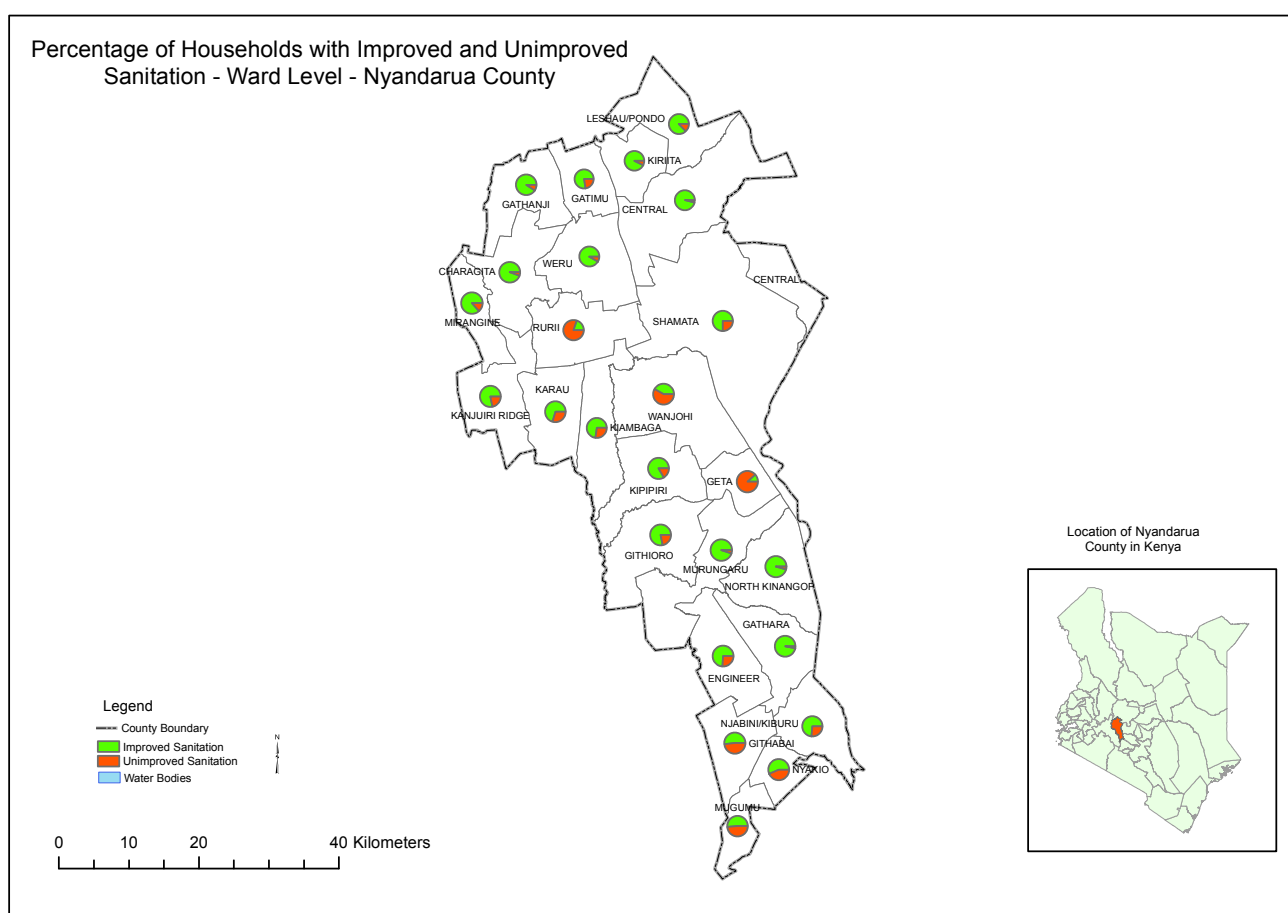


Sanitation

A total of 74% of residents in Nyandarua County use improved sanitation, while the rest use unimproved sanitation. Improved sanitation is mainly common in male headed households at 74% as compared with female headed households at 73%.

Ndaragwa constituency has the highest share of residents using improved sanitation at 88%. That is twice almost Kipipiri constituency, which has the lowest share using improved sanitation. Ndaragwa constituency is 11 percentage points above the county average. Gathara ward has the highest share of residents using improved sanitation at 97%. That is eight times Geta ward, which has the lowest share using improved sanitation. Gathara ward is 23 percentage points above the county average.

Figure 35.10: Nyandarua County –Percentage of Households with Improved and Unimproved Sanitation by Ward



Nyandarua County Annex Tables

35. NYANDARUA

Table 35.1: Gender, Age group, Demographic Indicators and Households Size by County Constituency and Wards

County/Constituency/Wards	Gender			Age group						Demographic indicators				Proportion of HH Members:			
	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 Ratio	Child dependency Ratio	aged dependency ratio	0-3	4-6	7+	total
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
Nyandarua County	589,320	288,569	300,751	101,616	253,353	131,469	187,536	309,605	26,362	0.959	0.903	0.818	0.085	43.0	42.2	14.9	140,745
Kinangop Constituency	189,714	92,922	96,792	33,459	82,670	42,034	61,741	99,900	7,144	0.960	0.899	0.828	0.072	41.2	42.7	16.1	44,537
Engineer	26,815	13,155	13,660	4,526	11,337	5,967	8,893	14,398	1,080	0.963	0.862	0.787	0.075	41.5	44.3	14.2	6,412
Gathara	25,839	12,596	13,243	4,495	11,063	5,586	8,585	13,865	911	0.951	0.864	0.798	0.066	42.4	42.0	15.6	6,170
North Kinangop	20,658	10,189	10,469	3,638	9,278	4,672	6,661	10,579	801	0.973	0.953	0.877	0.076	39.3	42.9	17.8	4,694
Murungaru	26,573	12,923	13,650	4,725	11,950	6,291	8,311	13,473	1,150	0.947	0.972	0.887	0.085	37.1	43.9	19.1	5,910
Njabini/Kiburu	20,248	10,062	10,186	3,551	8,625	4,218	6,868	10,976	647	0.988	0.845	0.786	0.059	47.3	39.1	13.6	5,150
Nyakio	24,892	12,245	12,647	4,439	10,880	5,401	8,037	13,021	991	0.968	0.912	0.836	0.076	38.8	44.1	17.1	5,687
Githabai	19,277	9,545	9,732	3,498	8,340	4,274	6,286	10,228	709	0.981	0.885	0.815	0.069	39.2	43.8	17.0	4,422
Mugumu	25,412	12,207	13,205	4,587	11,197	5,625	8,100	13,360	855	0.924	0.902	0.838	0.064	43.4	41.3	15.3	6,092
Kipipiri Constituency	94,820	46,063	48,757	16,617	42,559	22,001	28,361	47,033	5,228	0.945	1.016	0.905	0.111	40.4	42.0	17.6	21,804
Wanjohi	32,032	15,586	16,446	5,411	14,034	7,448	9,765	16,200	1,798	0.948	0.977	0.866	0.111	40.5	42.6	16.9	7,380

Kipipiri	22,540	10,977	11,563	3,731	9,875	5,252	6,775	11,395	1,270	0.949	0.978	0.867	0.111	41.1	42.1	16.8	5235
Geta	20,238	9,772	10,466	3,868	9,677	4,717	5,682	9,408	1,153	0.934	1.151	1.029	0.123	39.3	40.0	20.8	4500
Githoro	20,010	9,728	10,282	3,607	8,973	4,584	6,139	10,030	1,007	0.946	0.995	0.895	0.100	40.7	42.7	16.6	4689
Oi Kalou Constituency	118,903	58,451	60,452	21,118	51,869	26,456	37,623	61,789	5,245	0.967	0.924	0.839	0.085	42.5	41.5	16.0	26880
Karau	25,240	12,249	12,991	4,434	10,770	5,504	8,426	13,497	973	0.943	0.870	0.798	0.072	45.3	37.0	17.8	4635
Kanjuriri Ridge	25,374	12,686	12,688	4,638	11,359	5,623	7,778	12,871	1,144	1.000	0.971	0.883	0.089	40.7	42.3	16.9	5950
Mirangine	26,779	13,066	13,713	4,886	12,239	6,400	8,258	13,440	1,100	0.953	0.992	0.911	0.082	37.3	43.7	19.0	5913
Kiambaga	17,860	8,848	9,012	3,132	7,453	3,750	5,913	9,595	812	0.982	0.861	0.777	0.085	48.5	39.7	11.8	4712
Rurii	23,650	11,602	12,048	4,028	10,048	5,179	7,248	12,386	1,216	0.963	0.909	0.811	0.098	42.8	43.2	14.0	5770
Oi Jorok Constituency	94,415	46,522	47,893	15,600	38,987	20,791	31,126	51,475	3,953	0.971	0.834	0.757	0.077	46.1	42.0	11.9	24144
Gatharaji	21,114	10,571	10,543	3,444	8,857	4,908	6,644	11,274	983	1.003	0.873	0.786	0.087	41.1	45.0	13.9	5058
Gatimu	25,632	12,593	13,039	4,027	9,837	5,224	9,519	15,039	756	0.966	0.704	0.654	0.050	53.3	38.5	8.2	7264
Weru	25,886	12,563	13,323	4,195	10,555	5,841	8,325	14,087	1,244	0.943	0.838	0.749	0.088	46.2	41.8	12.0	6623
Charagita	21,783	10,795	10,988	3,934	9,738	4,818	6,638	11,075	970	0.982	0.967	0.879	0.088	40.8	44.3	14.9	5199
Ndaragwa Constituency	91,468	44,611	46,857	14,822	37,268	20,187	28,685	49,408	4,792	0.952	0.851	0.754	0.097	46.0	42.3	11.7	23380
Leshau/Pondo	19,025	9,146	9,879	3,035	7,735	4,321	5,759	9,991	1,299	0.926	0.904	0.774	0.130	46.5	41.8	11.8	4874
Kiriita	19,491	9,361	10,130	3,022	7,482	4,163	6,529	11,100	909	0.924	0.756	0.674	0.082	48.8	40.8	10.4	5147
Central	29,592	14,514	15,078	4,869	12,244	6,612	8,920	15,803	1,545	0.963	0.873	0.775	0.098	46.6	41.7	11.7	7601
Shamata	23,360	11,590	11,770	3,896	9,807	5,091	7,477	12,514	1,039	0.985	0.867	0.784	0.083	42.4	44.8	12.8	5758

Table 35.2: Employment by County, Constituency and Wards

County/Constituency/ Wards	Work for pay	Family Business	Family Agri- cultural Holding	Intern/ Volunteer	Retired Homemaker	Fulltime Student	Incapacitated	No work	Number of Individuals
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
Nyandarua County	18.0	9.1	50.0	0.7	4.6	13.7	0.5	3.5	309,605
Kinangop Constituency	16.7	9.5	55.3	0.9	3.1	11.6	0.4	2.5	99,900
Engineer	16.9	6.6	58.2	0.7	1.3	13.2	0.2	2.9	14,398
Gathara	19.4	9.3	54.2	0.6	1.6	12.5	0.3	2.1	13,865
North Kinangop	15.3	9.9	56.2	0.8	1.5	13.4	0.3	2.7	10,579
Murungaru	13.3	7.2	67.8	0.5	1.9	7.8	0.5	1.0	13,473
Njabini/Kiburu	24.6	10.9	42.6	0.6	4.4	12.6	0.4	3.9	10,976
Nyakio	13.5	5.9	64.3	2.2	2.1	9.8	0.4	1.8	13,021
Githabai	11.9	12.4	58.0	0.9	2.8	10.4	0.8	2.9	10,228
Mugumu	18.8	15.0	39.5	1.1	9.1	13.0	0.4	3.2	13,360
Kipipiri Constituency	13.4	7.3	63.7	0.6	3.4	9.7	0.4	1.5	47,033
Wanjohi	14.2	8.0	61.1	0.6	4.5	9.6	0.2	1.9	16,200
Kipipiri	14.4	8.0	60.4	0.6	3.6	10.4	0.7	1.9	11,395
Geta	8.7	7.6	70.4	0.6	1.7	9.5	0.6	1.0	9,408
Githioro	15.3	5.4	65.5	0.4	2.8	9.1	0.3	1.0	10,030
Ol Kalou Constituency	20.4	8.8	45.2	0.7	3.8	15.7	0.5	4.8	61,789
Karau	20.6	9.6	42.1	0.9	5.6	14.4	0.6	6.3	13,497
Kanjuri Ridge	21.0	9.7	49.2	0.4	1.6	14.3	0.6	3.2	12,871
Mirangine	13.3	7.5	50.9	0.7	3.2	18.1	0.5	5.8	13,440
Kiambaga	29.7	13.1	30.1	0.9	5.9	14.5	0.5	5.3	9,595
Rurii	20.2	5.3	50.1	0.5	3.0	16.9	0.5	3.5	12,386
Ol Jorok Constituency	23.6	10.7	39.2	0.8	5.8	15.8	0.4	3.7	51,475
Gathanji	15.0	8.4	54.1	0.6	1.9	17.6	0.6	1.8	11,274
Gatimu	37.0	16.2	14.1	1.1	11.6	13.8	0.3	6.0	15,039
Weru	22.6	9.3	40.1	0.7	6.3	16.3	0.5	4.4	14,087
Charagita	15.6	7.3	57.1	0.6	1.4	16.0	0.4	1.5	11,075
Ndaragwa Constituency	16.3	8.7	43.1	0.6	8.3	17.0	0.6	5.4	49,408

Leshau/Pondo	14.7	10.9	30.1	0.6	16.0	18.6	0.6	8.4	9,991
Kiriita	23.6	14.4	25.3	0.6	10.6	17.9	0.5	7.1	11,100
Central	16.1	6.4	47.8	0.6	7.2	16.3	0.7	5.0	15,803
Shamata	11.4	4.9	63.4	0.4	1.5	16.0	0.5	2.0	12,514

Table 35.3: Employment and Education Levels by County, Constituency and Wards

County /constitu- ency/Wards	Education Totallevel	Work for pay	Family Busi- ness	Family Agricultural Holding	Intern/ Volunteer	Retired /Homemaker	Fulltime Student	Incapaci- tated	No work	Number of Individuals
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	Total	38.1	16.4	11.4	1.3	9.9	12.2	0.3	10.2	7,265,012
Urban	None	23.5	15.8	17.1	3.1	18.7	1.5	1.6	18.8	539,405
Urban	Primary	33.6	16.9	16.0	1.0	12.3	9.5	0.4	10.2	2,742,525
Urban	Secondary+	43.2	16.1	7.5	1.3	7.1	15.6	0.2	9.0	3,983,082
Nyandarua	Total	18.0	9.1	50.0	0.7	4.6	13.7	0.5	3.5	309,605
Nyandarua	None	16.5	7.3	60.0	2.5	6.1	1.1	3.5	3.0	14,381
Nyandarua	Primary	16.0	8.6	58.4	0.6	4.5	8.5	0.4	3.1	179,270
Nyandarua	Secondary+	21.3	10.2	35.7	0.8	4.4	23.3	0.2	4.2	115,954
Kinangop Constitu- ency	Total	16.7	9.5	55.3	0.9	3.1	11.6	0.4	2.5	99,900
Kinangop Constitu- ency	None	15.8	7.8	63.1	2.9	3.7	1.1	3.3	2.4	4,298
Kinangop Constitu- ency	Primary	14.7	8.9	62.8	0.8	3.0	7.3	0.3	2.2	60,327
Kinangop Constitu- ency	Secondary+	20.3	10.7	41.4	1.0	3.2	20.1	0.2	3.1	35,275
Engineer Wards	Total	16.9	6.6	58.2	0.7	1.3	13.2	0.2	2.9	14,398
Engineer Wards	None	16.4	4.2	69.5	2.5	0.7	1.3	3.1	2.4	554
Engineer Wards	Primary	15.1	5.9	65.9	0.6	1.2	8.4	0.1	2.8	8,419

Engineer Wards	Secondary+	19.9	7.8	45.2	0.7	1.6	21.8	0.1	3.0	5,425
Gathara Wards	Total	19.4	9.3	54.2	0.6	1.6	12.5	0.3	2.1	13,865
Gathara Wards	None	19.6	9.8	60.1	2.2	3.1	0.8	3.1	1.4	491
Gathara Wards	Primary	15.6	9.2	63.0	0.5	1.7	8.5	0.2	1.4	8,348
Gathara Wards	Secondary+	25.8	9.3	39.0	0.6	1.4	20.3	0.1	3.5	5,026
North Kinangop Wards	Total	15.3	9.9	56.2	0.8	1.5	13.4	0.3	2.7	10,579
North Kinangop Wards	None	10.6	8.4	71.7	2.7	1.0	1.5	1.5	2.7	407
North Kinangop Wards	Primary	12.2	9.2	65.3	0.5	1.5	8.9	0.3	2.2	6,567
North Kinangop Wards	Secondary+	21.4	11.5	38.0	1.1	1.6	22.9	0.1	3.5	3,605
Murungu Wards	Total	13.3	7.2	67.8	0.5	1.9	7.8	0.5	1.0	13,473
Murungu Wards	None	10.6	5.2	75.2	2.0	3.1	-	3.6	0.4	557
Murungu Wards	Primary	11.9	6.2	72.8	0.4	1.8	5.6	0.4	0.8	8,924
Murungu Wards	Secondary+	16.7	9.7	55.5	0.5	2.0	13.8	0.3	1.5	3,992
Njabini/Kiburu Wards	Total	24.6	10.9	42.6	0.6	4.4	12.6	0.4	3.9	10,976
Njabini/Kiburu Wards	None	22.7	8.3	49.1	3.1	5.9	2.8	3.5	4.6	458
Njabini/Kiburu Wards	Primary	23.2	9.6	50.3	0.3	4.6	7.7	0.3	3.9	6,083
Njabini/Kiburu Wards	Secondary+	26.8	13.1	31.2	0.7	4.0	20.2	0.1	4.0	4,435
Nyakio Wards	Total	13.5	5.9	64.3	2.2	2.1	9.8	0.4	1.8	13,021
Nyakio Wards	None	14.2	3.3	71.9	2.6	2.7	0.9	2.6	1.8	661
Nyakio Wards	Primary	13.3	4.9	69.7	2.1	1.7	6.4	0.3	1.6	8,239
Nyakio Wards	Secondary+	13.9	8.4	52.1	2.6	2.8	17.9	0.1	2.2	4,121
Githabai Wards	Total	11.9	12.4	58.0	0.9	2.8	10.4	0.8	2.9	10,228
Githabai Wards	None	12.9	11.4	59.4	2.2	2.8	0.4	7.6	3.3	458
Githabai Wards	Primary	10.5	12.9	64.1	0.6	2.8	6.2	0.5	2.5	6,265
Githabai Wards	Secondary+	14.2	11.6	46.9	1.1	2.9	19.3	0.5	3.6	3,505
Mugumu Wards	Total	18.8	15.0	39.5	1.1	9.1	13.0	0.4	3.2	13,360
Mugumu Wards	None	18.5	12.2	48.9	5.1	8.4	1.5	2.1	3.2	712
Mugumu Wards	Primary	17.3	15.6	46.6	0.9	9.3	7.1	0.3	2.9	7,482
Mugumu Wards	Secondary+	20.9	14.7	27.9	0.8	8.7	23.2	0.2	3.6	5,166
Kipipiri Constituency	Total	13.4	7.3	63.7	0.6	3.4	9.7	0.4	1.5	47,033
Kipipiri Constituency	None	10.9	6.1	71.1	2.4	4.1	0.6	3.4	1.5	2,417

Kipipiri Constituency	Primary	11.6	7.0	69.8	0.4	3.0	6.8	0.3	1.2	30,010
Kipipiri Constituency	Secondary+	17.6	8.3	50.1	0.5	4.1	17.0	0.2	2.2	14,606
Wanjohi Wards	Total	14.2	8.0	61.1	0.6	4.5	9.6	0.2	1.9	16,200
Wanjohi Wards	None	12.8	7.2	66.1	3.5	5.0	0.7	2.0	2.7	821
Wanjohi Wards	Primary	13.0	7.6	67.3	0.4	3.9	6.3	0.1	1.5	9,900
Wanjohi Wards	Secondary+	16.7	8.8	49.0	0.5	5.6	16.9	0.1	2.5	5,479
Kipipiri Wards	Total	14.4	8.0	60.4	0.6	3.6	10.4	0.7	1.9	11,395
Kipipiri Wards	None	10.8	7.7	67.7	1.9	5.0	0.8	5.6	0.5	622
Kipipiri Wards	Primary	11.0	7.8	68.0	0.7	3.4	7.1	0.4	1.7	6,765
Kipipiri Wards	Secondary+	20.7	8.3	46.4	0.4	3.9	17.5	0.3	2.5	4,008
Geta Wards	Total	8.7	7.6	70.4	0.6	1.7	9.5	0.6	1.0	9,408
Geta Wards	None	5.9	5.5	80.5	2.0	1.4	0.4	3.7	0.6	493
Geta Wards	Primary	7.3	7.2	75.3	0.5	1.4	7.2	0.5	0.7	6,728
Geta Wards	Secondary+	13.8	9.2	53.3	0.5	2.4	18.5	0.2	2.2	2,187
Githioro Wards	Total	15.3	5.4	65.5	0.4	2.8	9.1	0.3	1.0	10,030
Githioro Wards	None	12.9	2.9	74.4	1.3	4.4	0.2	2.5	1.5	481
Githioro Wards	Primary	14.3	5.1	69.6	0.3	2.8	7.0	0.2	0.9	6,617
Githioro Wards	Secondary+	18.0	6.5	55.1	0.6	2.7	15.5	0.2	1.4	2,932
Oi Kalou Constituency	Total	20.4	8.8	45.2	0.7	3.8	15.7	0.5	4.8	61,789
Oi Kalou Constituency	None	20.8	6.8	56.6	2.6	5.0	1.0	3.5	3.7	3,181
Oi Kalou Constituency	Primary	18.8	8.2	53.0	0.5	3.9	10.6	0.5	4.5	35,118
Oi Kalou Constituency	Secondary+	22.9	10.1	32.0	0.7	3.4	25.3	0.2	5.5	23,490
Karau Wards	Total	20.6	9.6	42.1	0.9	5.6	14.4	0.6	6.3	13,497
Karau Wards	None	18.5	6.1	55.2	3.2	7.3	1.2	3.1	5.4	654
Karau Wards	Primary	17.2	8.3	50.1	0.5	6.3	10.6	0.6	6.4	7,619
Karau Wards	Secondary+	25.8	12.0	28.6	1.2	4.4	21.7	0.2	6.1	5,224
Kanjuiri Ridge Wards	Total	21.0	9.7	49.2	0.4	1.6	14.3	0.6	3.2	12,871
Kanjuiri Ridge Wards	None	26.9	10.9	51.4	1.4	1.6	0.4	4.1	3.3	704
Kanjuiri Ridge Wards	Primary	20.8	9.5	55.3	0.3	1.6	9.7	0.5	2.4	7,751
Kanjuiri Ridge Wards	Secondary+	20.2	9.8	38.3	0.5	1.6	24.6	0.2	4.8	4,416
Mirangine Wards	Total	13.3	7.5	50.9	0.7	3.2	18.1	0.5	5.8	13,440

Mirangine Wards	None	14.0	6.1	63.5	2.6	5.7	0.6	4.0	3.6	723
Mirangine Wards	Primary	12.1	7.3	57.9	0.5	3.3	12.9	0.4	5.7	8,332
Mirangine Wards	Secondary+	15.6	8.0	35.5	0.6	2.7	31.1	0.1	6.4	4,385
Kiambaga Wards	Total	29.7	13.1	30.1	0.9	5.9	14.5	0.5	5.3	9,595
Kiambaga Wards	None	22.3	8.9	46.1	4.7	8.2	1.2	2.3	6.3	427
Kiambaga Wards	Primary	28.4	12.0	37.7	0.6	6.6	9.3	0.5	4.8	4,839
Kiambaga Wards	Secondary+	31.9	14.7	20.0	0.9	5.0	21.6	0.2	5.8	4,329
Rurii Wards	Total	20.2	5.3	50.1	0.5	3.0	16.9	0.5	3.5	12,386
Rurii Wards	None	22.9	2.4	62.6	2.1	3.7	1.6	3.6	1.2	673
Rurii Wards	Primary	19.5	5.0	58.9	0.5	2.7	10.0	0.4	3.1	6,577
Rurii Wards	Secondary+	20.7	6.1	37.2	0.4	3.3	27.7	0.2	4.4	5,136
Oi Jorok Constituency	Total	23.6	10.7	39.2	0.8	5.8	15.8	0.4	3.7	51,475
Oi Jorok Constituency	None	18.3	10.5	53.3	2.8	7.6	1.1	3.1	3.4	2,295
Oi Jorok Constituency	Primary	22.3	10.4	48.1	0.6	5.8	9.4	0.4	3.1	27,518
Oi Jorok Constituency	Secondary+	25.9	11.1	26.5	0.8	5.6	25.5	0.2	4.5	21,662
Gathanji Wards	Total	15.0	8.4	54.1	0.6	1.9	17.6	0.6	1.8	11,274
Gathanji Wards	None	15.1	9.1	65.7	1.2	2.7	1.0	3.9	1.4	591
Gathanji Wards	Primary	14.2	9.1	61.9	0.5	1.7	10.8	0.5	1.4	6,948
Gathanji Wards	Secondary+	16.5	7.0	37.8	0.8	2.1	32.9	0.2	2.7	3,735
Gatimu Wards	Total	37.0	16.2	14.1	1.1	11.6	13.8	0.3	6.0	15,039
Gatimu Wards	None	23.4	18.8	29.4	3.3	15.5	1.0	1.8	6.8	606
Gatimu Wards	Primary	37.7	16.2	17.9	0.9	14.0	7.1	0.3	6.0	6,607
Gatimu Wards	Secondary+	37.4	16.1	9.8	1.1	9.2	20.4	0.1	5.9	7,826
Weru Wards	Total	22.6	9.3	40.1	0.7	6.3	16.3	0.5	4.4	14,087
Weru Wards	None	15.5	6.8	57.0	3.4	8.7	1.1	3.2	4.2	619
Weru Wards	Primary	22.1	8.9	48.5	0.5	6.5	9.4	0.5	3.7	7,501
Weru Wards	Secondary+	23.9	9.9	27.8	0.7	5.7	26.5	0.2	5.3	5,967
Charagita Wards	Total	15.6	7.3	57.1	0.6	1.4	16.0	0.4	1.5	11,075
Charagita Wards	None	19.4	6.7	63.7	3.1	2.1	1.0	3.6	0.4	479
Charagita Wards	Primary	15.3	7.6	63.6	0.6	1.2	10.0	0.4	1.3	6,462
Charagita Wards	Secondary+	15.6	7.0	46.1	0.4	1.6	27.1	0.1	2.1	4,134

Ndaragwa Constituency	Total	16.3	8.7	43.1	0.6	8.3	17.0	0.6	5.4	49,408
Ndaragwa Constituency	None	16.0	5.3	53.7	1.6	13.1	1.7	4.6	4.1	2,190
Ndaragwa Constituency	Primary	14.0	8.3	53.0	0.4	9.5	9.1	0.5	5.4	26,297
Ndaragwa Constituency	Secondary+	19.3	9.7	29.6	0.7	6.3	28.7	0.2	5.6	20,921
Leshau/Pondo Wards	Total	14.7	10.9	30.1	0.6	16.0	18.6	0.6	8.4	9,991
Leshau/Pondo Wards	None	13.8	8.3	42.5	0.9	25.2	1.1	3.7	4.6	457
Leshau/Pondo Wards	Primary	14.0	11.8	35.6	0.5	19.2	10.1	0.6	8.2	5,469
Leshau/Pondo Wards	Secondary+	15.8	10.1	21.3	0.8	10.7	32.1	0.3	9.0	4,065
Kiriita Wards	Total	23.6	14.4	25.3	0.6	10.6	17.9	0.5	7.1	11,100
Kiriita Wards	None	18.0	6.2	45.6	1.5	14.3	3.9	5.9	4.7	406
Kiriita Wards	Primary	20.4	14.2	34.5	0.4	13.1	8.9	0.5	8.1	4,796
Kiriita Wards	Secondary+	26.6	15.0	16.5	0.7	8.3	26.2	0.2	6.5	5,898
Central Wards	Total	16.1	6.4	47.8	0.6	7.2	16.3	0.7	5.0	15,803
Central Wards	None	16.3	4.7	54.3	2.1	11.8	0.7	4.7	5.4	823
Central Wards	Primary	13.9	6.0	56.4	0.4	8.4	9.0	0.7	5.3	8,626
Central Wards	Secondary+	19.0	7.2	35.2	0.7	4.9	28.2	0.2	4.7	6,354
Shamata Wards	Total	11.4	4.9	63.4	0.4	1.5	16.0	0.5	2.0	12,514
Shamata Wards	None	15.9	2.8	69.3	1.8	3.2	2.0	4.2	1.0	504
Shamata Wards	Primary	9.9	4.5	73.7	0.3	1.1	8.5	0.4	1.7	7,406
Shamata Wards	Secondary+	13.3	5.9	46.1	0.5	2.0	29.5	0.2	2.6	4,604

Table 35.4: Employment and Education Levels in Male Headed Household by County, Constituency and Wards

County, Constituency and Wards	Education Level reached	Work for Pay	Family Business	Family Agricultural holding	Internal/ Volunteer	Retired/ Homemaker	Fulltime Student	Incapacitated	No work	Population (15-64)
Kenya National	Total	25.5	13.5	31.6	1.1	9.0	11.4	0.4	7.5	14,757,992
Kenya National	None	11.4	14.3	44.2	1.6	13.9	0.9	1.0	12.6	2,183,284
Kenya National	Primary	22.2	12.9	37.3	0.8	9.4	10.6	0.4	6.4	6,939,667
Kenya National	Secondary+	35.0	13.8	19.8	1.1	6.5	16.5	0.2	7.0	5,635,041
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
Rural Rural	Primary	16.5	11.2	46.7	0.8	8.0	11.6	0.4	4.9	4,862,291

Rural Rural	Second-ary+	23.1	10.6	34.7	1.0	5.5	19.6	0.2	5.3	2,576,966
Urban Urban	Total	40.2	16.6	10.9	1.3	10.1	10.9	0.3	9.7	5,495,248
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	Second-ary+	45.1	16.6	7.3	1.2	7.4	13.8	0.1	8.5	3,058,075
Nyandarua	Total	18.9	9.6	50.5	0.7	4.5	12.2	0.4	3.3	222,006
Nyandarua	None	19.4	7.6	58.1	2.3	5.5	1.1	3.0	3.0	8,357
Nyandarua	Primary	16.5	9.0	59.0	0.5	4.4	7.3	0.3	2.9	130,008
Nyandarua	Second-ary+	22.7	10.9	36.4	0.7	4.4	20.8	0.2	4.0	83,641
Kinangop Constituency	Total	17.3	9.8	55.7	0.9	3.0	10.6	0.3	2.4	73,762
Kinangop Constituency	None	18.1	7.8	61.6	2.6	3.4	1.4	2.8	2.4	2,498
Kinangop Constituency	Primary	14.9	9.0	63.5	0.7	2.9	6.5	0.3	2.1	44,886
Kinangop Constituency	Second-ary+	21.1	11.3	41.9	0.9	3.2	18.3	0.2	3.0	26,378
Engineer Ward	Total	17.7	6.9	59.0	0.6	1.2	11.6	0.1	2.8	10,458
Engineer Ward	None	18.7	4.0	69.6	2.0	-	1.3	2.0	2.3	299
Engineer Ward	Primary	15.8	6.1	66.6	0.5	1.0	7.3	0.1	2.6	6,229
Engineer Ward	Second-ary+	20.8	8.4	46.1	0.7	1.7	19.2	0.1	3.1	3,930
Gathara Ward	Total	19.6	9.6	53.9	0.5	1.7	12.4	0.2	2.0	10,244
Gathara Ward	None	21.5	10.0	57.9	1.9	3.1	0.8	3.1	1.9	261
Gathara Ward	Primary	16.0	9.6	62.9	0.5	1.8	7.8	0.2	1.3	6,184
Gathara Ward	Second-ary+	25.4	9.5	39.0	0.6	1.5	20.6	0.1	3.2	3,799
North Kinangop Ward	Total	16.0	10.3	56.9	0.6	1.5	12.1	0.3	2.4	8,023
North Kinangop Ward	None	12.8	8.4	69.2	2.2	0.9	1.8	2.2	2.6	227
North Kinangop Ward	Primary	12.4	9.6	65.9	0.4	1.4	8.2	0.3	1.9	5,046
North Kinangop Ward	Second-ary+	22.9	11.9	39.3	1.0	1.7	20.1	0.1	3.2	2,750
Murungaru Ward	Total	13.5	7.7	68.0	0.5	2.0	6.7	0.4	1.0	9,644
Murungaru Ward	None	10.2	4.9	73.0	2.3	4.3	-	4.6	0.7	304
Murungaru Ward	Primary	11.6	6.7	73.4	0.4	1.9	4.8	0.3	0.9	6,483
Murungaru Ward	Second-ary+	18.2	10.4	55.3	0.6	2.1	11.8	0.2	1.5	2,857
Njabini/Kiburu Ward	Total	25.6	11.3	43.1	0.5	4.3	11.1	0.3	3.7	8,198
Njabini/Kiburu Ward	None	28.5	9.4	45.8	2.5	4.0	3.6	2.2	4.0	277

Njabini/Kiburu Ward	Primary	23.6	9.6	51.4	0.3	4.5	6.5	0.4	3.7	4,533
Njabini/Kiburu Ward	Second-ary+	28.0	13.8	31.7	0.7	4.1	18.0	0.0	3.7	3,388
Nyakio Ward	Total	13.0	6.0	65.4	2.3	2.0	9.3	0.3	1.7	10,034
Nyakio Ward	None	15.5	3.9	71.9	2.1	3.0	0.7	1.4	1.6	438
Nyakio Ward	Primary	12.3	4.7	71.4	2.2	1.5	5.9	0.3	1.6	6,371
Nyakio Ward	Second-ary+	14.1	8.7	52.4	2.5	2.9	17.3	0.1	1.9	3,225
Githabai Ward	Total	12.5	12.4	58.9	0.7	2.7	9.5	0.7	2.7	7,537
Githabai Ward	None	14.1	10.6	60.2	1.8	2.8	0.4	6.7	3.5	284
Githabai Ward	Primary	11.0	12.7	64.5	0.5	2.8	5.7	0.4	2.3	4,645
Githabai Ward	Second-ary+	15.0	12.1	48.6	0.8	2.5	17.3	0.5	3.2	2,608
Mugumu Ward	Total	20.0	15.6	39.1	1.0	9.0	11.6	0.3	3.2	9,624
Mugumu Ward	None	23.0	12.0	45.8	5.4	7.4	2.5	1.2	2.7	408
Mugumu Ward	Primary	18.3	15.7	46.5	0.9	9.3	6.0	0.3	3.0	5,395
Mugumu Ward	Second-ary+	22.2	16.0	28.0	0.7	8.7	20.5	0.2	3.7	3,821
Kipipiri Constituency	Total	14.1	7.7	64.3	0.5	3.2	8.4	0.3	1.5	32,949
Kipipiri Constituency	None	12.7	5.8	70.9	1.9	3.8	0.4	3.1	1.3	1,390
Kipipiri Constituency	Primary	11.8	7.2	70.6	0.4	2.8	5.8	0.2	1.1	21,365
Kipipiri Constituency	Second-ary+	19.2	8.9	50.2	0.5	3.9	14.9	0.2	2.2	10,194
Wanjohi Ward	Total	14.9	8.1	62.0	0.5	4.2	8.4	0.2	1.7	11,536
Wanjohi Ward	None	14.3	6.5	67.7	3.6	3.2	0.4	2.2	2.2	504
Wanjohi Ward	Primary	13.4	7.5	68.2	0.3	3.7	5.4	0.1	1.4	7,178
Wanjohi Ward	Second-ary+	17.8	9.5	49.7	0.5	5.3	14.9	0.0	2.2	3,854
Kipipiri Ward	Total	15.7	8.3	60.7	0.4	3.5	8.9	0.6	1.9	7,827
Kipipiri Ward	None	12.9	7.2	67.6	0.6	6.0	0.3	5.2	0.3	349
Kipipiri Ward	Primary	11.5	7.9	68.9	0.5	3.1	6.1	0.4	1.5	4,707
Kipipiri Ward	Second-ary+	23.2	9.0	45.9	0.3	3.7	14.8	0.3	2.7	2,771
Geta Ward	Total	9.4	8.2	70.7	0.5	1.5	8.2	0.4	1.1	6,594
Geta Ward	None	7.3	5.3	80.2	1.1	1.5	0.8	2.7	1.1	262
Geta Ward	Primary	7.5	7.8	75.8	0.5	1.2	6.2	0.4	0.6	4,808
Geta Ward	Second-ary+	15.6	10.0	53.1	0.7	2.4	15.7	0.2	2.4	1,524
Githioro Ward	Total	15.6	5.9	66.1	0.5	2.6	8.0	0.3	1.0	6,992

Githioro Ward	None	14.9	2.9	72.4	1.5	4.4	0.4	2.5	1.1	275
Githioro Ward	Primary	14.1	5.7	70.6	0.3	2.5	5.7	0.2	0.8	4,672
Githioro Ward	Second-ary+	19.1	6.7	54.9	0.7	2.6	14.2	0.2	1.4	2,045
OI Kalou Constituency	Total	21.6	9.4	45.4	0.6	3.9	14.0	0.4	4.6	43,692
OI Kalou Constituency	None	24.4	6.6	53.5	2.9	5.0	0.9	2.9	3.9	1,855
OI Kalou Constituency	Primary	19.5	8.7	53.3	0.5	4.0	9.3	0.4	4.3	25,065
OI Kalou Constituency	Second-ary+	24.4	10.6	32.8	0.6	3.6	22.6	0.2	5.2	16,772
Karau Ward	Total	21.9	10.1	40.8	0.9	6.0	13.4	0.5	6.4	9,171
Karau Ward	None	21.3	7.1	50.4	3.8	8.4	0.8	2.5	5.8	395
Karau Ward	Primary	18.3	8.6	49.0	0.5	6.8	9.9	0.5	6.6	5,145
Karau Ward	Second-ary+	27.2	12.7	28.2	1.1	4.7	19.8	0.3	6.2	3,631
Kanjiuri Ridge Ward	Total	22.0	10.2	50.0	0.3	1.6	12.5	0.5	3.0	9,217
Kanjiuri Ridge Ward	None	32.0	10.2	48.1	1.9	1.2	0.5	3.3	2.8	422
Kanjiuri Ridge Ward	Primary	21.5	9.9	56.0	0.2	1.6	8.1	0.4	2.4	5,625
Kanjiuri Ridge Ward	Second-ary+	21.5	10.6	39.7	0.4	1.5	22.1	0.2	4.0	3,170
Mirangine Ward	Total	13.4	8.2	51.9	0.6	3.3	16.8	0.4	5.4	9,860
Mirangine Ward	None	12.5	5.9	64.4	2.5	6.1	0.5	4.1	4.1	393
Mirangine Ward	Primary	12.0	8.2	59.0	0.5	3.4	11.4	0.3	5.2	6,199
Mirangine Ward	Second-ary+	16.2	8.4	36.9	0.6	2.8	29.2	0.1	5.9	3,268
Kiambaga Ward	Total	32.4	13.5	29.5	1.0	6.2	12.2	0.3	4.8	6,918
Kiambaga Ward	None	28.1	7.4	44.5	5.1	7.4	0.8	1.2	5.5	256
Kiambaga Ward	Primary	30.8	12.3	37.2	0.7	6.9	7.5	0.4	4.2	3,524
Kiambaga Ward	Second-ary+	34.7	15.3	19.7	0.9	5.4	18.5	0.1	5.5	3,138
Rurii Ward	Total	21.7	5.7	50.9	0.5	3.0	14.4	0.4	3.6	8,526
Rurii Ward	None	28.8	2.6	57.6	1.8	3.1	1.8	2.6	1.8	389
Rurii Ward	Primary	20.2	5.4	59.5	0.5	2.5	8.4	0.3	3.3	4,572
Rurii Ward	Second-ary+	22.8	6.6	39.2	0.3	3.5	23.4	0.2	4.1	3,565
OI Jorok Constituency	Total	24.8	11.5	39.3	0.7	6.0	14.1	0.3	3.4	36,853
OI Jorok Constituency	None	20.9	12.5	50.2	2.4	6.9	1.3	2.5	3.3	1,355
OI Jorok Constituency	Primary	23.0	11.1	48.2	0.5	6.1	8.0	0.3	2.8	19,934
OI Jorok Constituency	Second-ary+	27.4	11.9	26.9	0.7	5.7	23.1	0.1	4.2	15,564

Gathanji Ward	Total	15.4	9.3	55.1	0.5	1.8	15.8	0.4	1.8	8,108
Gathanji Ward	None	16.5	11.8	62.6	0.9	2.4	1.2	2.6	2.1	340
Gathanji Ward	Primary	14.6	9.9	62.7	0.4	1.5	9.5	0.4	1.1	5,075
Gathanji Ward	Second-ary+	16.7	7.8	39.8	0.8	2.2	29.6	0.2	2.9	2,693
Gatimu Ward	Total	38.3	16.7	13.4	0.9	11.8	13.0	0.2	5.6	11,008
Gatimu Ward	None	26.1	19.8	30.8	2.9	12.0	1.3	1.6	5.5	383
Gatimu Ward	Primary	38.8	16.7	17.2	0.8	14.7	5.9	0.2	5.8	4,836
Gatimu Ward	Second-ary+	38.7	16.4	9.2	0.9	9.5	19.8	0.1	5.4	5,789
Weru Ward	Total	24.4	10.2	39.6	0.7	6.6	14.2	0.4	4.0	9,691
Weru Ward	None	16.8	8.9	52.7	3.0	10.0	1.6	3.0	4.1	370
Weru Ward	Primary	23.4	9.8	47.7	0.5	7.0	8.0	0.3	3.4	5,253
Weru Ward	Second-ary+	26.4	10.9	27.8	0.7	5.8	23.3	0.2	4.9	4,068
Charagita Ward	Total	16.2	8.2	58.3	0.6	1.3	13.8	0.3	1.5	8,046
Charagita Ward	None	24.8	8.0	58.8	2.7	0.8	1.1	3.1	0.8	262
Charagita Ward	Primary	15.4	8.2	64.7	0.6	1.3	8.5	0.2	1.1	4,770
Charagita Ward	Second-ary+	16.7	8.2	48.1	0.4	1.3	23.2	0.1	2.1	3,014
Ndaragwa Constituency	Total	17.5	9.4	44.4	0.5	7.8	14.8	0.5	5.3	34,750
Ndaragwa Constituency	None	20.1	5.6	52.3	1.2	10.9	1.3	4.0	4.7	1,259
Ndaragwa Constituency	Primary	14.4	8.7	54.4	0.3	8.8	7.7	0.4	5.2	18,758
Ndaragwa Constituency	Second-ary+	21.1	10.5	31.1	0.6	6.2	24.9	0.2	5.3	14,733
Leshau/Pondo Ward	Total	16.9	12.5	29.8	0.7	14.9	16.2	0.5	8.5	6,607
Leshau/Pondo Ward	None	20.1	10.0	37.4	0.9	20.1	0.9	3.2	7.3	219
Leshau/Pondo Ward	Primary	15.6	13.2	35.3	0.5	17.8	8.9	0.5	8.2	3,693
Leshau/Pondo Ward	Second-ary+	18.4	11.6	21.7	0.9	10.6	27.5	0.3	9.1	2,695
Kiriita Ward	Total	25.4	15.6	24.8	0.5	10.8	15.8	0.4	6.8	7,719
Kiriita Ward	None	23.0	5.7	44.3	0.4	15.7	2.2	4.3	4.3	230
Kiriita Ward	Primary	21.4	15.2	33.6	0.3	13.3	7.7	0.4	8.2	3,371
Kiriita Ward	Second-ary+	28.8	16.4	16.5	0.6	8.5	23.2	0.2	5.9	4,118
Central Ward	Total	17.3	6.8	49.4	0.5	6.7	13.7	0.6	5.0	11,192
Central Ward	None	19.5	4.8	52.9	1.7	9.8	0.8	4.6	5.8	518
Central Ward	Primary	14.3	6.2	58.1	0.4	7.8	7.4	0.6	5.2	6,149

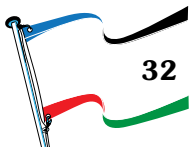
Central Ward	Second-ary+	21.0	7.8	37.1	0.6	4.8	23.7	0.2	4.7	4,525
Shamata Ward	Total	11.4	5.1	65.3	0.3	1.4	14.2	0.3	1.9	9,232
Shamata Ward	None	18.8	3.4	68.8	1.0	2.1	1.7	3.1	1.0	292
Shamata Ward	Primary	9.4	4.5	75.6	0.2	1.1	7.4	0.3	1.6	5,545
Shamata Ward	Second-ary+	14.2	6.2	48.2	0.4	1.8	26.4	0.2	2.7	3,395

Table 35.5: Employment and Education Levels in Female Headed Households by County, Constituency and Wards

County, Constituency and Wards	Education Level reached	Work for Pay	Family Business	Family Agricultural holding	Internal/ Volunteer	Retired/ Home-maker	Fulltime Student	Incapacitated	No work	Population (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
Nyandarua	Total	15.76	7.82	48.39	0.90	4.79	17.78	0.67	3.88	88,023
Nyandarua	None	12.51	6.94	62.60	2.85	6.92	1.08	4.26	2.84	6,027
Nyandarua	Primary	14.90	7.65	56.46	0.66	4.83	11.48	0.55	3.47	49,354
Nyandarua	Secondary+	17.66	8.25	33.57	0.91	4.33	30.39	0.20	4.69	32,642
Kinangop Constituency	Total	15.21	8.63	53.69	1.08	3.24	14.73	0.57	2.84	26,298
Kinangop Constituency	None	12.49	7.77	65.13	3.22	4.05	0.83	4.00	2.50	1,801
Kinangop Constituency	Primary	14.17	8.62	60.67	0.82	3.19	9.68	0.40	2.44	15,478
Kinangop Constituency	Secondary+	17.53	8.83	39.43	1.11	3.17	26.19	0.17	3.58	9,019
Engineer Ward	Total	14.78	5.66	56.18	0.89	1.57	17.32	0.53	3.05	3,937
Engineer Ward	None	13.73	4.31	69.41	3.14	1.57	1.18	4.31	2.35	255

Engineer Ward	Primary	13.16	5.44	63.91	0.73	1.69	11.42	0.37	3.29	2,189
Engineer Ward	Secondary+	17.35	6.23	42.60	0.74	1.41	28.73	0.13	2.81	1,493
Gathara Ward	Total	18.43	8.24	53.74	0.70	1.29	14.76	0.46	2.37	3,712
Gathara Ward	None	17.39	9.57	62.61	2.61	3.04	0.87	3.04	0.87	230
Gathara Ward	Primary	14.46	8.27	63.23	0.51	1.25	10.30	0.42	1.57	2,165
Gathara Ward	Secondary+	25.13	7.97	36.60	0.68	1.06	24.53	0.08	3.95	1,317
North Kinangop Ward	Total	12.87	8.72	54.15	1.33	1.76	17.41	0.23	3.52	2,556
North Kinangop Ward	None	7.78	8.33	75.00	3.33	1.11	1.11	0.56	2.78	180
North Kinangop Ward	Primary	11.44	7.89	63.18	0.99	1.97	11.11	0.33	3.09	1,521
North Kinangop Ward	Secondary+	16.49	10.29	33.68	1.52	1.52	32.05	-	4.44	855
Murungu Ward	Total	12.59	6.01	67.21	0.52	1.83	10.43	0.52	0.89	3,827
Murungu Ward	None	11.07	5.53	77.87	1.58	1.58	-	2.37	-	253
Murungu Ward	Primary	12.67	5.04	71.34	0.53	1.80	7.50	0.45	0.66	2,439
Murungu Ward	Secondary+	12.78	8.19	55.95	0.26	1.94	19.03	0.26	1.59	1,135
Njabini/Kiburu Ward	Total	21.77	9.86	41.09	0.79	4.71	16.73	0.54	4.50	2,779
Njabini/Kiburu Ward	None	13.81	6.63	54.14	3.87	8.84	1.66	5.52	5.52	181
Njabini/Kiburu Ward	Primary	21.92	9.61	47.26	0.52	4.96	11.22	0.19	4.32	1,551
Njabini/Kiburu Ward	Secondary+	22.92	10.79	29.70	0.67	3.63	27.51	0.19	4.58	1,047
Nyakio Ward	Total	15.29	5.97	59.57	2.07	2.23	11.68	0.59	2.59	3,047
Nyakio Ward	None	11.61	2.68	71.43	3.57	2.23	1.34	4.91	2.23	224
Nyakio Ward	Primary	16.52	5.80	63.17	1.64	2.06	8.50	0.32	2.01	1,895
Nyakio Ward	Secondary+	13.69	7.11	49.35	2.59	2.59	20.69	0.11	3.88	928
Githabai Ward	Total	10.23	12.28	55.58	1.41	3.09	12.76	1.15	3.50	2,688
Githabai Ward	None	10.92	12.64	58.05	2.87	2.87	0.57	9.20	2.87	174
Githabai Ward	Primary	9.21	13.41	62.92	0.93	2.66	7.29	0.74	2.84	1,618
Githabai Ward	Secondary+	11.94	10.16	41.85	2.01	3.91	25.00	0.33	4.80	896
Mugumu Ward	Total	15.38	13.38	40.14	1.25	9.22	16.98	0.56	3.09	3,752
Mugumu Ward	None	12.50	12.50	52.96	4.61	9.87	0.33	3.29	3.95	304
Mugumu Ward	Primary	14.67	15.10	46.38	0.86	9.38	10.48	0.38	2.76	2,100
Mugumu Ward	Secondary+	17.14	10.91	27.52	1.11	8.83	30.86	0.22	3.41	1,348
Kipipiri Constituency	Total	11.66	6.51	62.37	0.71	3.84	12.67	0.54	1.71	14,086

Kipipiri Constituency	None	8.37	6.62	71.37	2.92	4.58	0.78	3.70	1.66	1,027
Kipipiri Constituency	Primary	10.88	6.35	67.62	0.56	3.46	9.32	0.37	1.43	8,645
Kipipiri Constituency	Secondary+	13.93	6.80	49.98	0.50	4.42	21.98	0.14	2.27	4,414
Wanjohi Ward	Total	12.60	7.59	58.72	0.75	5.19	12.60	0.26	2.29	4,666
Wanjohi Ward	None	10.41	8.20	63.72	3.47	7.89	1.26	1.58	3.47	317
Wanjohi Ward	Primary	11.98	7.83	64.92	0.51	4.34	8.56	0.18	1.69	2,722
Wanjohi Ward	Secondary+	14.07	7.07	47.39	0.61	6.08	21.57	0.12	3.07	1,627
Kipipiri Ward	Total	11.46	7.23	59.67	1.07	4.01	13.62	0.92	2.02	3,568
Kipipiri Ward	None	8.06	8.42	67.77	3.66	3.66	1.47	6.23	0.73	273
Kipipiri Ward	Primary	9.86	7.39	65.89	0.97	3.89	9.28	0.63	2.09	2,058
Kipipiri Ward	Secondary+	14.87	6.71	47.53	0.65	4.28	23.52	0.24	2.18	1,237
Geta Ward	Total	7.21	6.11	69.79	0.57	1.99	12.51	0.82	1.00	2,814
Geta Ward	None	4.33	5.63	80.95	3.03	1.30	-	4.76	-	231
Geta Ward	Primary	6.72	5.73	74.01	0.42	1.93	9.74	0.57	0.89	1,920
Geta Ward	Secondary+	9.65	7.39	53.70	0.15	2.41	24.89	0.15	1.66	663
Githioro Ward	Total	14.55	4.38	64.25	0.36	3.29	11.78	0.26	1.12	3,038
Githioro Ward	None	10.19	2.91	77.18	0.97	4.37	-	2.43	1.94	206
Githioro Ward	Primary	14.55	3.80	66.94	0.31	3.29	10.03	0.15	0.93	1,945
Githioro Ward	Secondary+	15.56	5.98	55.36	0.34	3.04	18.38	-	1.35	887
Oi Kalou Constituency	Total	17.50	7.55	44.68	0.82	3.43	19.89	0.80	5.33	18,123
Oi Kalou Constituency	None	15.67	6.93	60.81	2.41	5.05	1.13	4.45	3.54	1,327
Oi Kalou Constituency	Primary	16.76	6.97	52.34	0.55	3.56	14.19	0.69	4.93	10,072
Oi Kalou Constituency	Secondary+	18.96	8.54	30.03	0.91	2.91	32.14	0.24	6.28	6,724
Karau Ward	Total	17.61	8.54	44.65	1.04	4.72	16.66	0.74	6.05	4,345
Karau Ward	None	14.18	4.60	62.45	2.68	5.75	1.92	3.83	4.60	261
Karau Ward	Primary	14.81	7.77	52.52	0.60	5.15	12.07	0.80	6.28	2,485
Karau Ward	Secondary+	22.51	10.38	29.52	1.44	3.88	26.20	0.13	5.94	1,599
Kanjiuri Ridge Ward	Total	18.35	8.35	47.23	0.57	1.69	18.95	0.96	3.90	3,663
Kanjiuri Ridge Ward	None	19.15	12.06	56.38	0.71	2.13	0.35	5.32	3.90	282
Kanjiuri Ridge Ward	Primary	19.02	8.34	53.35	0.47	1.59	14.24	0.70	2.30	2,135
Kanjiuri Ridge Ward	Secondary+	17.01	7.54	34.67	0.72	1.77	31.22	0.40	6.66	1,246



Mirangine Ward	Total	13.25	5.62	47.96	0.87	2.77	21.72	0.75	7.07	3,578
Mirangine Ward	None	15.81	6.38	62.31	2.74	5.17	0.61	3.95	3.04	329
Mirangine Ward	Primary	12.48	4.83	54.36	0.61	2.77	17.12	0.56	7.27	2,132
Mirangine Ward	Secondary+	13.97	6.89	31.51	0.81	2.06	36.71	0.18	7.88	1,117
Kiambaga Ward	Total	22.71	12.03	31.53	0.86	5.12	20.28	0.86	6.61	2,677
Kiambaga Ward	None	13.45	11.11	48.54	4.09	9.36	1.75	4.09	7.60	171
Kiambaga Ward	Primary	22.13	11.18	39.09	0.46	5.70	14.07	0.84	6.54	1,315
Kiambaga Ward	Secondary+	24.69	13.10	20.74	0.84	3.86	29.81	0.42	6.55	1,191
Rurii Ward	Total	16.89	4.35	48.39	0.73	3.08	22.46	0.73	3.37	3,860
Rurii Ward	None	14.79	2.11	69.37	2.46	4.58	1.41	4.93	0.35	284
Rurii Ward	Primary	17.81	4.04	57.61	0.55	3.14	13.72	0.60	2.54	2,005
Rurii Ward	Secondary+	16.10	5.16	32.85	0.64	2.74	37.43	0.13	4.96	1,571
OI Jorok Constituency	Total	20.51	8.55	38.71	0.97	5.37	20.93	0.71	4.25	14,795
OI Jorok Constituency	None	14.57	7.66	57.87	3.30	8.62	0.64	3.94	3.40	940
OI Jorok Constituency	Primary	20.36	8.49	47.78	0.68	5.11	13.12	0.71	3.74	7,597
OI Jorok Constituency	Secondary+	21.57	8.76	24.82	0.97	5.19	33.46	0.22	5.00	6,258
Gathanji Ward	Total	14.15	6.03	51.71	0.73	2.24	22.24	0.95	1.96	3,166
Gathanji Ward	None	13.15	5.58	69.72	1.59	3.19	0.80	5.58	0.40	251
Gathanji Ward	Primary	13.29	6.73	59.85	0.64	2.24	14.52	0.80	1.92	1,873
Gathanji Ward	Secondary+	15.93	4.89	32.73	0.67	2.02	41.27	0.10	2.40	1,042
Gatimu Ward	Total	32.07	14.47	15.40	1.46	10.41	19.01	0.41	6.78	4,188
Gatimu Ward	None	18.83	17.04	26.91	4.04	21.52	0.45	2.24	8.97	223
Gatimu Ward	Primary	34.67	14.62	19.93	1.07	12.20	10.50	0.45	6.55	1,771
Gatimu Ward	Secondary+	31.31	14.08	10.57	1.50	7.84	27.76	0.18	6.75	2,194
Weru Ward	Total	18.52	7.07	41.05	0.82	5.39	21.17	0.79	5.19	4,412
Weru Ward	None	13.65	3.61	63.45	4.02	6.83	0.40	3.61	4.42	249
Weru Ward	Primary	18.97	6.94	49.93	0.44	5.13	13.22	0.84	4.51	2,261
Weru Ward	Secondary+	18.61	7.68	27.55	0.84	5.52	33.33	0.37	6.10	1,902
Charagita Ward	Total	14.06	5.15	53.95	0.79	1.62	21.89	0.76	1.78	3,029
Charagita Ward	None	12.90	5.07	69.59	3.69	3.69	0.92	4.15	-	217
Charagita Ward	Primary	15.07	6.09	60.70	0.65	0.83	14.18	0.71	1.77	1,692

Charagita Ward	Secondary+	12.77	3.75	40.71	0.45	2.41	37.59	0.18	2.14	1,120
Ndaragwa Constituency	Total	13.76	7.24	39.84	0.78	9.55	22.35	0.81	5.67	14,721
Ndaragwa Constituency	None	10.52	4.94	55.36	2.25	15.99	2.25	5.47	3.22	932
Ndaragwa Constituency	Primary	12.99	7.21	49.27	0.56	11.19	12.36	0.73	5.70	7,562
Ndaragwa Constituency	Secondary+	15.18	7.63	26.06	0.84	6.60	37.48	0.21	6.01	6,227
Leshau/Pondo Ward	Total	10.40	7.92	30.67	0.62	18.14	23.37	0.83	8.04	3,384
Leshau/Pondo Ward	None	7.98	6.72	47.06	0.84	29.83	1.26	4.20	2.10	238
Leshau/Pondo Ward	Primary	10.53	8.67	36.32	0.62	22.18	12.61	0.79	8.28	1,776
Leshau/Pondo Ward	Secondary+	10.66	7.15	20.51	0.58	10.88	41.17	0.29	8.76	1,370
Kiriita Ward	Total	19.62	11.57	26.64	0.92	10.06	22.64	0.83	7.72	3,379
Kiriita Ward	None	11.36	6.82	47.16	2.84	12.50	6.25	7.95	5.11	176
Kiriita Ward	Primary	17.98	11.87	36.59	0.63	12.71	11.66	0.70	7.87	1,424
Kiriita Ward	Secondary+	21.75	11.80	16.64	0.96	7.70	33.05	0.22	7.87	1,779
Central Ward	Total	13.71	5.50	43.37	0.81	8.36	22.43	0.79	5.03	4,676
Central Ward	None	11.11	4.58	56.54	2.61	15.03	0.65	4.90	4.58	306
Central Ward	Primary	12.99	5.48	51.74	0.52	10.00	13.03	0.80	5.44	2,501
Central Ward	Secondary+	15.09	5.67	30.02	0.91	5.08	38.58	0.11	4.55	1,869
Shamata Ward	Total	11.24	4.57	57.86	0.76	1.86	20.87	0.79	2.04	3,282
Shamata Ward	None	11.79	1.89	69.81	2.83	4.72	2.36	5.66	0.94	212
Shamata Ward	Primary	11.50	4.57	68.03	0.48	1.13	11.77	0.59	1.93	1,861
Shamata Ward	Secondary+	10.75	5.05	40.12	0.83	2.48	38.13	0.25	2.40	1,209

Table 35.6: 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
Nyandarua County	0.016	3,260	0.015	0.394
Kinangop Constituency	0.005	2,950	0.0043	0.377
Engineer	0.001	2,920	0.0006	0.380
Gathara	0.001	3,170	0.0006	0.399
North Kinangop	0.001	3,010	0.0005	0.428
Murungaru	0.001	2,340	0.0005	0.335
Njabini/Kiburu	0.001	3,980	0.0006	0.406
Nyakio	0.001	2,610	0.0005	0.334

Githabai	0.001	2,800	0.0004	0.322
Mugumu	0.001	3,010	0.0006	0.331
Kipipiri Constituency	0.003	2,470	0.0018	0.351
Wanjohi	0.001	2,460	0.0006	0.339
Kipipiri	0.001	2,780	0.0005	0.384
Geta	0.001	2,080	0.0003	0.331
Githioro	0.001	2,530	0.0004	0.329
Oi Kalou Constituency	0.003	4,140	0.0036	0.414
Karau	0.001	5,410	0.0008	0.388
Kanjuiri Ridge	0.001	2,530	0.0005	0.339
Mirangine	0.001	2,390	0.0005	0.345
Kiambaga	0.000	6,100	0.0008	0.344
Rurii	0.001	5,340	0.0010	0.347
Oi Jorok Constituency	0.003	3,310	0.0024	0.383
Gathanji	0.001	2,430	0.0004	0.323
Gatimu	0.001	4,920	0.0010	0.365
Weru	0.001	3,070	0.0006	0.364
Charagita	0.001	2,560	0.0004	0.322
Ndaragwa Constituency	0.002	3,560	0.0025	0.379
Leshau/Pondo	0.001	3,040	0.0005	0.315
Kiriita	0.001	5,110	0.0008	0.387
Central	0.001	3,060	0.0007	0.358
Shamata	0.001	3,300	0.0006	0.359

Table 35.7: 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
Nyandarua County	15.6	62.0	22.4	537,173
Kinangop Constituency	14.6	64.2	21.2	172,638
Engineer	13.8	63.3	22.9	24,552
Gathara	14.1	63.9	22.1	23,574
North Kinangop	14.3	65.8	19.9	18,742
Murungaru	15.0	67.8	17.1	24,206
Njabini/Kiburu	14.4	60.8	24.8	18,459
Nyakio	15.0	66.2	18.8	22,601
Githabai	14.6	64.4	21.0	17,463
Mugumu	15.5	61.3	23.3	23,041
Kipipiri Constituency	17.1	65.3	17.6	86,206
Wanjohi	16.3	64.1	19.6	29,130
Kipipiri	16.4	63.3	20.3	20,581
Geta	19.1	68.6	12.3	18,240
Githioro	17.4	65.9	16.7	18,255
Oi Kalou Constituency	16.5	61.0	22.6	107,752

Karau	14.6	61.7	23.7	22,743
Kanjuiri Ridge	18.1	62.1	19.8	23,041
Mirangine	16.7	64.6	18.7	24,198
Kiambaga	15.4	56.8	27.8	16,107
Rurii	17.1	58.1	24.8	21,663
Oi Jorok Constituency	15.2	58.8	26.0	86,576
Gathanji	16.5	63.5	20.0	19,412
Gatimu	13.5	52.3	34.3	23,567
Weru	14.7	59.3	26.0	23,797
Charagita	16.7	61.4	21.9	19,800
Ndaragwa Constituency	15.3	58.8	25.9	84,001
Leshau/Pondo	16.2	59.4	24.4	17,489
Kiriita	14.8	51.3	34.0	17,955
Central	15.6	60.0	24.4	27,183
Shamata	14.6	63.1	22.4	21,374

Table 35.8: 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
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
Nyandarua County	14.1	62.4	23.5	261,928	17.0	61.6	21.4	275,245
Kinangop Constituency	13.3	64.6	22.1	84,221	15.9	63.9	20.3	88,417
Engineer	12.0	64.5	23.5	12,008	15.6	62.1	22.3	12,544
Gathara	13.1	64.3	22.6	11,425	15.0	63.5	21.5	12,149
North Kinangop	13.3	65.7	21.1	9,216	15.4	65.8	18.8	9,526
Murungaru	13.5	68.7	17.8	11,757	16.4	67.1	16.5	12,449
Njabini/Kiburu	13.5	60.3	26.2	9,145	15.4	61.3	23.3	9,314
Nyakio	13.7	66.8	19.5	11,050	16.3	65.6	18.1	11,551
Githabai	13.2	64.2	22.5	8,624	16.0	64.6	19.5	8,839
Mugumu	14.2	61.4	24.4	10,996	16.6	61.2	22.3	12,045
Kipipiri Constituency	15.3	66.0	18.8	41,679	18.9	64.6	16.5	44,527
Wanjohi	14.6	65.1	20.2	14,101	17.9	63.1	19.1	15,029
Kipipiri	14.8	63.0	22.2	9,985	17.9	63.6	18.5	10,596
Geta	16.6	70.3	13.2	8,775	21.5	67.1	11.4	9,465

Githioro	15.4	66.5	18.1	8,818		19.2	65.4	15.4	9,437
Oi Kalou Constituency	14.7	61.4	23.9	52,772		18.1	60.6	21.3	54,980
Karau	12.9	61.6	25.6	10,991		16.2	61.8	22.0	11,752
Kanjuri Ridge	16.2	62.6	21.2	11,530		20.1	61.6	18.3	11,511
Mirangine	14.8	65.3	19.9	11,750		18.4	64.0	17.6	12,448
Kiambaga	14.1	57.2	28.7	7,929		16.7	56.4	26.9	8,178
Rurii	15.3	58.7	26.1	10,572		18.9	57.6	23.5	11,091
Oi Jorok Constituency	14.2	59.0	26.8	42,423		16.2	58.6	25.3	44,153
Gathanji	15.3	63.9	20.9	9,649		17.6	63.2	19.2	9,763
Gatimu	13.2	52.1	34.8	11,537		13.7	52.5	33.7	12,030
Weru	13.5	59.7	26.9	11,464		15.9	58.9	25.2	12,333
Charagita	15.4	61.7	22.9	9,773		17.9	61.1	21.0	10,027
Ndaragwa Constituency	13.7	59.2	27.1	40,833		16.7	58.4	24.9	43,168
Leshau/Pondo	14.1	60.3	25.7	8,365		18.1	58.5	23.3	9,124
Kiriita	13.5	51.4	35.2	8,595		16.0	51.1	32.9	9,360
Central	14.1	60.1	25.8	13,312		17.0	60.0	23.1	13,871
Shamata	13.3	63.5	23.2	10,561		15.8	62.6	21.6	10,813

Table 35.9: 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
Nyandarua County	0.2	1.4	1.0	0.3	77.6	19.4	0.1	0.1	140,745
Kinangop Constituency	0.2	1.9	1.3	0.2	73.8	22.5	0.0	0.1	44,537
Engineer	0.1	2.5	1.8	0.1	79.4	16.0	0.0	0.0	6,412
Gathara	0.2	2.5	2.1	0.3	74.2	20.5	0.0	0.1	6,170
North Kinangop	0.2	1.6	1.4	0.0	76.5	20.2	0.0	0.0	4,694
Murungaru	0.1	0.9	0.7	0.2	85.2	12.9	0.1	0.0	5,910
Njabini/Kiburu	0.3	4.7	1.7	0.3	68.0	25.0	0.0	0.1	5,150
Nyakio	0.1	0.8	0.8	0.3	81.2	16.5	0.1	0.2	5,687

Githabai	0.1	1.3	0.8	0.0	77.8	19.7	0.0	0.2	4,422
Mugumu	0.3	1.0	0.8	0.2	49.1	48.3	0.1	0.2	6,092
Kipipiri Constituency	0.2	1.1	0.5	0.2	86.2	11.7	0.1	0.0	21,804
Wanjohi	0.1	0.7	0.4	0.2	88.9	9.6	0.1	0.1	7,380
Kipipiri	0.4	2.5	1.2	0.3	83.4	12.1	0.1	-	5,235
Geta	0.0	0.6	0.2	0.1	84.6	14.3	0.0	0.0	4,500
Githioro	0.1	0.5	0.3	0.2	86.7	12.2	0.0	-	4,689
Oi Kalou Constituency	0.4	1.3	1.2	0.3	77.2	19.4	0.1	0.1	26,880
Karau	0.9	2.5	3.5	0.7	63.1	29.0	0.2	0.1	4,535
Kanjuiri Ridge	0.1	0.7	0.4	0.2	87.3	11.2	0.1	0.1	5,950
Mirangine	0.4	1.0	0.4	0.0	84.8	13.1	0.2	0.1	5,913
Kiambaga	0.4	2.0	2.2	0.3	58.7	36.2	0.1	0.1	4,712
Rurii	0.2	0.8	0.5	0.3	85.0	13.1	0.1	0.0	5,770
Oi Jorok Constituency	0.2	1.3	0.9	0.2	73.8	23.4	0.1	0.1	24,144
Gathanji	0.1	0.5	0.1	0.3	90.0	8.9	0.1	0.0	5,058
Gatimu	0.6	2.6	2.0	0.4	44.6	49.6	0.1	0.2	7,264
Weru	0.2	1.3	0.9	0.1	79.4	17.9	0.0	0.2	6,623
Charagita	0.0	0.2	0.1	0.2	91.5	7.9	0.1	0.0	5,199
Ndaragwa Constituency	0.1	0.8	0.6	0.4	81.4	16.3	0.2	0.1	23,380
Leshau/Pondo	0.0	0.6	0.2	0.2	88.3	10.3	0.2	0.1	4,874
Kiriita	0.3	1.8	1.7	0.5	59.7	35.7	0.2	0.1	5,147
Central	0.1	0.6	0.5	0.2	88.2	10.2	0.1	0.0	7,601
Shamata	0.0	0.4	0.2	0.9	86.2	12.1	0.2	0.0	5,758

Table 35.10: 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
Nyandarua County	0.3	1.6	0.9	0.3	76.8	19.9	0.1	0.1	92,263
Kinangop Constituency	0.2	2.2	1.2	0.2	73.6	22.5	0.0	0.1	30,065
Engineer	0.1	3.0	1.5	0.2	78.4	16.7	0.1	0.0	4,283
Gathara	0.3	2.8	1.9	0.2	74.2	20.4	0.0	0.2	4,148
North Kinangop	0.2	1.8	1.4	0.0	76.4	20.0	0.1	0.1	3,285

Murungaru	0.1	0.8	0.6	0.3	85.0	13.1	0.1	0.0	3,875
Njabini/Kiburu	0.4	5.2	1.6	0.3	67.3	24.9	0.1	0.2	3,558
Nyakio	0.1	0.9	0.8	0.2	82.2	15.5	0.1	0.3	3,955
Githabai	0.2	1.5	0.9	0.0	76.9	20.3	0.0	0.3	3,027
Mugumu	0.4	1.3	0.7	0.2	48.6	48.7	0.1	0.1	3,934
Kipipiri Constituency	0.2	1.2	0.5	0.3	85.5	12.1	0.1	0.0	13,901
Wanjohi	0.1	0.7	0.3	0.3	89.1	9.3	0.1	0.1	4,766
Kipipiri	0.5	3.0	1.3	0.4	82.1	12.5	0.1	0.0	3,298
Geta	0.0	0.6	0.3	0.2	83.1	15.7	0.0	0.0	2,827
Githioro	0.1	0.7	0.3	0.2	85.9	12.8	0.0	0.0	3,010
Oi Kalou Constituency	0.4	1.5	1.2	0.2	76.2	20.2	0.1	0.1	17,659
Karau	1.1	2.9	3.7	0.6	61.7	29.7	0.2	0.1	2,990
Kanjuiri Ridge	0.1	0.9	0.3	0.1	86.4	12.2	0.1	0.0	3,982
Mirangine	0.5	0.9	0.4	0.0	84.5	13.4	0.3	0.1	3,918
Kiambaga	0.5	2.4	1.9	0.3	57.0	37.8	0.1	0.1	3,133
Rurii	0.2	1.0	0.4	0.3	84.5	13.5	0.1	0.0	3,636
Oi Jorok Constituency	0.3	1.6	0.9	0.2	72.4	24.5	0.1	0.1	15,711
Gathanji	0.1	0.6	0.1	0.3	89.2	9.7	0.1	0.0	3,294
Gatimu	0.6	3.2	2.0	0.4	42.7	50.9	0.1	0.1	4,853
Weru	0.2	1.7	0.8	0.0	78.9	18.0	0.1	0.2	4,124
Charagita	0.0	0.2	0.0	0.2	90.3	9.1	0.1	0.0	3,440
Ndaragwa Constituency	0.1	1.1	0.7	0.4	80.5	16.9	0.2	0.1	14,927
Leshau/Pondo	0.1	0.7	0.2	0.2	87.0	11.5	0.3	0.1	2,897
Kiriita	0.4	2.4	1.9	0.5	57.5	37.1	0.1	0.2	3,234
Central	0.1	0.9	0.5	0.2	87.5	10.7	0.1	0.0	4,890
Shamata	0.0	0.5	0.2	0.9	86.1	12.1	0.2	0.1	3,906

Table 35.11: 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
Nyandarua County	0.2	0.9	1.0	0.3	79.2	18.3	0.1	0.1	48,482
Kinangop Constituency	0.1	1.4	1.4	0.2	74.1	22.6	0.0	0.1	14,472
Engineer	0.0	1.6	2.4	0.1	81.5	14.4	-	-	2,129
Gathara	0.1	2.0	2.5	0.4	74.4	20.6	-	-	2,022
North Kinangop	0.1	1.1	1.2	0.1	76.7	20.7	-	-	1,409
Murungaru	0.1	1.0	0.8	0.1	85.6	12.3	0.1	-	2,035
Njabini/Kiburu	0.1	3.5	1.7	0.3	69.3	25.1	-	-	1,592
Nyakio	0.1	0.7	0.8	0.4	79.0	18.9	0.1	0.1	1,732

Githabai	-	0.7	0.7	-	79.8	18.6	0.1	0.1	1,395
Mugumu	0.3	0.5	0.9	0.3	50.0	47.6	0.1	0.3	2,158
Kipipiri Constituency	0.1	0.7	0.5	0.2	87.4	11.1	0.1	0.0	7,903
Wanjohi	-	0.5	0.5	0.2	88.5	10.3	0.0	0.0	2,614
Kipipiri	0.3	1.5	0.9	0.3	85.5	11.4	0.1	-	1,937
Geta	0.1	0.7	0.1	-	87.1	12.0	0.1	-	1,673
Githioro	0.1	0.2	0.2	0.3	88.1	11.0	-	-	1,679
Oi Kalou Constituency	0.3	0.9	1.4	0.3	79.1	17.8	0.1	0.1	9,221
Karau	0.5	1.7	3.2	0.7	65.7	27.8	0.3	0.1	1,545
Kanjuiri Ridge	0.1	0.4	0.6	0.3	89.2	9.2	0.1	0.2	1,968
Mirangine	0.4	1.1	0.4	0.1	85.6	12.4	0.1	0.1	1,995
Kiambaga	0.2	1.1	2.8	0.4	62.2	33.1	0.1	0.1	1,579
Rurii	0.3	0.5	0.7	0.2	85.9	12.4	-	0.0	2,134
Oi Jorok Constituency	0.2	0.7	0.9	0.2	76.3	21.4	0.0	0.2	8,433
Gathanji	-	0.4	0.2	0.2	91.4	7.6	0.1	0.1	1,764
Gatimu	0.5	1.5	1.9	0.3	48.5	47.0	0.0	0.2	2,411
Weru	0.2	0.6	1.0	0.1	80.3	17.6	-	0.2	2,499
Charagita	-	0.2	0.2	0.3	93.8	5.5	-	0.1	1,759
Ndaragwa Constituency	0.1	0.4	0.6	0.5	83.1	15.2	0.2	-	8,453
Leshau/Pondo	-	0.5	0.2	0.4	90.2	8.6	0.2	-	1,977
Kiriita	0.2	0.7	1.5	0.4	63.6	33.4	0.3	-	1,913
Central	0.1	0.2	0.5	0.2	89.4	9.4	0.1	-	2,711
Shamata	-	0.2	0.3	1.0	86.3	12.0	0.1	-	1,852

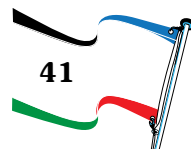
Table 35.12: Lighting Fuel by County, Constituency and Wards

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
Nyandarua County	10.6	0.6	55.5	26.1	0.6	0.3	6.1	0.2	92,263
Kinangop Constituency	10.8	0.7	60.1	22.7	0.6	0.1	4.7	0.2	30,065
Engineer	10.8	0.4	64.6	16.7	1.0	0.0	6.3	0.2	4,283
Gathara	13.2	0.6	62.7	17.3	0.8	0.1	4.9	0.4	4,148
North Kinangop	12.0	0.5	55.9	25.9	0.6	0.2	4.7	0.1	3,285

Murungaru	4.7	0.7	63.0	25.4	0.8	0.2	5.0	0.2	3,875
Njabini/Kiburu	11.6	1.0	62.1	19.8	0.5	0.2	4.7	0.1	3,558
Nyakio	7.6	0.5	60.5	27.0	0.4	0.1	3.8	0.1	3,955
Githabai	3.6	1.2	65.4	22.9	0.5	0.0	6.1	0.2	3,027
Mugumu	20.8	0.8	47.4	27.9	0.4	0.2	2.3	0.1	3,934
Kipipiri Constituency	4.7	0.5	63.3	25.1	0.6	0.2	5.4	0.2	13,901
Wanjohi	3.2	0.4	64.6	24.7	0.4	0.1	6.3	0.2	4,766
Kipipiri	8.7	0.8	65.1	18.7	1.0	0.3	5.4	0.1	3,298
Geta	3.5	0.4	63.1	28.2	0.3	0.4	3.9	0.3	2,827
Githioro	3.8	0.4	59.6	29.8	0.7	0.1	5.6	0.0	3,010
Oi Kalou Constituency	13.5	0.5	52.4	26.6	0.8	0.2	5.8	0.2	17,659
Karau	24.8	0.6	43.6	24.2	0.3	0.2	5.8	0.5	2,990
Kanjuiri Ridge	6.9	0.4	51.0	34.9	0.5	0.3	5.7	0.1	3,982
Mirangine	8.3	0.4	57.1	28.0	1.5	0.1	4.5	0.1	3,918
Kiambaga	21.8	0.7	49.8	19.9	1.2	0.2	5.9	0.4	3,133
Rurii	10.0	0.3	58.0	23.9	0.2	0.2	7.2	0.2	3,636
Oi Jorok Constituency	13.8	0.8	52.2	26.3	0.6	0.3	5.9	0.2	15,711
Gathanji	1.0	0.5	52.3	36.7	1.4	0.6	7.3	0.1	3,294
Gatimu	31.6	0.7	48.9	15.3	0.2	0.3	2.8	0.2	4,853
Weru	13.5	1.1	52.5	25.7	0.5	0.3	6.1	0.3	4,124
Charagita	1.6	0.7	56.1	32.2	0.4	0.2	8.5	0.3	3,440
Ndaragwa Constituency	8.9	0.5	46.7	32.8	0.6	0.5	9.7	0.4	14,927
Leshau/Pondo	4.8	0.5	41.2	40.8	0.4	0.4	11.8	0.2	2,897
Kiriita	26.9	0.4	49.0	17.5	0.4	0.2	5.2	0.3	3,234
Central	4.7	0.2	49.7	32.6	0.5	0.8	11.4	0.2	4,890
Shamata	1.7	1.0	45.3	40.0	1.1	0.4	9.6	0.8	3,906

Table 35.13: 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
Nyandarua County	11.0	0.7	55.7	25.0	0.6	0.2	6.5	0.3	92,263
Kinangop Constituency	11.0	0.8	60.5	21.6	0.7	0.1	5.2	0.2	30,065
Engineer	10.7	0.4	64.6	16.0	1.3	0.0	6.7	0.2	4,283
Gathara	12.9	0.6	63.6	16.2	0.9	0.0	5.4	0.4	4,148
North Kinangop	12.4	0.4	56.8	24.3	0.6	0.2	5.2	0.1	3,285
Murungaru	4.5	0.8	63.1	25.2	0.6	0.2	5.4	0.2	3,875
Njabini/Kiburu	12.2	1.1	62.0	18.7	0.6	0.1	5.2	0.1	3,558
Nyakio	7.2	0.6	62.4	25.0	0.5	0.1	4.1	0.1	3,955
Githabai	4.0	1.5	64.5	22.0	0.6	0.0	7.1	0.3	3,027
Mugumu	22.6	0.8	46.8	26.3	0.4	0.1	2.7	0.2	3,934
Kipipiri Constituency	4.9	0.6	64.0	23.6	0.6	0.2	6.0	0.2	13,901
Wanjohi	3.0	0.4	65.6	23.1	0.4	0.1	7.2	0.1	4,766
Kipipiri	9.5	0.9	65.1	17.6	1.0	0.3	5.5	0.1	3,298
Geta	3.7	0.6	64.4	25.5	0.2	0.4	4.7	0.5	2,827



Githioro	3.9	0.4	59.7	29.0	0.8	0.2	5.9	0.0	3,010
Ol Kalou Constituency	14.0	0.6	52.3	25.7	0.7	0.2	6.2	0.3	17,659
Karau	25.3	0.7	43.3	23.4	0.2	0.2	6.3	0.6	2,990
Kanjuri Ridge	7.2	0.4	51.2	34.2	0.4	0.4	6.0	0.2	3,982
Mirangine	8.7	0.6	58.2	25.8	1.5	0.1	5.0	0.1	3,918
Kiambaga	22.8	0.9	48.9	19.3	1.2	0.2	6.2	0.5	3,133
Rurii	10.3	0.3	57.3	23.8	0.1	0.2	7.8	0.1	3,636
Ol Jorok Constituency	14.4	0.7	52.2	25.3	0.5	0.3	6.2	0.3	15,711
Gathanji	0.9	0.6	53.2	35.2	1.4	0.5	8.0	0.2	3,294
Gatimu	32.8	0.7	48.2	14.5	0.2	0.3	2.9	0.2	4,853
Weru	14.2	1.0	52.5	25.0	0.4	0.3	6.4	0.3	4,124
Charagita	1.7	0.6	56.3	31.6	0.2	0.1	9.0	0.3	3,440
Ndaragwa Constituency	9.5	0.5	46.0	32.0	0.6	0.5	10.4	0.4	14,927
Leshau/Pondo	5.7	0.3	39.5	40.5	0.5	0.3	13.0	0.2	2,897
Kiriita	28.6	0.5	48.2	16.0	0.4	0.1	5.8	0.4	3,234
Central	5.3	0.3	49.3	31.9	0.4	0.8	11.8	0.2	4,890
Shamata	1.7	1.0	44.9	39.2	1.1	0.5	10.7	1.0	3,906

Table 35.14: 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
Nyandarua County	9.7	0.5	55.3	28.2	0.6	0.3	5.1	0.2	48,482
Kinangop Constituency	10.4	0.6	59.4	25.2	0.5	0.2	3.7	0.1	14,472
Engineer	10.9	0.4	64.4	18.1	0.5	0.1	5.5	0.1	2,129
Gathara	13.9	0.6	61.0	19.6	0.6	0.1	3.9	0.2	2,022
North Kinangop	11.0	0.6	54.0	29.7	0.6	0.4	3.5	0.2	1,409
Murungaru	4.9	0.6	62.7	26.0	1.0	0.3	4.3	0.1	2,035
Njabini/Kiburu	10.2	0.6	62.4	22.4	0.4	0.3	3.6	-	1,592
Nyakio	8.5	0.3	56.2	31.6	0.2	0.2	3.0	-	1,732
Githabai	2.8	0.7	67.2	24.8	0.4	-	3.9	0.2	1,395
Mugumu	17.7	0.7	48.5	30.7	0.5	0.3	1.6	0.1	2,158
Kipipiri Constituency	4.3	0.4	62.2	27.7	0.5	0.2	4.4	0.1	7,903
Wanjohi	3.5	0.5	62.8	27.6	0.4	0.2	4.6	0.3	2,614
Kipipiri	7.3	0.6	65.1	20.5	0.9	0.3	5.4	0.1	1,937
Geta	3.0	0.2	60.8	32.6	0.4	0.4	2.5	-	1,673

Githioro	3.5	0.4	59.4	31.2	0.5	0.1	4.9	0.1	1,679
Ol Kalou Constituency	12.6	0.4	52.6	28.2	0.8	0.2	5.1	0.2	9,221
Karau	23.8	0.4	44.2	25.8	0.3	0.3	4.9	0.3	1,545
Kanjuri Ridge	6.3	0.5	50.6	36.3	0.8	0.3	5.2	0.1	1,968
Mirangine	7.5	0.2	54.8	32.3	1.6	0.2	3.5	-	1,995
Kiambaga	19.9	0.4	51.6	21.0	1.3	0.1	5.4	0.3	1,579
Rurii	9.5	0.3	59.2	24.1	0.2	0.1	6.4	0.2	2,134
Ol Jorok Constituency	12.5	0.8	52.1	28.1	0.7	0.3	5.3	0.2	8,433
Gathanji	1.2	0.3	50.5	39.6	1.6	0.6	6.1	0.1	1,764
Gatimu	29.0	0.6	50.3	16.8	0.2	0.4	2.7	0.0	2,411
Weru	12.3	1.4	52.6	27.1	0.5	0.2	5.7	0.2	2,499
Charagita	1.5	0.7	55.5	33.5	0.7	0.2	7.6	0.3	1,759
Ndaragwa Constituency	7.8	0.4	47.9	34.2	0.7	0.5	8.3	0.2	8,453
Leshau/Pondo	3.6	0.6	43.7	41.2	0.3	0.6	9.9	0.2	1,977
Kiriita	24.2	0.3	50.3	20.2	0.5	0.3	4.2	0.1	1,913
Central	3.6	0.1	50.4	33.7	0.8	0.7	10.6	0.1	2,711
Shamata	1.8	0.9	46.3	41.8	1.2	0.3	7.3	0.4	1,852

Table 35.15: 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
Nyandarua County	28.7	0.3	1.5	68.2	1.2	140,745
Kinangop Constituency	31.1	0.3	1.9	66.5	0.2	44,537
Engineer	26.0	0.4	0.5	72.8	0.4	6,412
Gathara	34.6	0.5	1.9	62.9	0.1	6,170
North Kinangop	31.6	0.2	6.9	61.0	0.3	4,694
Murungaru	19.1	0.3	1.1	79.4	0.1	5,910
Njabini/Kiburu	45.9	0.4	2.7	50.5	0.4	5,150
Nyakio	26.9	0.1	1.0	71.8	0.2	5,687
Githabai	24.8	0.1	0.5	74.5	0.1	4,422
Mugumu	40.1	0.5	1.1	58.2	0.0	6,092
Kipipiri Constituency	19.8	0.2	2.1	76.9	1.0	21,804
Wanjohi	21.1	0.2	0.8	76.5	1.5	7,380
Kipipiri	26.3	0.2	0.5	72.8	0.2	5,235
Geta	8.0	0.1	7.7	82.4	1.7	4,500

Githioro	21.9	0.2	0.6	76.9	0.4	4,689
Ol Kalou Constituency	31.1	0.4	0.8	66.6	1.1	26,880
Karau	43.7	0.6	0.4	53.8	1.4	4,535
Kanjuri Ridge	21.1	0.3	1.1	76.1	1.5	5,950
Mirangine	20.8	0.2	1.1	76.9	1.0	5,913
Kiambaga	44.9	0.4	1.0	52.4	1.4	4,712
Rurii	30.8	0.5	0.6	67.8	0.3	5,770
Ol Jorok Constituency	32.9	0.4	1.2	63.7	1.8	24,144
Gathanji	14.4	0.2	1.3	83.9	0.2	5,058
Gatimu	55.6	0.6	0.9	39.8	3.2	7,264
Weru	32.6	0.4	0.9	64.0	2.1	6,623
Charagita	19.8	0.2	1.8	77.2	0.9	5,199
Ndaragwa Constituency	25.5	0.3	1.6	69.6	2.9	23,380
Leshau/Pondo	24.4	0.2	0.9	74.2	0.3	4,874
Kiriita	43.5	0.9	0.9	46.9	7.9	5,147
Central	22.1	0.2	1.8	75.4	0.5	7,601
Shamata	15.0	0.1	2.7	78.3	3.9	5,758

Table 35.16: Main Material of the Floor in Male and Female Headed Households by County, Constituency and Ward

County/Constituency/ wards	Cement	Tiles	Wood	Earth	Other	Households		Cement	Tiles	Wood	Earth	Other	Households
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
Nyandarua County	28.5	0.3	1.6	68.4	1.2	92,263		29.2	0.3	1.5	67.8	1.2	48,482
Kinangop Constituency	30.7	0.3	2.0	66.8	0.2	30,065		31.9	0.3	1.7	65.9	0.2	14,472
Engineer	25.2	0.4	0.5	73.5	0.5	4,283		27.4	0.4	0.5	71.3	0.4	2,129
Gathara	33.9	0.5	1.9	63.7	0.1	4,148		36.1	0.5	2.0	61.2	0.1	2,022
North Kinangop	31.3	0.2	7.3	60.9	0.3	3,285		32.2	0.3	6.0	61.2	0.3	1,409
Murungaru	18.7	0.4	1.2	79.6	0.1	3,875		19.7	0.1	1.0	79.0	0.1	2,035
Njabini/Kiburu	46.1	0.4	3.0	50.0	0.4	3,558		45.4	0.2	2.3	51.7	0.4	1,592
Nyakio	25.5	0.1	1.0	73.1	0.3	3,955		30.0	0.1	0.9	68.9	0.1	1,732
Githabai	24.2	0.1	0.4	75.2	0.0	3,027		25.9	0.1	0.8	73.0	0.2	1,395
Mugumu	40.5	0.5	1.2	57.8	0.0	3,934		39.5	0.5	1.0	59.0	-	2,158
Kipipiri Constituency	19.6	0.1	2.0	77.3	0.9	13,901		20.1	0.2	2.3	76.3	1.2	7,903
Wanjohi	20.6	0.1	0.9	77.2	1.2	4,766		22.0	0.2	0.5	75.2	2.1	2,614
Kipipiri	26.7	0.2	0.4	72.5	0.2	3,298		25.5	0.3	0.7	73.4	0.2	1,937
Geta	8.3	0.1	7.3	82.4	1.8	2,827		7.6	0.1	8.3	82.5	1.6	1,673

Githioro	21.0	0.1	0.6	77.9	0.4	3,010		23.5	0.4	0.7	75.0	0.5	1,679
Oi Kalou Constituency	31.2	0.4	0.8	66.6	1.0	17,659		30.9	0.3	0.9	66.6	1.2	9,221
Karau	44.1	0.6	0.5	53.6	1.2	2,990		43.0	0.7	0.2	54.3	1.8	1,545
Kanjuiri Ridge	20.4	0.3	1.0	76.8	1.6	3,982		22.4	0.4	1.3	74.6	1.3	1,968
Mirangine	21.0	0.2	1.0	77.1	0.8	3,918		20.4	0.1	1.3	76.7	1.5	1,995
Kiambaga	46.3	0.4	0.9	50.9	1.5	3,133		42.0	0.3	1.1	55.4	1.2	1,579
Rurii	30.3	0.5	0.7	68.2	0.2	3,636		31.7	0.3	0.4	67.1	0.5	2,134
Oi Jorok Constituency	32.5	0.4	1.3	64.1	1.7	15,711		33.8	0.4	1.0	63.0	1.9	8,433
Gathanji	14.2	0.2	1.3	84.1	0.2	3,294		14.6	0.3	1.4	83.6	0.1	1,764
Gatimu	54.9	0.6	1.0	40.2	3.2	4,853		57.0	0.5	0.5	38.9	3.1	2,411
Weru	32.0	0.4	0.8	64.9	1.9	4,124		33.5	0.4	1.0	62.6	2.5	2,499
Charagita	18.9	0.2	2.1	77.8	0.9	3,440		21.6	0.2	1.3	76.0	1.0	1,759
Ndaragwa Constituency	25.1	0.4	1.7	69.7	3.1	14,927		26.4	0.2	1.6	69.3	2.5	8,453
Leshau/Pondo	24.7	0.2	1.0	73.7	0.3	2,897		23.8	0.2	0.8	75.0	0.3	1,977
Kiriita	44.3	1.1	0.9	44.8	8.8	3,234		42.1	0.5	0.7	50.3	6.3	1,913
Central	21.5	0.2	1.7	76.2	0.4	4,890		23.3	0.1	2.0	74.0	0.6	2,711
Shamata	13.9	0.1	2.7	79.3	3.9	3,906		17.3	0.2	2.7	76.0	3.8	1,852

Table 35.17: 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
Nyandarua County	95.0	0.6	0.2	2.0	0.8	0.1	0.1	0.0	1.2	140,745
Kinangop Constituency	96.3	0.6	0.4	2.0	0.4	0.0	0.0	0.0	0.2	44,537
Engineer	96.2	0.4	1.0	1.7	0.1	0.0	0.0	0.0	0.4	6,412
Gathara	96.8	1.0	0.5	0.7	0.6	0.1	0.0	0.0	0.3	6,170
North Kinangop	97.0	0.5	0.2	1.9	0.2	0.1	0.0	0.0	0.1	4,694
Murungaru	95.1	0.3	0.0	3.4	1.1	0.0	0.0	0.0	0.0	5,910
Njabini/Kiburu	96.6	1.0	1.2	0.4	0.2	0.0	0.0	0.0	0.5	5,150
Nyakio	94.0	0.9	0.0	4.6	0.4	0.0	0.0	0.0	0.0	5,687
Githabai	98.9	0.5	0.0	0.2	0.3	0.0	0.0	0.1	0.1	4,422
Mugumu	96.4	0.4	0.2	2.7	0.2	0.0	0.0	0.0	0.0	6,092
Kipipiri Constituency	94.6	0.5	0.1	2.4	1.3	0.1	0.0	0.0	0.9	21,804
Wanjohi	95.9	0.5	0.1	1.4	0.4	0.0	0.0	0.0	1.5	7,380
Kipipiri	90.3	0.5	0.0	7.7	1.2	0.1	0.1	0.0	0.1	5,235

Geta	97.1	0.6	0.1	0.2	0.4	0.1	0.0	0.0	1.5	4,500
Githioro	94.7	0.7	0.0	0.4	3.6	0.4	0.0	0.0	0.3	4,689
Ol Kalou Constituency	95.1	0.6	0.1	1.7	0.8	0.0	0.1	0.0	1.6	26,880
Karau	93.1	0.4	0.0	2.2	1.3	0.0	0.0	0.0	2.9	4,535
Kanjuiri Ridge	95.7	0.7	0.1	1.3	0.9	0.0	0.0	0.0	1.2	5,950
Mirangine	93.5	0.3	0.0	3.3	0.3	0.0	0.2	0.0	2.3	5,913
Kiambaga	96.3	0.6	0.3	0.7	0.5	0.1	0.2	0.0	1.3	4,712
Rurii	96.8	0.8	0.1	1.1	0.9	0.0	0.0	0.0	0.3	5,770
Ol Jorok Constituency	95.5	0.6	0.0	1.6	0.5	0.1	0.1	0.0	1.7	24,144
Gathanji	96.3	0.4	0.0	2.4	0.8	0.1	0.1	0.0	0.0	5,058
Gatimu	92.8	0.7	0.0	3.2	0.1	0.1	0.1	0.0	3.0	7,264
Weru	96.5	0.6	0.1	0.2	0.5	0.1	0.1	0.0	2.0	6,623
Charagita	97.2	0.7	0.0	0.2	0.8	0.1	0.2	0.0	0.9	5,199
Ndaragwa Constituency	92.4	0.7	0.1	2.5	1.4	0.1	0.1	0.0	2.8	23,380
Leshau/Pondo	90.3	0.4	0.0	6.5	2.4	0.1	0.1	0.1	0.2	4,874
Kiriita	89.1	0.7	0.2	1.6	0.5	0.0	0.0	0.1	7.9	5,147
Central	96.0	0.8	0.1	0.9	1.7	0.1	0.1	0.0	0.4	7,601
Shamata	92.3	0.7	0.0	2.0	1.1	0.2	0.0	0.0	3.7	5,758

Table 35.18: Main Roofing Material in Male Headed Households by County, Constituency and Wards

County/Constituency/ Wards	Corrugated Iron Sheets	Tiles	Concrete	Asbestos sheets	Grass	Makuti	Tin	Mud/Dung	Other	Households
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
Nyandarua County	95.0	0.6	0.2	2.0	0.8	0.1	0.1	0.0	1.2	92,263
Kinangop Constituency	96.2	0.7	0.4	2.0	0.4	0.0	0.0	0.0	0.2	30,065
Engineer	96.2	0.4	1.1	1.7	0.1	-	0.0	0.0	0.4	4,283
Gathara	96.8	1.0	0.5	0.7	0.5	0.1	-	0.0	0.3	4,148
North Kinangop	96.7	0.6	0.2	2.2	0.2	0.0	-	-	0.1	3,285
Murungaru	94.8	0.3	-	3.6	1.2	-	0.1	-	0.0	3,875
Njabini/Kiburu	96.5	1.1	1.1	0.4	0.3	0.0	-	-	0.6	3,558
Nyakio	93.9	1.1	0.0	4.5	0.4	0.0	0.0	-	0.0	3,955
Githabai	99.0	0.4	-	0.2	0.3	-	0.0	0.1	0.0	3,027
Mugumu	96.5	0.4	0.2	2.6	0.2	0.1	-	-	0.0	3,934
Kipipiri Constituency	94.7	0.5	0.1	2.4	1.3	0.2	0.0	0.0	0.8	13,901
Wanjohi	96.4	0.5	0.2	1.3	0.4	0.1	0.0	-	1.3	4,766
Kipipiri	90.1	0.5	0.1	7.7	1.3	0.1	0.1	-	0.2	3,298

Geta	97.2	0.5	0.1	0.1	0.5	0.1	-	0.0	1.5	2,827
Githioro	94.8	0.7	-	0.4	3.5	0.4	0.0	-	0.2	3,010
OI Kalou Constituency	95.3	0.5	0.1	1.7	0.8	0.0	0.1	0.0	1.4	17,659
Karau	93.6	0.3	0.0	2.3	1.3	-	0.0	-	2.5	2,990
Kanjui Ridge	95.6	0.7	0.1	1.2	1.0	-	0.1	-	1.3	3,982
Mirangine	93.8	0.3	0.0	3.5	0.3	-	0.3	-	1.8	3,918
Kiambaga	96.3	0.6	0.3	0.6	0.5	0.1	0.2	0.0	1.4	3,133
Rurii	97.2	0.6	0.1	1.0	0.9	0.0	0.0	-	0.2	3,636
OI Jorok Constituency	95.5	0.6	0.0	1.6	0.4	0.1	0.1	0.0	1.6	15,711
Gathanji	96.6	0.3	-	2.3	0.5	0.1	0.1	-	0.1	3,294
Gatimu	92.8	0.7	0.0	3.2	0.1	0.1	0.1	-	3.1	4,853
Weru	96.6	0.8	0.1	0.2	0.5	0.0	0.0	-	1.7	4,124
Charagita	97.1	0.8	-	0.2	0.6	0.1	0.2	0.0	1.0	3,440
Ndaragwa Constituency	92.1	0.7	0.1	2.4	1.4	0.2	0.1	0.0	3.0	14,927
Leshau/Pondo	89.8	0.4	0.0	6.7	2.5	0.2	0.1	0.0	0.2	2,897
Kiriita	87.9	0.8	0.3	1.7	0.5	0.0	0.0	0.0	8.7	3,234
Central	95.9	0.9	0.0	0.9	1.7	0.2	0.1	0.0	0.3	4,890
Shamata	92.4	0.8	-	1.7	1.0	0.3	0.0	0.0	3.7	3,906

Table 35.19: 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	Households
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
Nyandarua County	94.9	0.6	0.2	2.1	0.8	0.1	0.0	0.0	1.3	48,482
Kinangop Constituency	96.4	0.6	0.4	1.9	0.4	0.0	0.0	0.0	0.2	14,472
Engineer	96.3	0.5	0.8	1.8	0.1	-	-	0.0	0.3	2,129
Gathara	96.7	1.0	0.4	0.7	0.6	0.1	-	0.1	0.2	2,022
North Kinangop	97.6	0.4	0.2	1.3	0.3	0.1	-	-	0.1	1,409
Murungaru	95.5	0.4	-	3.0	0.9	0.0	-	0.0	0.0	2,035

Njabini/Kiburu	96.9	0.9	1.4	0.3	0.2	-	-	-	0.3	1,592
Nyakio	94.1	0.6	0.1	4.7	0.5	-	0.1	-	0.1	1,732
Githabai	98.6	0.5	-	0.1	0.4	-	-	0.1	0.1	1,395
Mugumu	96.3	0.5	0.2	2.7	0.2	-	0.0	-	0.1	2,158
Kipipiri Constituency	94.3	0.6	0.1	2.6	1.3	0.1	0.0	-	1.1	7,903
Wanjohi	95.2	0.5	0.1	1.8	0.4	-	-	-	2.0	2,614
Kipipiri	90.6	0.6	-	7.6	1.1	0.1	0.1	-	0.1	1,937
Geta	97.0	0.7	0.1	0.3	0.3	0.1	-	-	1.6	1,673
Githioro	94.4	0.7	0.1	0.4	3.9	0.3	-	-	0.3	1,679
Ol Kalou Constituency	94.8	0.7	0.1	1.7	0.8	0.0	0.1	0.0	1.9	9,221
Karau	92.1	0.6	0.1	2.0	1.4	-	0.1	-	3.8	1,545
Kanjuiri Ridge	96.0	0.8	0.1	1.4	0.7	0.1	-	-	1.0	1,968
Mirangine	92.9	0.3	-	3.1	0.3	-	0.2	0.1	3.3	1,995
Kiambaga	96.2	0.6	0.3	0.8	0.6	0.1	0.2	-	1.2	1,579
Rurii	96.2	1.1	-	1.3	1.0	-	-	-	0.4	2,134
Ol Jorok Constituency	95.4	0.5	0.1	1.6	0.6	0.1	0.1	-	1.7	8,433
Gathanji	95.7	0.5	0.1	2.6	1.2	-	-	-	-	1,764
Gatimu	92.9	0.7	-	3.4	0.1	0.1	0.0	-	2.8	2,411
Weru	96.2	0.3	0.2	0.2	0.4	0.1	0.1	-	2.5	2,499
Charagita	97.3	0.5	0.1	0.1	1.0	0.1	0.2	-	0.8	1,759
Ndaragwa Constituency	92.9	0.5	0.0	2.6	1.4	0.1	0.0	0.0	2.4	8,453
Leshau/Pondo	90.9	0.4	-	6.2	2.2	0.1	0.1	0.1	0.1	1,977
Kiriita	91.0	0.4	0.1	1.5	0.6	-	-	0.1	6.4	1,913
Central	96.2	0.7	0.1	0.8	1.6	-	0.1	-	0.5	2,711
Shamata	92.0	0.5	-	2.5	1.1	0.2	-	-	3.7	1,852

Table 35.20: Main material of the wall by County, Constituency and Wards

County/Constituency/ Wards	Stone	Brick/ Block	Mud/ Wood	Mud/ Cement	Wood only	Corrugated 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

Nyandarua County	13.4	2.6	33.3	3.0	43.0	3.0	0.0	0.1	1.4	140,745
Kinangop Constituency	15.3	3.9	33.4	3.5	40.1	3.6	0.0	0.1	0.1	44,537
Engineer	14.0	4.5	60.2	7.6	10.3	2.8	0.0	0.0	0.4	6,412
Gathara	18.9	1.9	39.2	4.2	32.5	3.0	0.0	0.1	0.1	6,170
North Kinangop	16.5	0.9	25.4	1.0	55.1	1.1	0.0	0.0	0.0	4,694
Murungaru	11.1	1.6	55.7	4.5	24.7	2.2	0.0	0.1	0.1	5,910
Njabini/Kiburu	23.3	2.4	9.5	0.4	62.5	1.6	0.0	0.0	0.3	5,150
Nyakio	9.8	2.0	7.5	1.3	75.3	3.8	0.0	0.3	0.0	5,687
Githabai	11.9	8.8	53.1	3.3	19.0	3.7	0.0	0.3	0.1	4,422
Mugumu	16.7	9.2	14.1	3.9	46.1	9.8	0.0	0.2	0.0	6,092
Kipipiri Constituency	9.1	2.1	50.2	5.0	28.3	3.1	0.1	0.1	2.1	21,804
Wanjohi	8.3	2.5	52.2	8.1	23.6	3.0	0.0	0.1	2.1	7,380
Kipipiri	14.6	3.7	55.0	4.1	15.2	4.2	0.1	0.2	3.0	5,235
Geta	2.2	0.6	41.3	1.9	52.0	0.6	0.1	0.0	1.4	4,500
Githioro	10.6	1.3	50.3	4.1	27.4	4.6	0.0	0.0	1.7	4,689
Ol Kalou Constituency	18.4	2.8	43.2	2.9	28.0	2.9	0.0	0.1	1.6	26,880
Karau	30.6	2.5	38.6	5.8	16.3	3.1	0.0	0.2	3.0	4,535
Kanjuri Ridge	11.0	1.1	53.7	1.7	27.6	3.5	0.0	0.1	1.3	5,950
Mirangine	10.2	2.7	44.8	3.6	34.6	1.5	0.0	0.1	2.5	5,913
Kiambaga	32.3	3.2	36.9	2.7	19.2	4.3	0.0	0.0	1.3	4,712
Rurii	13.6	4.7	39.4	1.3	38.1	2.4	0.1	0.2	0.3	5,770
Ol Jorok Constituency	13.6	1.7	18.1	1.6	60.9	2.3	0.0	0.1	1.7	24,144
Gathanji	4.4	0.9	13.7	0.6	79.9	0.4	0.0	0.0	0.0	5,058
Gatimu	23.7	2.4	13.7	2.5	51.0	3.5	0.1	0.1	3.0	7,264
Weru	15.3	1.7	25.5	1.9	49.6	3.6	0.0	0.0	2.2	6,623
Charagita	6.1	1.2	18.9	0.9	70.7	1.0	0.0	0.1	1.0	5,199
Ndaragwa Constituency	8.2	1.5	22.0	1.7	60.9	2.8	0.1	0.0	2.8	23,380
Leshau/Pondo	5.4	1.4	30.3	2.7	54.5	5.3	0.1	0.1	0.2	4,874
Kiriita	19.4	1.5	14.5	1.3	54.1	1.5	0.0	0.0	7.8	5,147
Central	4.5	1.9	24.1	1.7	64.0	3.2	0.1	0.1	0.4	7,601
Shamata	5.5	1.2	18.9	1.0	68.2	1.4	0.0	0.0	3.8	5,758

Table 35.21: Main Material of the Wall in Male Headed Households by County, Constituency and Ward

County/ Constituency/ Wards	Stone	Brick/ Block	Mud/ Wood	Mud/ Cement	Wood only	Corrugated Iron Sheets	Grass/ Reeds	Tin	Other	Households
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
Nyandarua County	13.5	2.7	33.2	2.9	43.3	2.9	0.0	0.1	1.4	92,263
Kinangop Constituency	14.9	3.8	33.3	3.5	40.8	3.4	0.0	0.1	0.1	30,065
Engineer	13.8	4.1	61.1	7.8	10.0	2.6	0.0	0.0	0.4	4,283
Gathara	18.2	2.0	39.1	4.4	33.3	2.7	-	0.1	0.1	4,148

North Kinangop	16.1	0.9	25.1	1.0	55.6	1.2	-	0.1	0.0	3,285
Murungaru	10.8	1.6	55.7	4.3	25.4	2.1	-	0.0	0.0	3,875
Njabini/Kiburu	22.8	2.5	9.5	0.4	62.8	1.6	0.1	0.0	0.3	3,558
Nyakio	9.1	1.8	7.1	1.3	76.7	3.6	0.1	0.2	0.0	3,955
Githabai	11.7	8.2	54.0	3.6	18.4	3.7	-	0.3	0.0	3,027
Mugumu	17.0	10.0	13.8	3.8	45.9	9.4	0.1	0.1	-	3,934
Kipipiri Constituency	9.1	2.3	50.5	5.0	28.0	2.9	0.0	0.1	2.1	13,901
Wanjohi	8.1	2.7	53.3	8.1	23.1	2.7	0.0	0.1	1.9	4,766
Kipipiri	14.7	4.0	54.2	4.2	15.1	4.2	0.1	0.3	3.2	3,298
Geta	2.3	0.6	40.4	1.8	52.6	0.7	0.1	0.1	1.4	2,827
Githioro	11.0	1.2	51.3	4.1	26.8	3.9	-	0.0	1.7	3,010
Ol Kalou Constituency	18.6	2.8	43.0	2.7	28.4	2.9	0.0	0.1	1.5	17,659
Karau	31.3	2.3	38.7	5.1	16.7	3.2	0.0	0.1	2.5	2,990
Kanjuri Ridge	10.6	1.0	54.1	1.5	28.0	3.3	-	0.1	1.4	3,982
Mirangine	10.3	2.9	44.0	3.3	35.6	1.7	-	0.1	2.0	3,918
Kiambaga	33.4	3.2	36.0	3.0	18.7	4.2	-	0.1	1.4	3,133
Rurii	13.2	4.5	39.4	1.3	38.9	2.2	0.1	0.2	0.3	3,636
Ol Jorok Constituency	13.5	1.6	17.9	1.6	61.3	2.2	0.0	0.1	1.8	15,711
Gathanji	4.2	0.9	12.8	0.4	81.3	0.4	-	-	0.0	3,294
Gatimu	24.3	2.2	13.9	2.6	50.2	3.3	0.1	0.1	3.1	4,853
Weru	14.9	2.0	26.2	1.8	49.4	3.5	0.0	0.0	2.1	4,124
Charagita	5.6	1.1	18.6	0.9	72.0	0.8	-	0.1	1.1	3,440
Ndaragwa Constituency	8.3	1.6	21.2	1.5	61.4	2.8	0.1	0.1	3.0	14,927
Leshau/Pondo	5.5	1.3	29.7	2.7	55.3	5.1	0.0	0.1	0.3	2,897
Kiriita	20.3	1.6	13.3	1.3	53.2	1.5	-	0.0	8.7	3,234
Central	4.7	2.0	23.5	1.4	64.6	3.2	0.2	0.1	0.3	4,890
Shamata	5.0	1.3	18.6	1.0	68.8	1.5	0.0	0.0	3.7	3,906

Table 35.22: 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
Nyandarua County	13.4	2.6	33.7	3.0	42.3	3.3	0.0	0.1	1.5	48,482
Kinangop Constituency	16.0	4.0	33.6	3.4	38.7	4.0	0.0	0.2	0.2	14,472
Engineer	14.5	5.4	58.3	7.2	10.8	3.3	-	0.1	0.4	2,129
Gathara	20.5	1.7	39.3	3.8	30.9	3.7	-	0.2	0.0	2,022
North Kinangop	17.5	1.0	26.0	0.9	53.7	0.9	-	-	-	1,409
Murungaru	11.6	1.7	55.7	4.9	23.3	2.5	-	0.1	0.2	2,035
Njabini/Kiburu	24.5	2.2	9.4	0.4	61.7	1.5	-	-	0.3	1,592
Nyakio	11.5	2.4	8.5	1.2	71.9	4.1	-	0.3	-	1,732
Githabai	12.2	9.9	50.9	2.6	20.1	3.8	-	0.3	0.2	1,395
Mugumu	16.1	7.8	14.7	4.1	46.6	10.3	0.0	0.2	0.1	2,158
Kipipiri Constituency	8.9	1.9	49.8	4.9	28.7	3.6	0.1	0.0	2.1	7,903
Wanjohi	8.8	2.0	50.4	8.1	24.6	3.5	0.0	0.1	2.6	2,614
Kipipiri	14.5	3.2	56.2	3.9	15.3	4.3	0.1	0.1	2.5	1,937
Geta	1.9	0.6	42.7	1.9	51.0	0.4	0.2	-	1.4	1,673
Githioro	9.9	1.4	48.4	4.0	28.5	6.1	-	-	1.7	1,679
Oi Kalou Constituency	18.0	3.0	43.5	3.2	27.2	3.0	0.0	0.2	1.9	9,221
Karau	29.1	2.9	38.4	7.1	15.5	2.8	-	0.3	3.9	1,545
Kanjuiri Ridge	11.8	1.2	52.8	2.2	26.7	4.1	-	0.3	1.0	1,968
Mirangine	10.0	2.3	46.4	4.2	32.5	1.1	0.1	0.1	3.5	1,995
Kiambaga	30.2	3.2	38.7	2.0	20.1	4.6	-	-	1.2	1,579
Rurii	14.2	5.2	39.5	1.4	36.6	2.6	0.0	0.1	0.4	2,134
Oi Jorok Constituency	13.7	1.7	18.3	1.6	60.2	2.6	0.0	0.1	1.7	8,433
Gathanji	4.9	1.1	15.3	0.9	77.3	0.5	0.1	-	-	1,764
Gatimu	22.5	2.6	13.3	2.1	52.6	3.9	0.0	0.1	2.9	2,411
Weru	15.9	1.2	24.4	2.1	50.0	3.8	-	0.1	2.5	2,499

Charagita	7.2	1.5	19.7	1.0	68.1	1.5	0.1	0.1	0.9	1,759
Ndaragwa Constituency	8.0	1.4	23.4	1.9	60.0	2.9	0.0	0.0	2.4	8,453
Leshau/Pondo	5.3	1.5	31.2	2.7	53.4	5.5	0.1	0.1	0.2	1,977
Kiriita	17.7	1.3	16.5	1.3	55.5	1.4	0.1	0.1	6.2	1,913
Central	4.2	1.7	25.0	2.3	63.1	3.2	-	-	0.5	2,711
Shamata	6.3	1.0	19.7	0.9	67.1	1.2	0.1	0.1	3.8	1,852

Table 35.23: Source of Water by County, Constituency and Ward

County/Constituency/ Wards	Pond	Dam	Lake	Stream/ River	Unprotected Spring	Unprotected Well	Jabia	Water ven- dor	Other	Unim- proved Sources	Protected Spring	Protect- ed Well	Bore- hole	Piped into Dwelling	Piped	Rain Water Col- lec- tion	Im- proved Sour- ces	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
Nyandarua County	1.8	6.9	0.1	20.8	2.9	4.9	1.1	2.6	0.0	41.2	1.4	21.3	6.8	3.7	20.1	5.4	58.8	589,320
Kinangop Constituency	3.1	2.2	0.0	16.1	1.5	6.1	1.9	3.5	0.0	34.4	0.6	17.8	6.7	2.7	28.3	9.5	65.6	189,714
Engineer	0.7	3.0	0.1	22.7	0.6	2.3	0.1	2.2	0.1	31.8	0.1	0.2	8.0	2.3	37.2	20.4	68.2	26,815
Gathara	0.1	0.1	0.0	9.9	0.1	0.1	0.0	0.8	0.1	11.1	1.2	1.3	0.5	8.3	73.5	4.2	88.9	25,839
North Kinangop	0.0	0.1	0.0	14.4	0.0	0.0	0.0	0.2	0.0	14.7	0.1	0.1	0.0	6.8	77.7	0.7	85.3	20,658
Murungaru	0.0	4.8	0.0	45.3	0.2	0.4	0.9	6.4	0.0	58.1	0.2	0.7	13.9	0.8	6.3	20.1	41.9	26,573
Njabini/Kiburu	1.9	1.6	0.0	22.6	0.5	7.7	0.0	0.6	0.0	34.8	0.5	16.3	10.7	3.0	32.7	2.0	65.2	20,248
Nyakio	7.9	0.4	0.0	6.3	3.7	14.1	0.3	3.8	0.0	36.6	1.4	48.9	10.9	0.1	0.1	2.1	63.4	24,892
Githabai	16.9	7.4	0.1	3.5	4.1	3.5	14.2	11.7	0.0	61.5	0.6	9.2	6.1	0.2	0.0	22.4	38.5	19,277
Mugumu	0.1	0.7	0.0	0.4	3.1	19.8	1.9	3.3	0.0	29.4	0.5	63.0	3.0	0.1	1.2	2.9	70.6	25,412
Kipipiri Constituency	2.7	2.5	0.0	32.6	2.7	1.9	0.2	0.6	0.0	43.3	0.2	3.7	3.3	7.0	37.2	5.3	56.7	94,820
Wanjohi	0.9	0.3	0.0	24.8	0.6	3.1	0.0	0.1	0.0	29.8	0.2	10.3	5.8	8.7	42.9	2.4	70.2	32,032
Kipipiri	7.0	2.7	0.1	53.7	8.0	1.2	0.7	1.8	0.0	75.4	0.4	0.2	5.1	2.0	9.5	7.5	24.6	22,540
Geta	0.2	0.0	0.0	15.0	0.8	0.8	0.0	0.0	0.1	16.8	0.1	0.5	0.5	9.7	72.5	0.0	83.2	20,238
Githioro	3.1	8.4	0.0	39.3	2.2	1.6	0.1	0.6	0.0	55.4	0.3	0.4	0.3	7.0	23.4	13.1	44.6	20,010

Oi Kalou Constituency	0.7	13.4	0.1	18.9	5.3	6.8	1.5	3.5	0.0	50.2	3.1	26.0	8.6	2.9	5.9	3.4	49.8	118,903
Karau	0.1	35.6	0.0	21.5	3.6	3.7	2.6	4.6	0.0	71.8	6.8	3.5	2.4	3.9	8.7	2.8	28.2	25,240
Kanjui Ridge	0.2	6.8	0.0	26.6	13.1	8.0	1.5	1.3	0.0	57.6	3.2	11.7	13.2	1.4	9.3	3.6	42.4	25,374
Mirangine	2.1	0.2	0.0	14.0	3.0	8.0	0.0	0.0	0.0	27.4	2.6	60.6	9.0	0.2	0.0	0.3	72.6	26,779
Kiambaga	0.1	8.0	0.0	33.9	0.9	1.0	1.2	12.3	0.2	57.6	1.9	5.6	13.6	7.9	8.8	4.6	42.4	17,860
Rurii	0.7	15.6	0.2	2.1	4.7	12.1	2.0	1.9	0.0	39.4	0.4	41.7	6.0	2.6	3.6	6.4	60.6	23,650
Oi Jorok Constituency	0.2	2.9	0.1	19.3	1.6	3.3	0.4	1.9	0.0	29.8	1.8	44.5	9.2	3.4	9.2	2.3	70.2	94,415
Gathanji	0.1	5.4	0.1	12.5	1.3	1.7	0.2	0.3	0.0	21.6	2.1	68.7	6.4	0.0	0.3	0.8	78.4	21,114
Gatimu	0.2	1.0	0.1	34.0	1.9	3.8	0.2	3.7	0.0	45.0	1.8	18.2	9.4	6.0	17.3	2.4	55.0	25,632
Weru	0.3	3.9	0.1	14.4	2.4	4.6	1.1	2.8	0.0	29.5	1.7	32.2	11.3	5.8	15.9	3.6	70.5	25,886
Charagita	0.2	1.6	0.0	14.4	0.5	2.9	0.2	0.2	0.0	20.1	1.6	66.5	9.1	0.6	0.2	1.9	79.9	21,783
Ndaragwa Constituency	1.4	17.2	0.1	22.2	4.1	4.9	0.8	2.5	0.0	53.1	1.9	16.7	5.8	4.1	15.3	3.1	46.9	91,468
Leshau/Pondo	1.3	37.8	0.2	20.5	5.0	3.7	1.5	0.6	0.0	70.7	5.2	16.5	3.0	0.1	0.4	4.1	29.3	19,025
Kiriita	0.1	15.3	0.1	7.5	3.1	11.6	1.4	8.5	0.0	47.6	1.6	20.9	13.9	5.4	6.3	4.3	52.4	19,491
Central	2.9	15.0	0.1	33.3	3.2	1.4	0.2	0.2	0.0	56.3	0.7	7.8	2.8	4.1	25.7	2.5	43.7	29,592
Shamata	0.5	4.7	0.0	21.9	5.4	4.7	0.3	2.0	0.1	39.5	1.0	24.4	5.2	6.2	21.8	1.9	60.5	23,360

Table 35.24: Source of Water of Male headed Household by County Constituency and Ward

County/Constituency/ Wards	Pond	Dam	Lake	Stream/ River	Unprotect- ed Spring	Unprotected Well	Jabia	Water ven- dor	Other	Unim- proved Sources	Pro- tected Spring	Protected Well	Bore- hole	Piped into Dwelling	Piped Water Collection	Im- proved Sources	Number of Individuals
Kenya	2.7	2.3	1.1	22.4	4.8	6.7	0.4	5.6	0.4	46.4	7.4	7.7	11.7	6.2	19.9	53.6	26,755,066
Rural	3.7	3.1	1.4	29.1	6.3	8.6	0.4	2.4	0.5	55.6	9.2	8.2	12.1	1.9	12.2	44.4	18,016,471
Urban	0.8	0.6	0.5	8.5	1.8	2.8	0.2	12.1	0.1	27.5	3.8	6.7	10.8	14.9	35.8	72.5	8,738,595
Nyandarua County	1.9	6.6	0.1	20.7	2.8	4.9	1.1	2.6	0.0	40.7	1.5	21.5	6.7	3.8	20.4	59.3	408,095
Kinangop Constituency	3.1	2.2	0.0	16.2	1.5	6.1	1.8	3.4	0.0	34.3	0.6	18.1	6.5	2.6	28.3	65.7	136,120
Engineer	0.7	3.1	0.1	22.9	0.6	2.5	0.1	2.1	0.1	32.0	0.2	0.2	7.2	2.3	37.2	68.0	18,957
Gathara	0.1	0.1	-	10.3	0.1	0.1	0.0	0.6	0.0	11.3	1.1	1.3	0.6	8.1	73.5	4.1	18,451
North Kinangop	-	0.1	-	14.7	-	0.1	0.0	0.1	-	14.9	0.1	0.1	0.0	6.9	77.4	85.1	15,216
Murungeru	-	4.7	0.0	46.1	0.1	0.5	0.9	6.3	-	58.5	0.2	0.7	13.3	0.8	6.0	20.5	18,576
Njabini/Kiburu	1.9	1.6	0.1	21.6	0.5	7.9	0.0	0.5	-	34.1	0.5	16.8	10.8	3.0	32.6	2.2	14,808
Nyakio	8.0	0.4	0.1	6.6	3.6	14.4	0.4	3.6	-	36.9	1.6	49.1	10.3	0.1	0.0	2.0	18,617
Githabai	16.5	7.1	0.1	4.0	3.9	3.7	13.7	11.3	-	60.4	0.5	9.4	6.0	0.2	0.0	23.3	13,876
Mugumu	0.1	0.9	-	0.4	3.3	19.1	1.9	3.3	-	29.0	0.5	63.8	2.9	0.1	1.0	2.7	17,619
Kipipiri Constituency	2.8	2.6	0.1	32.0	2.8	1.9	0.2	0.6	0.0	42.9	0.3	3.8	3.4	7.1	37.3	5.1	64,382
Wanjohi	1.0	0.4	-	24.2	0.5	3.1	0.0	0.1	-	29.4	0.3	10.4	5.9	8.9	43.1	1.9	22,290
Kipipiri	7.3	2.6	0.2	52.8	8.5	1.5	0.7	1.7	0.0	75.2	0.4	0.2	5.3	2.0	9.5	7.5	15,031
Geta	0.3	-	-	13.9	0.8	0.8	0.0	0.0	0.1	15.8	0.1	0.5	0.5	9.7	73.5	-	13,528
Githioro	3.1	8.7	0.1	40.0	2.2	1.7	0.1	0.6	0.0	56.5	0.3	0.3	0.3	7.1	22.6	12.8	13,533

Oi Kalou Constituency	0.7	12.6	0.1	19.3	5.2	6.7	1.4	3.5	0.0	49.5	3.1	26.4	8.7	2.9	6.0	3.3	50.5	81,079
Karau	0.2	32.8	0.1	22.3	3.5	3.9	2.7	4.8	0.1	70.3	7.2	4.2	2.4	4.1	9.0	2.8	29.7	16,711
Kanjui Ridge	0.2	7.1	0.0	27.0	12.6	7.8	1.4	1.5	-	57.6	3.0	11.8	13.3	1.5	9.2	3.6	42.4	17,585
Mirangine	2.1	0.3	-	14.0	2.8	7.9	0.0	-	0.0	27.1	2.7	60.9	8.9	0.1	-	0.3	72.9	18,757
Kiambaga	0.1	7.6	-	33.7	0.9	1.0	1.2	11.8	0.2	56.4	1.8	6.1	14.1	7.9	9.2	4.4	43.6	12,442
Rurii	0.6	15.7	0.3	2.3	4.9	11.7	2.0	2.0	-	39.6	0.4	41.7	5.7	2.6	3.7	6.2	60.4	15,584
Oi Jorok Constituency	0.2	3.0	0.0	19.2	1.6	3.2	0.4	1.9	0.0	29.5	1.9	44.8	9.1	3.3	9.3	2.1	70.5	64,899
Gathanji	0.0	5.5	0.0	12.7	1.2	1.3	0.2	0.3	-	21.2	2.2	68.7	7.0	-	0.3	0.6	78.8	14,613
Gatimu	0.3	0.9	0.1	33.5	1.9	3.7	0.2	3.9	-	44.5	1.8	18.4	9.2	5.9	18.0	2.2	55.5	17,876
Weru	0.3	4.1	0.1	14.3	2.4	4.7	1.1	2.8	0.0	29.8	1.9	32.0	11.1	5.6	16.1	3.5	70.2	17,169
Charagita	0.2	1.8	0.0	13.9	0.5	2.7	0.2	0.3	-	19.6	1.7	67.3	8.8	0.7	0.2	1.7	80.4	15,241
Ndaragwa Constituency	1.4	16.5	0.1	22.0	4.1	5.0	0.8	2.5	0.0	52.5	1.9	16.8	5.6	4.3	15.9	3.0	47.5	61,615
Leshau/Pondo	1.4	37.5	0.2	19.8	4.9	3.5	1.8	0.7	-	69.8	5.3	16.9	3.2	0.1	0.4	4.4	30.2	12,000
Kiitita	0.1	15.4	0.1	7.8	3.1	12.0	1.5	8.7	-	48.8	1.9	20.1	13.2	5.8	5.9	4.4	51.2	12,941
Central	3.2	14.6	0.1	33.0	3.1	1.5	0.3	0.2	-	55.8	0.7	8.0	2.5	4.2	26.5	2.3	44.2	19,983
Shamata	0.4	4.7	-	21.3	5.4	4.9	0.3	1.9	0.0	38.9	1.0	24.8	5.1	6.4	22.1	1.8	61.1	16,691

Table 35.25: Source of Water of Female headed Household by County Constituency and Ward

County/ Constituency/Wards	Pond	Dam	Lake	Stream/ River	Unprotect- ed Spring	Unprotect- ed Well	Jabia	Water vendor	Other	Unimproved Sources	Protected Spring	Protect- ed Well	Bore- hole	Piped into Dwelling	Piped	Rain Water Collection	Improved Sources	Number of Individ- uals
Kenya	2.8	2.7	1.3	252	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	0.6	69.5	3,105,857
Nyandarua County	1.7	7.7	0.0	21.1	3.0	4.9	1.1	2.7	0.0	42.3	1.4	20.7	7.0	3.7	19.4	5.4	57.7	181,225
Kinangop Constituency	3.1	2.2	0.0	15.8	1.6	6.1	2.0	3.9	0.0	34.7	0.5	17.2	7.4	2.7	28.1	9.3	65.3	53,594
Engineer	0.8	2.9	0.0	22.3	0.7	2.0	0.1	2.5	0.1	31.3	0.1	0.2	9.9	2.3	37.2	19.1	68.7	7,858
Gathara	0.1	-	-	8.9	0.2	0.0	0.0	1.2	0.1	10.5	1.3	1.4	0.3	8.7	73.5	4.4	89.5	7,388
North Kinan- gop	-	-	-	13.5	-	-	-	0.6	-	14.1	0.1	-	-	6.6	78.5	0.8	85.9	5,442
Murungu	-	5.0	0.1	43.5	0.5	0.4	1.0	6.5	0.1	57.1	0.2	0.6	15.3	0.8	6.8	19.2	42.9	7,997
Njabini/Kiburu	1.9	1.3	-	25.3	0.3	7.1	-	0.9	-	36.7	0.6	14.8	10.4	3.2	32.8	1.5	63.3	5,440
Nyakio	7.8	0.4	-	5.5	4.1	13.4	0.1	4.5	-	35.7	0.8	48.3	12.5	0.2	0.2	2.3	64.3	6,275
Githabai	17.9	8.1	0.1	2.4	4.6	3.2	15.3	12.5	-	64.1	0.6	8.7	6.4	0.0	0.0	20.1	35.9	5,401
Mugumu	0.1	0.4	0.0	0.3	2.8	21.3	1.8	3.5	0.0	30.3	0.5	61.2	3.1	0.0	1.5	3.3	69.7	7,793
Kipipiri Con- stituency	2.5	2.4	0.0	33.9	2.7	1.7	0.2	0.6	-	44.0	0.2	3.4	3.1	6.7	36.8	5.8	56.0	30,438
Wanjohi	0.7	0.1	-	26.0	0.7	3.1	-	0.0	-	30.8	0.1	9.9	5.5	8.1	42.3	3.4	69.2	9,742
Kipipiri	6.4	2.9	0.0	55.6	7.2	0.8	0.9	2.0	-	75.8	0.4	0.1	4.8	2.0	9.5	7.4	24.2	7,509
Geta	0.1	-	-	17.2	0.7	0.7	-	-	-	18.7	0.1	0.4	0.5	9.7	70.5	0.0	81.3	6,710
Githoro	3.2	7.7	-	37.8	2.3	1.6	0.1	0.6	-	53.2	0.3	0.6	0.3	6.7	25.1	13.7	46.8	6,477

Ol Kalou Constituency	0.7	15.1	0.1	18.1	5.6	7.1	1.6	3.4	0.0	51.6	2.9	25.1	8.4	2.7	5.6	3.6	48.4	37,824
Karau	0.1	41.1	-	19.8	3.9	3.3	2.5	4.2	-	74.9	6.0	2.1	2.5	3.4	8.1	2.9	25.1	8,529
Kanjui Ridge	0.2	6.2	0.1	25.9	14.1	8.4	1.8	0.8	-	57.4	3.6	11.7	13.1	1.1	9.6	3.6	42.6	7,789
Mirangine	2.1	0.1	-	14.2	3.6	8.1	-	-	-	28.2	2.2	60.0	9.1	0.2	-	0.2	71.8	8,022
Kiambaga	0.1	9.0	0.1	34.2	1.0	0.9	1.4	13.5	0.2	60.3	1.9	4.5	12.4	8.1	7.8	5.1	39.7	5,418
Rurii	0.7	15.3	0.2	1.8	4.3	12.8	2.0	1.8	0.1	38.9	0.3	41.7	6.6	2.5	3.3	6.8	61.1	8,066
Ol Jorok Constituency	0.2	2.9	0.1	19.7	1.6	3.5	0.4	1.8	0.0	30.3	1.5	43.8	9.4	3.6	8.7	2.7	69.7	29,516
Gathanji	0.3	5.3	0.1	12.2	1.6	2.5	0.2	0.3	-	22.6	1.9	68.8	5.2	-	0.2	1.3	77.4	6,501
Gatimu	0.2	1.4	0.0	35.0	1.9	3.9	0.2	3.4	0.0	46.0	1.7	17.8	9.8	6.1	15.7	2.9	54.0	7,756
Weru	0.3	3.5	0.0	14.5	2.3	4.2	1.0	2.9	-	28.9	1.3	32.6	11.7	6.3	15.4	3.8	71.1	8,717
Charagita	0.1	1.4	0.1	15.7	0.5	3.2	0.2	0.1	-	21.2	1.3	64.7	9.8	0.4	0.1	2.5	78.8	6,542
Ndaragwa Constituency	1.2	18.5	0.1	22.7	4.2	4.6	0.7	2.5	0.0	54.5	1.9	16.4	6.3	3.5	14.1	3.2	45.5	29,853
Leshau/Pondo	1.2	38.4	0.1	21.5	5.2	4.1	1.1	0.6	-	72.3	5.2	15.8	2.7	0.1	0.4	3.6	27.7	7,025
Kiitita	0.1	15.0	0.2	7.0	2.9	10.6	1.3	8.0	-	45.2	1.2	22.7	15.2	4.5	7.0	4.1	54.8	6,550
Central	2.3	15.9	0.0	33.9	3.5	1.2	0.2	0.2	-	57.2	0.8	7.6	3.4	3.9	24.2	2.9	42.8	9,609
Shamata	0.8	4.5	-	23.4	5.5	4.1	0.3	2.3	0.1	41.0	1.0	23.4	5.6	5.6	21.1	2.3	59.0	6,669

Table 35.26: Human Waste Disposal by County, Constituency and Ward

County/ Constituency	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	38.86	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	5.90	44.80	78.02	17.67	0.71	3.42	0.18	21.98	11,844,452
Nyandarua County	0.18	0.58	0.07	4.68	68.28	73.79	25.99	0.07	0.13	0.02	26.21	589,320
Kinangop Constituency	0.13	0.29	0.02	2.91	71.49	74.83	25.01	0.06	0.08	0.03	25.17	189,714
Engineer	0.04	0.41	0.04	4.96	68.48	73.93	26.01	0.00	0.02	0.04	26.07	26,815
Gathara	0.11	0.76	0.00	2.32	93.90	97.09	2.84	0.00	0.05	0.02	2.91	25,839
North Kinangop	0.26	0.54	0.04	0.91	93.99	95.74	4.16	0.01	0.09	0.00	4.26	20,658
Murungaru	0.11	0.05	0.00	3.37	91.65	95.18	4.76	0.00	0.04	0.03	4.82	26,573
Njabini/Kiburu	0.51	0.37	0.01	1.28	71.52	73.70	26.10	0.11	0.08	0.01	26.30	20,248
Nyakio	0.02	0.10	0.02	1.84	54.53	56.50	43.26	0.13	0.10	0.00	43.50	24,892
Githabai	0.00	0.06	0.05	6.57	44.94	51.63	48.28	0.00	0.10	0.00	48.37	19,277
Mugumu	0.03	0.02	0.02	2.02	49.25	51.35	48.19	0.18	0.14	0.14	48.65	25,412
Kipipiri Constituency	0.03	0.17	0.06	2.56	50.03	52.86	47.01	0.03	0.09	0.01	47.14	94,820
Wanjohi	0.02	0.12	0.13	3.05	38.49	41.80	58.04	0.04	0.10	0.02	58.20	32,032
Kipipiri	0.03	0.40	0.05	3.85	78.95	83.28	16.64	0.01	0.07	0.00	16.72	22,540
Geta	0.05	0.05	0.00	1.56	10.06	11.73	88.12	0.01	0.13	0.00	88.27	20,238
Githioro	0.04	0.13	0.03	1.36	76.34	77.91	21.99	0.05	0.05	0.00	22.09	20,010
Oi Kalou Constituency	0.50	1.33	0.16	6.30	57.83	66.13	33.65	0.06	0.13	0.02	33.87	118,903
Karau	0.46	1.73	0.32	6.48	61.74	70.72	29.12	0.02	0.10	0.05	29.28	25,240
Kanjuri Ridge	0.22	0.13	0.00	6.04	71.85	78.24	21.49	0.01	0.24	0.02	21.76	25,374
Mirangine	0.00	0.03	0.00	2.18	84.70	86.91	12.80	0.18	0.09	0.01	13.09	26,779
Kiambaga	1.77	5.67	0.30	11.20	53.89	72.83	26.86	0.00	0.27	0.04	27.17	17,860
Rurii	0.47	0.39	0.25	7.37	11.18	19.67	80.25	0.07	0.01	0.00	80.33	23,650
Oi Jorok Constituency	0.13	0.64	0.09	8.45	78.91	88.22	11.43	0.18	0.15	0.02	11.78	94,415
Gathanji	0.11	0.06	0.04	4.62	86.02	90.84	8.83	0.24	0.05	0.03	9.16	21,114
Gatimu	0.18	1.36	0.26	20.46	55.15	77.41	22.01	0.18	0.39	0.00	22.59	25,632
Weru	0.11	0.66	0.03	5.54	85.29	91.64	8.12	0.10	0.10	0.03	8.36	25,886
Charagita	0.09	0.33	0.00	1.49	92.41	94.32	5.42	0.22	0.01	0.03	5.68	21,783
Ndaragwa Constituency	0.07	0.55	0.03	4.54	83.17	88.37	11.32	0.06	0.23	0.03	11.63	91,468
Leshau/Pondo	0.03	0.02	0.07	4.74	82.25	87.11	12.67	0.00	0.20	0.02	12.89	19,025
Kiitita	0.25	2.23	0.02	6.89	83.37	92.75	6.76	0.13	0.30	0.06	7.25	19,491

Central	0.03	0.18	0.04	2.26	94.11	96.62	3.17	0.01	0.20	0.00	3.38	29,592
Shamata	0.00	0.06	0.00	5.33	69.90	75.29	24.33	0.09	0.24	0.04	24.71	23,360

Table 35.27: Human Waste Disposal in Male Headed household by County, Constituency and Ward

County/ Constituency/ 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
Nyandarua County	0.17	0.59	0.07	4.67	68.47	73.98	25.79	0.07	0.14	0.02	26.02	408,095
Kinangop Constituency	0.14	0.26	0.01	2.91	71.40	74.72	25.12	0.05	0.09	0.02	25.28	136,120
Engineer	0.06	0.38	0.00	4.94	68.15	73.53	26.41	0.00	0.03	0.03	26.47	18,957
Gathara	0.11	0.55	0.00	2.15	94.21	97.02	2.88	0.00	0.07	0.02	2.98	18,451
North Kinangop	0.25	0.57	0.00	0.99	94.33	96.14	3.73	0.01	0.12	0.00	3.86	15,216
Murungu	0.11	0.06	0.00	3.23	91.89	95.30	4.69	0.00	0.01	0.00	4.70	18,576
Njabini/Kiburu	0.60	0.43	0.01	1.30	71.47	73.81	26.01	0.06	0.10	0.01	26.19	14,808
Nyakio	0.00	0.06	0.02	1.83	54.29	56.21	43.58	0.10	0.11	0.00	43.79	18,617
Githabai	0.00	0.04	0.07	6.90	44.90	51.91	47.95	0.00	0.14	0.00	48.09	13,876
Mugumu	0.04	0.00	0.00	2.21	48.50	50.75	48.76	0.23	0.18	0.09	49.25	17,619
Kipipiri Constituency	0.03	0.20	0.07	2.60	50.18	53.07	46.76	0.04	0.11	0.01	46.93	64,382
Wanjohi	0.01	0.12	0.16	3.16	38.94	42.38	57.41	0.06	0.13	0.03	57.62	22,290
Kipipiri	0.03	0.49	0.04	3.58	79.74	83.87	16.06	0.01	0.06	0.00	16.13	15,031
Geta	0.08	0.07	0.00	1.69	10.16	11.99	87.79	0.02	0.20	0.00	88.01	13,528
Githoro	0.00	0.13	0.01	1.50	75.90	77.53	22.33	0.07	0.07	0.00	22.47	13,533
Oi Kalou Constituency	0.48	1.38	0.19	6.34	58.37	66.76	33.02	0.07	0.14	0.01	33.24	81,079
Karau	0.51	1.74	0.38	7.01	60.19	69.83	30.11	0.02	0.05	0.00	30.17	16,711
Kanjuri Ridge	0.25	0.06	0.00	6.23	72.28	78.82	20.83	0.00	0.31	0.03	21.18	17,585
Mirangine	0.00	0.02	0.00	1.51	85.66	87.20	12.47	0.19	0.12	0.02	12.80	18,757
Kiambaga	1.62	6.11	0.32	11.27	54.02	73.33	26.48	0.00	0.18	0.00	26.67	12,442
Rurii	0.36	0.36	0.34	7.64	11.33	20.02	79.87	0.10	0.01	0.00	79.98	15,584
Oi Jorok Constituency	0.12	0.66	0.09	8.41	79.17	88.45	11.21	0.16	0.15	0.03	11.55	64,899
Gathanji	0.16	0.04	0.00	4.50	86.94	91.64	8.08	0.20	0.04	0.03	8.36	14,613

Gatimu	0.20	1.40	0.29	20.37	55.24	77.49	21.93	0.13	0.44	0.00	22.51	17,876
Weru	0.04	0.68	0.04	5.38	85.57	91.71	8.05	0.13	0.06	0.05	8.29	17,169
Charagita	0.08	0.37	0.00	1.55	92.58	94.57	5.19	0.19	0.01	0.04	5.43	15,241
Ndaragwa Constituency	0.06	0.64	0.05	4.58	83.13	88.46	11.19	0.06	0.27	0.02	11.54	61,615
Leshau/Pondo	0.03	0.00	0.12	5.17	82.82	88.13	11.68	0.00	0.19	0.00	11.87	12,000
Kiritia	0.19	2.73	0.02	6.85	83.54	93.34	6.07	0.17	0.38	0.04	6.66	12,941
Central	0.03	0.15	0.06	2.16	94.04	96.43	3.30	0.02	0.25	0.00	3.57	19,983
Shamala	0.00	0.08	0.00	5.31	69.96	75.35	24.24	0.07	0.28	0.05	24.65	16,691

Table 35.28: Human Waste Disposal in Female Headed Household by County, Constituency and Ward

County/ Constituency	Main Sewer	Septic Tank	Cess Pool	VIP Latrine	Pit Latrine	Improved Sanitation	Pit Latrine Uncov- ered	Bucket	Bush	Other	Unim- proved Sanitation	Number of HH Members
Kenya	5.0	2.2	0.2	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	0.6	5.9	45.1	76.4	18.4	0.7	4.3	0.2	23.6	3,105,857.0
Nyandarua	0.2	0.5	0.1	4.7	67.9	73.4	26.4	0.1	0.1	0.0	26.6	181,225.0
Kinangop	0.1	0.4	0.0	2.9	71.7	75.1	24.7	0.1	0.0	0.1	24.9	53,594.0
Engineer	0.0	0.5	0.1	5.0	69.3	74.9	25.1	0.0	0.0	0.1	25.1	7,858.0
Gathara	0.1	1.3	0.0	2.7	93.1	97.3	2.7	0.0	0.0	0.0	2.7	7,388.0
North Kinangop	0.3	0.4	0.2	0.7	93.0	94.6	5.4	0.0	0.0	0.0	5.4	5,442.0
Murungaru	0.1	0.0	0.0	3.7	91.1	94.9	4.9	0.0	0.1	0.1	5.1	7,997.0
Njabini/Kiburu	0.3	0.2	0.0	1.2	71.7	73.4	26.3	0.2	0.0	0.0	26.6	5,440.0
Nyakio	0.1	0.2	0.0	1.8	55.2	57.4	42.3	0.2	0.1	0.0	42.6	6,275.0
Githabai	0.0	0.1	0.0	5.7	45.0	50.9	49.1	0.0	0.0	0.0	49.1	5,401.0
Mugumu	0.0	0.1	0.1	1.6	51.0	52.7	46.9	0.1	0.1	0.3	47.3	7,793.0
Kipipiri	0.0	0.1	0.1	2.5	49.7	52.4	47.5	0.0	0.0	0.0	47.6	30,438.0
Wanjohi	0.0	0.1	0.1	2.8	37.5	40.5	59.5	0.0	0.1	0.0	59.5	9,742.0
Kipipiri	0.0	0.2	0.1	4.4	77.4	82.1	17.8	0.0	0.1	0.0	17.9	7,509.0
Geta	0.0	0.0	0.0	1.3	9.9	11.2	88.8	0.0	0.0	0.0	88.8	6,710.0

Githioro		0.1	0.2	0.1	1.1	77.3	78.7	21.3	0.0	0.0	0.0	0.0	21.3	6,477.0
Oi Kalou		0.6	1.2	0.1	6.2	56.7	64.8	35.0	0.0	0.1	0.1	0.1	35.2	37,824.0
Karau		0.4	1.7	0.2	5.4	64.8	72.5	27.2	0.0	0.2	0.1	0.1	27.5	8,529.0
Kanjuri Ridge		0.1	0.3	0.0	5.6	70.9	76.9	23.0	0.0	0.1	0.0	0.0	23.1	7,789.0
Mirangine		0.0	0.0	0.0	3.8	82.4	86.2	13.6	0.2	0.0	0.0	0.0	13.8	8,022.0
Kianbaga		2.1	4.7	0.3	11.0	53.6	71.7	27.7	0.0	0.5	0.1	0.1	28.3	5,418.0
Ruri		0.7	0.4	0.1	6.9	10.9	19.0	81.0	0.0	0.0	0.0	0.0	81.0	8,066.0
Oi Jorok		0.1	0.6	0.1	8.5	78.4	87.7	11.9	0.2	0.1	0.0	0.0	12.3	29,516.0
Gathanji		0.0	0.1	0.1	4.9	83.9	89.0	10.5	0.3	0.1	0.0	0.0	11.0	6,501.0
Galimu		0.2	1.3	0.2	20.7	55.0	77.2	22.2	0.3	0.3	0.0	0.0	22.8	7,756.0
Weru		0.3	0.6	0.0	5.9	84.8	91.5	8.3	0.1	0.2	0.0	0.0	8.5	8,717.0
Charagita		0.1	0.2	0.0	1.4	92.0	93.7	6.0	0.3	0.0	0.0	0.0	6.3	6,542.0
Ndaragwa		0.1	0.4	0.0	4.5	83.3	88.2	11.6	0.0	0.1	0.0	0.0	11.8	29,853.0
Leshau/Pondo		0.0	0.1	0.0	4.0	81.3	85.4	14.4	0.0	0.2	0.0	0.0	14.6	7,025.0
Kiriita		0.4	1.2	0.0	6.9	83.0	91.6	8.1	0.1	0.1	0.1	0.1	8.4	6,550.0
Central		0.0	0.2	0.0	2.5	94.2	97.0	2.9	0.0	0.1	0.0	0.0	3.0	9,609.0
Shamata		0.0	0.0	0.0	5.4	69.7	75.1	24.6	0.1	0.1	0.0	0.0	24.9	6,669.0



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The Society for International Development (SID) is an international network of individuals and organizations with an interest in development, policy and governance research and dialogue. Since its creation in 1957, SID has consistently been at the forefront of reappraising prevalent development ideas and has confronted the theory and practice of development, challenging existing practices and suggesting alternative approaches. Over the years, three values have been – and remain – at the core of the Society's work – respect for diversity, participation and equity. SID East Africa is incorporated as a Company Limited by Guarantee under the Laws of Kenya. It serves as the Regional Office of the SID International Secretariat which is headquartered in Rome, Italy.

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