



POVERTY REPORT

**BASED ON THE 2019 KENYA CONTINUOUS
HOUSEHOLD SURVEY**



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Based on the 2019 Kenya Continuous
Household Survey



WORLD BANK GROUP

Published by:

Kenya National Bureau of Statistics

Real Towers, Upper Hill

P.O. Box 30266 - 00100 Nairobi, Kenya

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ISBN: 978-9966-102-23-2

Published 2023

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Abbreviations

ASAL	Arid and Semi-Arid Lands
BBI	Building Bridges Initiative
CAPI	Computer Assisted Personal Interviews
CBN	Cost-of-Basic Needs
CD	Compact Disc
COVID-19	Coronavirus disease 2019
CPI	Consumer Price Index
DVD	Digital Video Disc
EA	Enumeration Areas
ERS	Economic Recovery Strategy
FGT	Foster, Greer and Thorbecke
GDP	Gross Domestic Product
GoK	Government of Kenya
HBS	Household Budget Survey
KCHS	Kenya Continuous Household Survey
KCHSP	Kenya Continuous Household Survey Programme
KIHBS	Kenya Integrated Household Budget Survey
KLMIS	Kenya Labour Market Information System
KM	Kilometre
KNBS	Kenya National Bureau of Statistics
KSh	Kenya Shilling
KSPforR	Kenya Statistics Program-for-Results
LPG	Liquefied Petroleum Gas
MTP	Medium Term Plan
NASSEP	National Sample Survey and Evaluation Programme
NSS	National Statistical System
OLS	Ordinary Least Squares
PPS	Probability Proportional to Size
PTA	Parents Teachers Associations
RHBS	Rural Household Budget Survey
SDGs	Sustainable Development Goals
UHBS	Urban Household Budget Surveys
WMS	Welfare Monitoring Survey

Preface

The Kenya National Bureau of Statistics (KNBS) regularly produces analytical reports for planning in general as well as for monitoring the social-economic policies for the country. In the 57 years since independence, Kenya has witnessed several economic policies, programmes and reforms geared towards a vibrant market-based economy to spur economic growth and poverty alleviation. Such policies started with the Sessional Paper No. 10 of 1965 to the current Vision 2030 that aims for the transformation of our country into a rapidly industrializing middle-income nation by 2030. The latest addition to the country's policies is Big Four Agenda of growing the manufacturing sector for employment creation, improve access to affordable housing, increase universal health coverage and enhance food security.

This poverty report adds to the wealth of information on economic welfare for the understanding of the characteristics of the poor and non-poor and to examine inequality of income/ expenditure. The analysis helps to assess poverty change over time and by subgroups such age, gender, employment status and estimate vulnerability to poverty to inform pension, social safety net, labour programmes and policy formulation.

The analysis contained in the report is based on the 2019 Kenya Continuous Household Survey (KCHS) which collected data on a wide range of social and economic particular on household consumption expenditure and labour force. The poverty measures generated are based mainly on household consumption expenditure data. The households were ranked by consumption expenditures and poverty lines for the country set. Individuals or households with consumption below a given poverty line were considered poor. The poverty measures include Poverty headcount, Poverty gap and Poverty severity.

This report provides information for monitoring progress on the Government policies and programmes such as the Vision 2030, Big Four Agenda as well internationally agreed developmental agenda including African Union Agenda 2063 and United Nations Sustainable Development Goals (SDGs). The findings contained in the report are for poverty measures at both National and County levels in 2019.

Data collection instruments together with data capture System were developed by KNBS technical staff with technical support from the World Bank. The technical staff include Benjamin Avusevwa, Paul Samoei, Silas Mulwa, Caneble Oganga, Pius Ng'ang'a, George Magara, Samwel Mwenda from KNBS and Utz Johann Pape, Nduati Maina Kariuki and Emanuele Clemente of the World Bank.

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Background

The Government of Kenya's long-term economic blueprint, Vision 2030, aims at transforming Kenya into "a newly-industrialising, middle-income country providing a high quality of life to all its citizens in a clean and secure environment". The social Pillar of Vision 2030, "Enhanced Equity and Wealth Creation Opportunities for the Poor", underscores the Government's commitment to eliminate poverty. This Vision is given more impetus by Sustainable Development Goals (SDGs) and devolution.

The Kenya National Bureau of Statistics (KNBS) periodically conducts Household Budget Surveys (HBS) to update national welfare indicators. The specific surveys that have been conducted in the past include: The 1981/82 Rural Household Budget Survey (RHBS); 1983/84 and 1993/94 Urban Household Budget Surveys (UHBS); the 1992, 1994, and 1997 Welfare Monitoring Survey (WMS); the 2005/06 Kenya Integrated Household Budget Survey (KIHBS) and the 2015/16 KIHBS. In 2019, KNBS commenced the Kenya Continuous Household Survey Programme (KCHSP) to provide data to support production of annual poverty estimates and quarterly labour statistics. The aim was to increase the frequency of updating national welfare and other socio-economic indicators including data on household demographic characteristics, education, housing, and agricultural producer prices. The 2019 Kenya Continuous Household Survey (KCHS) is the inaugural survey under the KCHSP, financed by the Government of Kenya through the World Bank-supported Kenya statistics Programme-for-Results (KsPforR) project.

The 2019 KCHS was a comprehensive household survey designed to provide welfare estimates for various socio-economic indicators at national, rural-urban and county levels on a quarterly and annual basis. This is consistent with the survey's main objective of updating a wide range of national and county specific indicators necessary for assessment of the population's living standards. Further, the indicators will be used to monitor Sustainable Development Goals (SDGs) and agenda 2063.

The data collected during 2019 KCHS is the primary source used for production of this report. According to the derived poverty lines, households whose adult equivalent food consumption expenditure per person per month fell below KSh 1,954 (in 2015/16 prices) in rural areas and KSh 2,551 (in 2015/16 prices) in urban areas were deemed to be food poor. Similarly, households whose overall consumption expenditure fell below KSh 3,252 (in 2015/16 prices) and KSh 5,995 (in 2015/16 prices) in rural and urban areas, respectively, per person per month were considered to be overall poor. Further, households whose total expenditure (food and non-food) could not meet their basic food requirements were deemed to be hardcore or extreme poor.

Poverty Overview

Overall (absolute) poverty

The overall poverty rate in 2019 was 33.6 per cent, implying that 15.8 million people lived below absolute poverty line. The overall poverty incidence remained highest in rural areas at 37 per cent and 26 per cent in urban areas respectively. Spatial variation is wide: across the 47 counties, the overall headcount poverty rate (proportion of poor individuals) ranged from a low of 10.2 per cent in Nairobi City County to a high of 81.3 per cent in Turkana County. In 2019, the poorest four counties were Turkana (81.3 %), Samburu (71.3%), Mandera (69.5%), and Garissa (64.7%). Conversely, the four counties with least poverty included Nairobi (10.2%), Nyeri (12.8%), Kirinyaga (15.9%), and Meru (17.2%). Thirty (30) counties had overall poverty rates that were higher than the national average.

The 33.6 per cent overall national poverty headcount rate (proportion of poor individuals) indicates a 2.5-percentage point fall from 36.1 per cent in 2015/16. Owing in part to growth in population between 2015/16 and 2019, the findings also show that the number of poor individuals declined by only about six hundred thousand (600,000) from 16.4 million to 15.8 million. Urban areas experienced a faster decline in the overall rural poverty rate for individuals, decreasing by about 3.4 percentage points from 29.4 to 26 per cent. In rural areas, a decrease of 1.8 percentage points from 38.8 to 37.0 per cent was recorded. Therefore, while headcount poverty continued a downward trend since 2005/06, there still are geographic pockets of high poverty.

Food poverty

Nationally, 30.5 per cent of population was food poor in 2019. In rural areas, the proportion of population who were living below the food poverty line was 34 per cent, compared to 22.5 per cent in urban areas. Spatially, the food headcount poverty rate (proportion of food poor individuals) ranged from a low of 12.7 per cent in Nairobi City County to a high of 71.4 per cent in Turkana County. In 2019, the food poorest four counties were Turkana (71.4%), Mandera (60%), Samburu (58.4%) and West Pokot (51.1%). Conversely, the four counties with least food poverty included Nairobi (12.7%), Nyeri (14.7%), Meru (15.3%), and Kirinyaga (16.6%). Twenty-nine (29) counties had food poverty rates that were higher than the national average.

Compared to 2015/16, the national food poverty headcount rate (proportion of food poor individuals) declined marginally from 32 per cent to 30.5 per cent, a decline of about 1.5 percentage points. The food poverty rate declined by a (1) percentage point in rural areas and 1.9 percentage points in urban areas.

Hardcore (extreme) poverty

The hardcore poor were 8.3 per cent of the population, implying that about 3.9 million people lived in extreme poverty and were unable to afford the minimum required food consumption basket even if they allocated all their expenditure on food alone.

Across counties, the extreme poverty rate (proportion of hardcore poor individuals) ranges from a low of 0.7 per cent in Nairobi City County to a high of 58.2 per cent in Turkana County. In 2019, the hardcore poorest four counties were Turkana (58.2%), Samburu (34.4%), Mandera (29.5%), and Garissa (26.8%). Conversely, the four counties with least hardcore poverty included Nairobi (0.7%), Nyeri (1.7%), Kiambu (1.7%), and Mombasa (2.1%). Nineteen (19) counties had hardcore poverty rates that were higher than the national average. Geographically, there were pockets of high concentrations of hardcore poor in a few counties. Turkana County alone accounted for about 13.6 per cent of the hardcore poor in Kenya. Overall, about 90 per cent of the total hardcore poor (about 3.5 million) were in rural areas.

Between 2015/16 and 2019, the prevalence of hardcore poor nearly stagnated, falling marginally from 8.6 to 8.3 per cent at national level. In rural areas, it increased marginally from 10.7 to 10.9 per cent. The corresponding decline in urban areas was from 3.4 to 2.7 per cent.

Child Poverty

Overall (absolute) poor children

Nationally, 39.5 per cent of all children (aged 17 years or less) were categorised as poor, translating to about 8.2 million children living in poor households. The analysis of child poverty by age group shows that among all children aged 0-5 years, 37.5 per cent were poor. The poverty rate among children of primary school going age (aged 6-13 years) was 40.6 per cent. Among all 14-17-year-olds, 39.9 per cent were poor. Most poor children lived in rural areas, 6.6 million compared to 1.6 million in urban areas.

At county level, the prevalence of child poverty ranged from about 11.4 per cent in Nairobi City to almost 82 per cent in Turkana. In 2019, the top four counties in terms of overall child poverty were Turkana (82%), Samburu (73.9%), Mandera (71%), and Garissa (68.1%). Conversely, the four counties with least child poverty included Nairobi (11.4%), Nyeri (15.6%), Kirinyaga (18.7%), and Meru (19.3%). Twenty-three (23) counties had child poverty rates that were higher than the national average.

Regarding contribution to overall child poverty at the county level, not only does Turkana have the highest child poverty prevalence, but the county also had the highest share of poor children (5%) in Kenya followed by Bungoma (accounting for 4.5% of poor children), Kakamega, and Nakuru (4.4%).

Food poor children

Analysis of food poverty among children (aged 0-17 years) shows that nationally, 35.3 per cent were food poor. Like the overall child poverty pattern, the majority (82%) of food poor children resided in rural areas, translating to about 6 million of food poor children. Spatially, the prevalence of food poverty among children shows huge variation across counties, ranging from a low of 13.3 per cent in Nairobi City to a high of 72.6 per cent in Turkana

County. The highest food prevalence rates among children were registered in the following counties: Turkana (72.6%), Mandera (62.2%), Samburu (61.5%), and West Pokot (53.4%).

Poverty among the youth and elderly

The survey findings show that at national level, with a poverty rate of 39.5 per cent for children aged 17 years and below, children have the highest likelihood of being poor. The age group with the second highest overall poverty rate were the elderly, aged at least 70 years, with a poverty rate of 33 per cent. Considering the rural/urban category, overall poverty was highest among children aged 0-17 years in rural areas; however, in urban areas, the age group with the highest overall poverty were the elderly (aged 70 and above). Counties with a high prevalence of poverty among the youth (aged 18-35 years) were Turkana (82.9%), Mandera (67.2%), Samburu (64.5%), Garissa (60.3%).

1.1 Introduction and Background

Good quality data and statistics that are easily accessible, frequent, relevant, accurate, and timely are an essential input to evidence-based policymaking and decision-making. In Kenya, the demand for good quality data has been increasing against the backdrop of an increasingly integrated, interconnected, data-driven and growing economy. This demand emanates from a wide range of stakeholders, including government, the private sector, research institutions, development partners and the media. Further, good quality data and statistics are key for monitoring the country's medium and long-term development plans (Vision 2030 and Medium-Term Plans (MTPs)) and achievements made in various international commitments such as Sustainable Development Goals (SDGs). Moreover, the devolved system of government established by the Constitution of Kenya (2010) has generated enormous demand for county specific statistics.

KNBS regularly produces analytical reports and official statistics to support planning and monitoring progress towards national and international socioeconomic targets. Household Budget Surveys (HBS) conducted by the Bureau are the primary surveys used to produce official estimates of monetary and non-monetary indicators of well-being of Kenyans, as well as of inequality. The specific surveys that have been conducted in the past include: The 1981/82 Rural Household Budget Survey (RHBS); 1983/84 and 1993/94 Urban Household Budget Surveys (UHBS); the 1992, 1994, and 1997 Welfare Monitoring Survey (WMS); the 2005/06 Kenya Integrated Household Budget Survey (KIHBS) and the 2015/16 KIHBS. To address the challenge around the frequency and consistency of HBSs, KNBS commenced the Kenya Continuous Household Survey Programme (KCHSP) to provide data to support production of annual poverty estimates and quarterly labour statistics. The 2019 Kenya Continuous Household Survey (KCHS) is the inaugural survey under the KCHSP. The data collected during 2019 KCHS is the primary source used in this report.

1.2 Objectives of KCHSP

The KCHSP was designed to address existing data gaps by providing indicators on a regular basis i.e., quarterly and annually. This way, KCHSP provides high frequency data covering a wide range of indicators at both national and county levels. The survey was designed with particular emphasis on collecting data to monitor key poverty related and labour indicators. Specifically, it updates labour indicators (quarterly and annually) and household consumption expenditure indicators to inform the production of poverty indicators on an annual basis.

The poverty indicators will be used to guide policy and programme formulation targeting the poor, guiding national resource allocation to the devolved system of government. The data will provide indicators for monitoring progress towards achievement of SDG goal 1 and SDG 2 on ending poverty and hunger, and other government development initiatives such as the Big Four Agenda. The survey will also provide annual micro-data for use in research by governments, academia, non-state actors and the public. Through this programme, additional modules on emerging and other relevant topical issues may be added as needed.

1.3 Sample Design and Selection

1.3.1 Sample Design

The survey utilized both cross-sectional and panel survey designs. The assessment of poverty indicators took into consideration different seasons of the year, with derivation of county specific estimates on an annual basis. The cross-sectional design was expected to provide 4 cross-sectional survey estimates (per quarter) for labour indicators that can be analysed independently and provide national and urban/rural estimates.

1.3.2 Sample Size and Allocation

The 2019 KCHS had a total of 50 study domains, namely, national, urban, rural and 47 counties. In designing the sample, the minimum sample size for anticipated integrated surveys and relative sizes of the counties were considered. The sample size consisted of 1,684 clusters¹ and 25,260 households: 1,300 clusters for the cross-sectional survey and 384 clusters for the panel study. At the county level, the sample ranged from a minimum of 24 clusters (360 households) to a maximum of 56 clusters (840 households). Two panels were implemented alongside the cross-sectional sample in each quarter. In total, 517 (325-cross-sectional and 192 panel) clusters (7,755 households) are visited every quarter. The sample allocation by counties is presented in (Table 1.1).

1.3.3 Sample Frame

The sample for this survey was drawn from the Fifth National Sample Survey and Evaluation Programme (NASSEP V). The NASSEP V Frame is composed of 5,360 clusters selected with Probability Proportional to Size (PPS) from 96,251 Enumeration Areas (EAs) from the 2009 Population and Housing Census. In the development of NASSEP V, the 47 counties were stratified into 92 sampling strata, that is, urban and rural strata in 45 counties plus Nairobi and Mombasa Counties that are wholly urban.

¹ A cluster is either part of an EA, an EA or combination of EAs and consists of about 100 households on average.

The frame is further divided into four sub-samples (C₁, C₂, C₃ and C₄) each composed of 1,340 clusters that can each serve as independent frames. Any two or more sub-samples can be combined whenever a bigger sample size is required. The required clusters for the 2019 KCHS were drawn from one of these sub-samples and combination of two in a few counties. A new cross-sectional sample is drawn at the beginning of each survey year.

1.3.4 Sampling

Two sets of units were sampled, namely, clusters and households. At the time of interviews in the households, it was expected that individuals would be eligible for various modules of the survey and further selection was provided when required. The sampling was done separately for cross-sectional and panel surveys.

Sampling of Clusters

The clusters were the primary sampling units for the 2019 KCHS and were selected independently from each of 92 strata in NASSEP V frame. The required clusters for the entire year were selected systematically with equal probability. The selected clusters from each stratum will be further randomized systematically into the four panels.

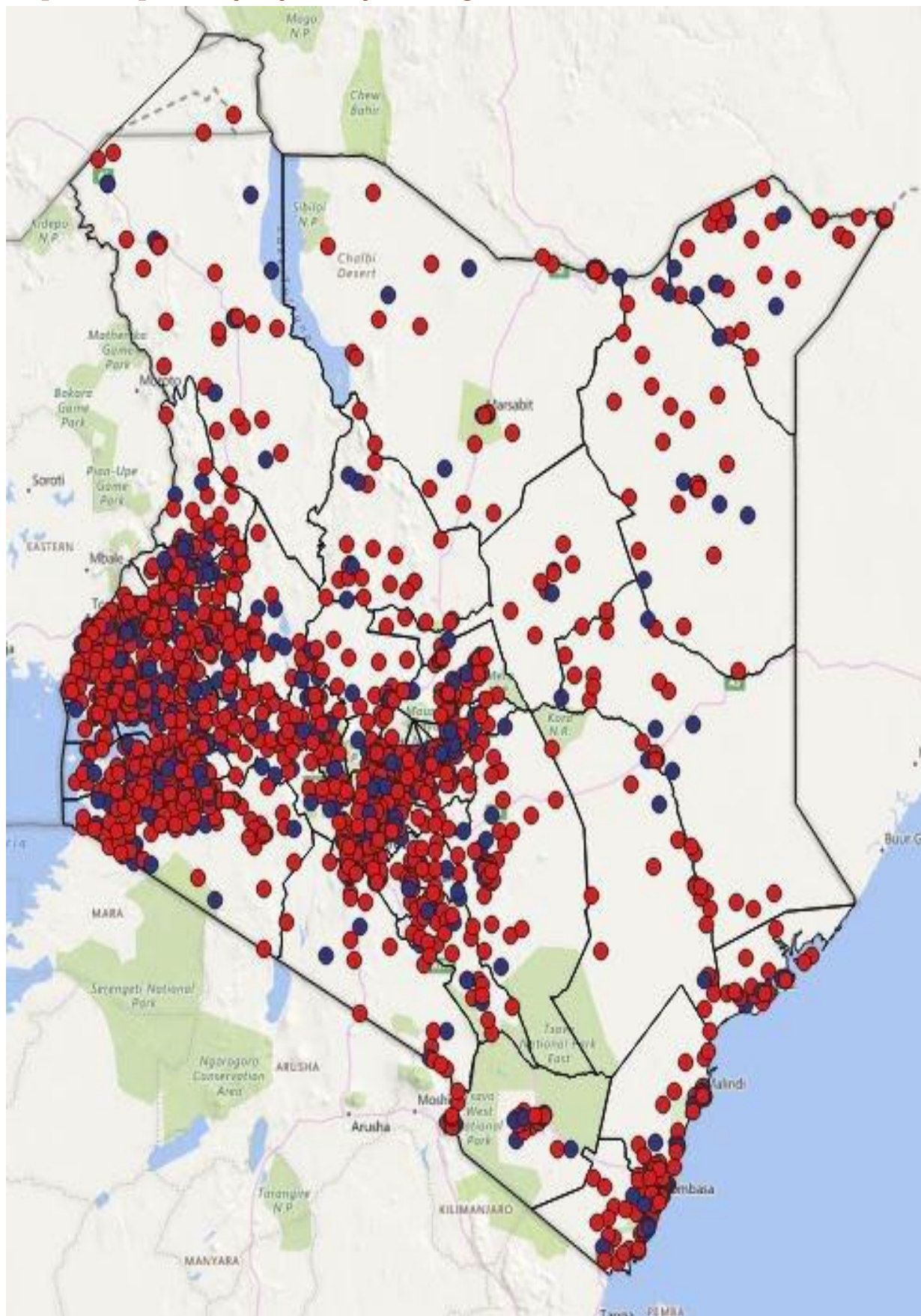
Sampling of Households

A total of 15 households per cluster were sampled systematically (with random start) from the list of updated households. Sampling of the households was done centrally at the head-office and interviews were only done in these pre-selected households.

Table 1.1: 2019 KCHS sample allocation by county

County Code	County	Number of Clusters			Number of Households		
		Rural	Urban	Total	Rural	Urban	Total
1	Mombasa	0	40	40	0	600	600
2	Kwale	22	14	36	330	210	540
3	Kilifi	20	16	36	300	240	540
4	Tana River	19	9	28	285	135	420
5	Lamu	15	9	24	225	135	360
6	Taita Taveta	21	11	32	315	165	480
7	Garissa	19	13	32	285	195	480
8	Wajir	22	10	32	330	150	480
9	Mandera	24	12	36	360	180	540
10	Marsabit	21	11	32	315	165	480
11	Isiolo	12	12	24	180	180	360
12	Meru	31	13	44	465	195	660
13	Tharaka-Nithi	19	13	32	285	195	480
14	Embu	24	12	36	360	180	540
15	Kitui	24	12	36	360	180	540
16	Machakos	19	21	40	285	315	600
17	Makueni	25	11	36	375	165	540
18	Nyandarua	23	13	36	345	195	540
19	Nyeri	21	15	36	315	225	540
20	Kirinyaga	24	12	36	360	180	540
21	Murang'a	27	13	40	405	195	600
22	Kiambu	19	25	44	285	375	660
23	Turkana	25	11	36	375	165	540
24	West Pokot	23	9	32	345	135	480
25	Samburu	18	10	28	270	150	420
26	Trans Nzoia	22	14	36	330	210	540
27	Uasin Gishu	18	18	36	270	270	540
28	Elgeyo/ Marakwet	22	10	32	330	150	480
29	Nandi	25	11	36	375	165	540
30	Baringo	22	10	32	330	150	480
31	Laikipia	19	13	32	285	195	480
32	Nakuru	22	22	44	330	330	660
33	Narok	26	10	36	390	150	540
34	Kajiado	18	18	36	270	270	540
35	Kericho	19	17	36	285	255	540
36	Bomet	25	11	36	375	165	540
37	Kakamega	29	15	44	435	225	660
38	Vihiga	21	15	36	315	225	540
39	Bungoma	27	13	40	405	195	600
40	Busia	25	11	36	375	165	540
41	Siaya	26	10	36	390	150	540
42	Kisumu	17	19	36	255	285	540
43	Homa Bay	20	16	36	300	240	540
44	Migori	25	11	36	375	165	540
45	Kisii	23	13	36	345	195	540
46	Nyamira	25	11	36	375	165	540
47	Nairobi City	0	56	56	0	840	840
	Total	993	691	1,684	14,895	10,365	25,260

Map 0.1: Map of Kenya by county showing cluster distribution



Note: The red dots represent the rural clusters while the blue dots are urban clusters.

1.4 Data Weighting

Due to the sample allocation not being proportional to the size of the strata, the survey data was not self-weighting necessitating weighting for the 2019 KCHS data to be done and the resultant adjusted weights applied during analysis. Additionally, some of the sampled households did not respond to the interviews while others could not be accessed due to various reasons. The resulting data has therefore been weighted to be representative at the national level as well as at the county level. The sampling weights W are calculated simply as the inverse of the product of these selection probabilities. The probability (P) of selecting a KCHS household is the product of four factors D_i :

$$D_i = \prod_{i=1}^4 P_i$$

Where;

P_1 = the probability of selecting the EA for the NASSEP V master sample among all the EAs in the 2009 Population and Housing Census;

P_2 = the probability of selecting the EA segment to form a cluster among all segments in the EA;

P_3 = the probability of selecting the cluster for the 2019 KCHS, among all the clusters in the NASSEP V master sample; and

P_4 = the probability of selecting the household among all the households listed in the cluster.

In the process of weighting, the sample required adjustments to cater for non-proportional distribution of clusters and non-response to provide estimates that are representative of the target population. The cluster weights were computed as the product of sample cluster design weight, household and cluster response adjustment factors as follows:

$$W_{ij} = D_{ij} \frac{S_{ij} C_j}{I_{ij} c_j}$$

Where;

W_{ij} = overall final cluster weight for cluster i in stratum j ;

D_{ij} = sample cluster design weight obtained from inverse of cluster selection probabilities for cluster i in stratum j ;

S_{ij} = number of eligible households in cluster i in stratum j ; where eligible households include those successfully interviewed, those with partial interviews, those whose households were away at the time of visits and households who refused to be interviewed;

I_{ij} = number of responding households in cluster i in stratum j ;

C_j = number of clusters in stratum j ; and

c_j = number of clusters selected from stratum j ;

The weights were calibrated so that the aggregate matches the population, including the male and female split, from the conventional households in the 2019 Kenya Population and Housing Census.

1.5 Amendments in Place of Residence for Poverty Analysis

As per the 2009 Kenya Population and Housing Census, three strata for place of residence were created, namely: Rural; Core-Urban; and Peri-Urban and defined² as below:

Rural: *This is a large and isolated part of an open or agricultural area, including trading, market and service centre with relatively low population concentrations of less than 2,000 people. The peri-urban areas were classified together as rural.*

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

1.6 Survey Instruments

The 2019 KCHS questionnaire was similar to 2015/16 KIHBS questionnaire and was administered via Computer Assisted Personal Interview (CAPI) system. CAPI is a data capture technology in which the interviewer uses a tablet or a mobile phone to capture and relay data to the server at the headquarters. The software used for this survey is called *Survey Solutions*, which has been used widely in other countries.

1.7 Management of the Survey

² Further information is provided in the Analytical Report on Urbanization, Volume VIII (March 2002), KNBS.

The Bureau managed the implementation of the survey and was responsible for coordination of all aspects of the survey including design, data collection, processing and analysis. A steering committee comprising KNBS Directors was responsible for policy direction and overseeing the overall implementation of the survey. The steering committee constituted a secretariat comprising three KNBS Technical Managers who were responsible for the day-to-day administrative, logistical and technical operations of the survey.

To ensure field work ran smoothly, a coordinator was assigned a number of counties to coordinate the field teams. The County Statistics Officers facilitated implementation of KCHS in their respective counties.

1.8 Recruitment and Training

All personnel involved in the KCHS were recruited based on rigorous testing and merit-based selection procedures. Survey personnel were interviewed, tested for technical skills and hired from all counties to build a regionally balanced team. A total of 122 survey personnel with the relevant qualification were recruited outside the Bureau. These included 104 interviewers and 18 Supervisors.

Three hands-on training phases (training of trainers, training of data collection personnel and CAPI training for all the personnel) was undertaken before fieldwork. The trainees acquired in-depth knowledge of all the data collection instruments and manuals and acquired skills to enable them to participate in the survey field data collection.

1.9 Field Logistics and Implementation

Field data collection for the 2019 KCHS took place over a period of 12 months from January 2019 to December 2019, and it was organised into 12 cycles of 14 days each. Clusters were equally and randomly allocated to the four quarters of the year which were based on the expected seasons in Kenya. The teams ensured that they completed data collection in the assigned clusters before embarking on clusters assigned for the next quarter. Each county had a team comprising of at least two interviewers and one driver. A supervisor oversaw at most three counties. In each cycle/month, a team covered several cross sectional and panel clusters. Each cluster had 12 pre-selected households which were pre-loaded in the tablet. At the end of every day, the interviewer ensured that they uploaded data to the server where the supervisor would download the data, check for inconsistencies, and then approve or reject the interview.

1.10 Survey Response Rates

Table 1.2 presents the results of the household interviews. Nationally, 21,484 households were selected for the survey out of which 20,691 households were successfully

interviewed yielding an overall household response rate of 96.3 per cent. The response rate for rural households was higher (97.3%) compared to that of the urban households (94.7%). A total of 9 clusters which had been selected for the survey could not be covered due to either insecurity or movement of the entire population in the clusters which were in nomadic areas.

Table 1.2: Response rates

Result	Residence		Total
	Urban	Rural	
Households Sampled	10,365	14,895	25,260
Households Occupied	8,543	12,941	21,484
Households interviewed	8,093	12,598	20,691
Household response rate (%)	94.7	97.3	96.3

1.11 Data Processing

Data collection in the 2019 KCHS adopted Computer Assisted Personal Interviewing (CAPI) approach where the interviewers used tablet computers to collect data. The tablets were loaded with CAPI software application which had been programmed with inbuilt checks on consistency to ensure out of range values could be not entered. The data capture system was programmed in *Survey Solutions* software. During data collection, the data was relayed to a central server at KNBS head office which was secured with a firewall to enhance data security. To enhance the security of the data during transmission, it was secured using end to end encryption. The interviewers were provided with data bundles for internet connectivity during transmission of data to the central server. Data at the local server was synchronized in real-time with the cloud server as back up. This data redundancy was meant to ensure availability of data in case of server failure.

Data backup was done using external hard disks and local servers at the headquarters. The survey personnel were provided with power banks for recharging the tablets during data collection. Data security was achieved through several methods including data encryption, secure file transfer and passwords. Before data analysis was done, data editing and cleaning was done which included range, structure and internal consistency checks.

1.12 Comparison between 2015/16 KIHBS and 2019 KCHS

The 2015/16 KIHBS and 2019 KCHS were cross-sectional surveys which collected nationally representative household data over a period of 12 months. Table 1.3 below presents a comparison of selected survey aspects between the two surveys.

Table 1.3: Comparison between 2015/15 KIHBS and 2019 KCHS

Parameters	2015/ 16 KIHBS	2019 KCHSP
Sample design		
Survey Domains	National, 47 Counties, Rural/ Urban	National, 47 Counties, Rural/ Urban
Sampling Frame	NASSEP V (5,360 Clusters)	NASSEP V (5,360 Clusters)
Sample Size & Allocation		
<i>National</i>	24,000 Households (2,400 Clusters)	25,260 Households (1,684 Clusters)
Rural	14,120 Households (1,412 Clusters)	14,895 Households (993 Clusters)
Urban	9,880 Households (988 Clusters)	10,365 Households (691 Clusters)
Data Collection		
Field data collection teams	50 (323 Survey personnel)	18 (122 Survey personnel)
Data collection dates	September 2015 - August 2016	January 2019 - December 2019
Consumption module recall periods (days)		
<i>Food Consumption-recall</i>	7	7
Non -food Expenditures-Regular	30	30
Non -food Expenditures-Non-Durable	90	90
Durables	365	365
Data collection logistics		
<i>Cycles</i>	24	12
Days	14	14
Data Processing		
Data Processing	Double Entry	All data captured in the field
Data Entry Software	CSPro	Survey Solutions
Data transmission	Cloud Server	Cloud Server

1.13 Outline of the Report

This report is structured as follows: the first chapter presents an introduction of the report and provides a background on the 2019 KCHS methodology. Chapter two explains the poverty concepts and measurement approach while chapter three presents poverty estimates. A basic socio-economic poverty profile is presented in Chapter four. Chapter five concludes and makes recommendations on how data collection and analysis could be improved to support regular updating of poverty estimates.

2.1 The Welfare Indicator

In 2019, the total consumption of each household in the KCHS is estimated by modelling the relationship between consumption and household-level characteristics in 2015/16 and then applying this relationship to households in 2019 using a multiple imputation approach.³ Separate models are used for rural areas, urban areas (excluding Nairobi) and Nairobi.

The dependent variable in the model is the log of per adult equivalent consumption. The independent variables include household and household head characteristics such as a household's wall type, dwelling ownership status, household size and household head age and education level:

$$\ln y_{h2019} = x_{h2019}'\beta_{2015/16} + u_{h2019}$$

Where $\ln y_{h2019}$ refers to the natural logarithm of per adult equivalent expenditure of household h in 2019, x_{h2019} is a vector of consumption correlates for household h in 2019 and $\beta_{2015/16}$ is a vector of coefficients of consumption correlates estimated from the 2015/16 KIHBS dataset. The household level residual is denoted by u_{h2019} .

The model for each geographic area is selected using cross validation to account for potential issues with overfitting. Despite a model performing well within its sample of data, it can perform poorly with a different sample of data. Cross validation splits the sample into (i) training data that is used for estimating the model, and (ii) the remaining sample that is used for evaluating the fitness of the model.⁴

Cross validation is implemented in three steps. First, the training data is divided into ten random sub-samples or folds. Then, the consumption model is estimated using only nine folds by running a stepwise Ordinary Least Squares (OLS) regression. The mean squared error is calculated, as well as the absolute difference between the observed poverty rate and the predicted poverty rate for the tenth fold using the coefficients of the independent variables produced from the other nine folds. The final statistic of interest is the difference between the projected and actual poverty rate in 2015/16 as well as the corresponding mean squared error, averaged over all folds. The outcome of this

³ The imputation approach uses the technique developed in the Survey of Well-being via Instant and Frequent tracking (SWIFT) approach.

⁴ Since the evaluation sample is not used for estimating the model, the results from the fitness of the model are not affected by the overfitting problem.

process is a set of independent variables for each model (Table 2.1) that minimizes the difference between the actual and predicted poverty rate for 2015/16. These independent variables define the final models for each geographic area and predict consumption for 2019⁵.

The final model in each geographic area is used to impute consumption for each household in the 2019 KCHS. Instead of imputing a point estimate, the distribution of consumption for each household is imputed by drawing 100 estimates.⁶ This results in 100 consumption values per household. Monthly per-adult-equivalent expenditure is used as a welfare indicator to adjust for differing needs across households of differing composition.

⁵ If the mean squared error is minimized at a p-value that is smaller than the value where the absolute difference between the actual and the projected poverty rates is minimized, then the former value is chosen as the optimal p-value.

⁶ A similar procedure is adopted to impute the fraction of consumption devoted to food. This allows for the computation of food consumption, and therefore the food poverty status for households in KCHS 2019.

Table 2.1: Independent Variables used to Impute Consumption for 2019 KCHS households

Variable	Rural	Urban excluding Nairobi	Nairobi
Calendar quarter of interview	✓		✓
Household owns a fridge	✓	✓	✓
Household owns a computer			✓
Household owns a television	✓	✓	✓
Household has access to electricity	✓		
Household share of dependents		✓	
Number of rooms in dwelling			✓
Dwelling not owned	✓		
Dwelling's floor material: refined materials	✓		
Dwelling's wall material: Bricks/ stone/ lime/ cement	✓	✓	✓
Dwelling's wall material: Mud/ Iron sheets/ Adobe	✓		
Household's toilet: no toilet	✓		
Household's toilet: Pit latrine/ composting toilet	✓	✓	
Household's toilet: Flush		✓	
Main source of household's drinking water: protected open source		✓	
Household size	✓		
Household size squared	✓		
Household-level female proportion			✓
Sex of household head			✓
Household head is less than 30 years old			✓
Household head is 30-44 years old	✓	✓	
Household head is 45-64 years old		✓	✓
Household head is at least 65 years old		✓	
Household head achieved primary school education		✓	
Household head achieved secondary school education	✓		
Household head achieved university education	✓	✓	✓
Household head is employed	✓		
Household head marital status: Never married		✓	✓
County dummies	✓	✓	

2.2 Poverty Lines

Given that the household consumption is imputed based on the 2015/16 KIHBS, the 2015/16 consumption-based poverty lines are used to compute the 2019 poverty measures in Kenya. Therefore, two poverty lines are used namely, the food poverty line and the absolute poverty line. The cost-of-basic-needs (CBN) method was used to determine these lines. The method defines poor households as those who cannot afford a bundle of goods that is deemed enough to satisfy basic needs, with basic needs defined as access to both adequate nutrition and basic non-food items. Separate poverty lines were computed for the rural and urban population in Kenya, and all estimates for the poverty line are based on median national reference prices.

2.2.1 The Food Poverty Line

Consistent with the CBN approach, the food poverty line corresponds to the expenditure needed in 2015/16 to attain the minimum recommended daily intake of 2,250 kilocalories. This line is determined in two stages. First, a food reference basket is constructed. Second, to determine the level of the line, the basket is costed in reference prices collected during the survey. The rural and urban food poverty lines were set by costing two separate bundles of basic food items which attain the 2,250 Kcal minimum nutritional requirements in a way which is consistent with food tastes in rural and urban areas observed in the survey. Thus, in practice, computing the poverty line involves several steps starting with determining a calorie requirement, creating a food basket, and evaluating the cost of meeting the calorie requirement using that food basket.

The rural and urban basic food bundles were determined using an iterative approach. The starting point was to calculate the average quantities of food items consumed by households in the middle quintile of the price-adjusted (by median national prices) weighted (using sampling weights) rural and urban consumption per adult equivalent distributions. The initial choice of the third quintile was motivated by the likely bandwidth in which the food poverty line might fall because conceptually the basic food bundle should be representative of consumption by the poor. Through repeated iterations benchmarked on the food poverty estimates obtained at each stage, it was determined that the households located in the 30th to 50th percentiles of the rural and the 10th to 30th per centiles of the urban price-adjusted weighted food consumption distributions represent the optimal bandwidth for computing the respective food poverty lines. These bandwidths incorporated rural and urban households from each county.

A comparison of the 2019 KCHS and 2015/16 KIHBS rural and urban food baskets and its relative prices suggests that food consumption tastes have indeed not changed as revealed by sensitivity analysis conducted on the 2019 KCHS. The food poverty lines in monthly adult equivalent terms were computed as KSh 1,954 and KSh 2,551 for rural and urban areas, respectively.

2.2.2 The Overall Poverty Line

The absolute or overall poverty line is computed by including an allowance for non-food consumption to the food poverty line. This line is used to determine the overall poverty line which is used to determine the proportion of the population that is unable to meet the minimum overall basic consumption needs (i.e., the absolute or overall poor). Derivation of the overall poverty line is an iterative process starting with the computation of the mean value of total non-food consumption by households whose food expenditure fall within a one percentage point interval around the food poverty line. This process was repeated ten times, and at each stage, the interval was increased by additional percentage points. The average of the mean total non-food expenditures from each stage provides a weighted non-parametric estimate of the value of the non-

food component which was added to the food poverty line to compute the overall poverty line. This approach provides an upper bound to the overall poverty line and therefore minimizes the risk of underestimating the incidence of poverty. The overall poverty lines for rural and urban areas in monthly adult equivalent terms were computed as KSh 3,252 and KSh 5,995, respectively.

2.3 Poverty Measures

This report uses a commonly used class of poverty measures – the Foster, Greer and Thorbecke (usually referred to as FGT) indices – to estimate and describe poverty in Kenya. These measures are based on the premise that measuring poverty entails measuring a welfare indicator (herein the consumption aggregate) against a pre-determined threshold (the poverty line). The FGT measure, $P(\alpha)$, is defined as:

$$P(\alpha) = \frac{1}{N} \sum_{i=1}^N \left(\frac{z - y_i}{z} \right)^{\alpha} I(y_i < z)$$

Where N is the population size for which the measure is computed, y_i is the level of individual welfare (real per capita consumption) of the i th individual, z is the poverty line, $I(.)$ is an indicator function that maps a value of 1 when the constraint is satisfied and 0 otherwise, and α is the poverty sensitivity indicator. The FGT measure produces three different poverty indices.

2.3.1 The Poverty Headcount Index

The poverty headcount index is computed by setting $\alpha=0$ in the FGT measure so that:

$$P(0) = \frac{1}{N} \sum_{i=1}^N I(y_i < z)$$

The index therefore measures the proportion of the population that cannot afford the basic basket of goods and services. Specifically, and given the poverty methodology described in preceding sections, the index estimates the incidence of poverty (poverty headcount rate) which captures the proportion of the population whose consumption per adult equivalent is below the poverty line. Accordingly, the food poverty headcount rate captures the proportion of households and individuals whose monthly adult equivalent food consumption expenditure per person is less than the food poverty line (KSh 1,954 in rural areas and KSh 2,551 in urban areas respectively). The overall poverty headcount rate captures the proportion of households and individuals whose monthly adult equivalent total consumption expenditure per person is less than overall poverty line (KSh 3,252 in rural areas and KSh 5,995 in urban areas). A third poverty measure – the hardcore or extreme poverty headcount rate – is estimated and captures the proportion of households and individuals whose monthly adult equivalent total

consumption expenditure (food and non-food) per person is less than the food poverty line (KSh 1,954 in rural areas and KSh 2,551 in urban areas respectively).

Given the use of imputation to estimate household consumption, poor households are identified by comparing the imputed consumption value (in 2015/16 prices) against the 2015/16 poverty line. The poverty lines are applied to each of the estimates and 100 binary poverty statuses are obtained for each household. The proportion of the binary statuses indicating a household is poor can also be thought of as a household's probability of being poor. The average of these poverty statuses over all households defines the poverty headcount rate. A single household-level binary poverty status is also obtained for each household to allow analysis distinguishing between poor and non-poor households. The single binary poverty status is derived from the household's probability of being poor. The threshold determining a poor household is optimized to ensure that the poverty headcount rates within each stratum are best approximated.

The headcount index is the most basic measure of poverty and has the advantage of being easily understood and communicated. It is also a good measure for certain poverty comparisons such as assessing progress in reducing poverty over time. However, the poverty headcount index has some drawbacks, for instance in the analyses of the impacts of specific policies on the poor. The poverty headcount index conceals the fact that some people might only be a few shillings short of the poverty line while others might just have a few shillings to spend, explaining why the poverty gap and the poverty severity index are good complementary indicators to assess poverty.

2.3.2 The Depth of Poverty (the Poverty Gap Index)

The poverty gap index measures the depth of poverty. It provides information on how much poorer the poor people are, relative to the poverty line. This measure captures the average expenditure shortfall, or gap, for the poor relative to the poverty line. Intuitively, the poverty gap index is obtained by adding up all the expenditure shortfalls of the poor (ignoring the non-poor) relative to the poverty line and dividing with the total population. The poverty gap measures the poverty deficit of the population, or the resources that would be needed to lift all the poor out of poverty through perfectly targeted cash transfers geared towards closing the gap. In this sense, the poverty gap is a very crude measure of the minimum level of resources necessary to eradicate poverty, that is, the amount that one would have to transfer to the poor to lift them up to the poverty line, under the assumption of perfect targeting.

The poverty gap index is computed by setting $\alpha=1$ in the FGT measure so that:

$$P(1) = \frac{1}{N} \sum_{i=1}^N \left(\frac{z - y_i}{z} \right) I(y_i < z)$$

When interpreting the poverty gap measure, at least two caveats apply. First, although the poverty gap accounts for the average expenditure separating the poor from the poverty line, it does not measure inequality among poor people. For instance, a transfer of 100 shillings from the least poor person among the poor to the poorest person would not affect the poverty gap measure. Second, attempting to reach the whole population through perfectly targeted cash transfers is neither practically feasible nor a recommendable policy option (e.g., financing transfers via excessive tax rates could stifle economic growth and, by extension, future poverty reduction). Instead, the index should be viewed as providing a useful policy benchmark by quantifying the absolute minimum level of resources required to eradicate poverty.

2.3.3 The Severity of Poverty (the Squared Poverty Gap Index)

The poverty severity or poverty gap squared index is computed by setting $\alpha=2$ in the FGT measure so that:

$$P(2) = \frac{1}{N} \sum_{i=1}^N \left(\frac{z - y_i}{z} \right)^2 I(y_i < z)$$

The poverty severity index squares the poverty gap to consider not only the distance separating the poor from the poverty line (the poverty gap), but also the inequality among the poor. This way, the severity of poverty gives a higher weight to those households who are further away from the poverty line. For example, consider two distributions of consumption expenditures for four people; distribution A is (1,2,3,4) and distribution B is (2,2,2,4). For a poverty line $z=3$, the headcount index for both distributions is 0.5 and 0.75 respectively while the poverty gap remain the same for the two distributions at 0.25. However, the poorest person in distribution A has only half the consumption expenditures than the poorest person in distribution B. The poverty severity index is 0.14 for A and 0.08 for B thus indicating poverty is more severe in distribution A. The poverty severity measure, while not easy to interpret intuitively, can be used to assess the impact of policies and programmes which are aimed to reach the poorest of the poor.

This chapter presents the main poverty measures at the national level, place of residence (rural and urban), and county level. The comparison of poverty measures between the 2015/16 KIHBS and 2019 KCHS is also highlighted.

3.1 Mean Monthly Expenditure in 2019, National Level and by Place of Residence and County

The mean monthly expenditure per adult equivalent is presented in Table 3.1. At the national level, the mean household total expenditure per month per adult equivalent was KSh 7,904 in 2015/16 prices while the median expenditure was KSh 6,040. Both the mean and median expenditure among urban households was on average more than double that of their counterparts in rural areas. In terms of variation across counties, Nairobi City had the highest mean and median expenditure of KSh 14,761 and KSh 12,118 per adult equivalent per month, respectively. Kiambu has the second highest mean and median expenditure. The county with the least average household expenditure in 2019 was Turkana with mean of KSh 2,934 and a median of KSh 1,970 per adult equivalent per month.

Quintiles are used to divide households into five equal groups based on the per adult equivalent expenditure distribution ranking from the lowest to the highest. The share of expenditure attributable to each household is then calculated. Table 3.1 shows that nationally, 42.6 per cent of expenditure is attributable to households in the topmost quintile (Q5), while only 6 per cent of consumption expenditure came from the bottom quintile (Q1). The divide between rural and urban areas is also present in this statistic with around 1 percent of urban expenditure coming from households in the bottom quintile while two-thirds came from the topmost quintile. Conversely, rural households had a much more equal split between the quintiles with 9 percent of expenditure from the bottom quintile and 28 percent from the top quintile.

Table 3.1: Mean and median expenditure per adult equivalent in 2015/16 prices, and distribution of population across expenditure quintiles across expenditure

Residence / County	Mean	Median	<2,829	2,830-4,121	4,122-6,015	6,016-9,421	>9,423
			Q1	Q2	Q3	Q4	Q5
National	7,904	6,040	6.0	10.5	16.1	24.8	42.6
Rural	5,635	4,520	9.2	15.3	20.9	26.2	28.3
Urban	11,492	9,360	1.2	3.2	8.8	22.7	64.2
Mombasa	9,822	8,542	0.7	2.3	8.0	25.1	64.0
Kwale	5,891	4,594	5.8	11.7	16.9	26.7	38.9
Kilifi	6,294	4,877	6.9	12.3	16.6	24.3	39.9
Tana River	4,361	3,437	17.7	20.3	22.1	21.7	18.2
Lamu	7,082	5,799	3.8	10.0	16.5	27.7	41.9
Taita Taveta	6,935	5,755	3.7	8.7	17.0	28.6	42.1
Garissa	4,229	3,217	13.5	14.2	19.0	27.6	25.8
Wajir	4,399	3,497	21.1	26.6	23.0	17.5	11.9
Mandera	3,781	2,993	28.2	20.8	19.1	17.9	14.0
Marsabit	4,976	3,672	13.8	15.3	17.5	22.9	30.6
Isiolo	6,183	4,779	7.4	13.5	18.5	24.7	35.9
Meru	7,962	6,547	1.7	5.6	12.6	26.1	54.1
Tharaka-Nithi	7,986	6,357	2.3	7.5	13.8	26.1	50.4
Embu	7,569	6,055	2.6	7.0	14.7	25.6	50.1
Kitui	4,813	3,892	10.4	18.6	23.1	22.8	25.1
Machakos	8,321	6,609	3.4	8.1	16.2	26.2	46.1
Makueni	5,479	4,604	7.9	15.4	23.9	29.4	23.3
Nyandarua	6,757	5,649	3.5	9.5	17.5	29.5	40.0
Nyeri	9,322	7,777	1.2	4.2	10.7	27.1	56.8
Kirinyaga	8,326	6,961	1.7	5.6	13.8	27.7	51.3
Murang'a	7,615	6,274	2.4	7.2	15.1	27.5	47.8
Kiambu	10,891	9,077	1.4	4.1	9.8	22.4	62.3
Turkana	2,934	1,970	30.8	15.3	13.9	18.2	21.9
West Pokot	4,008	3,265	20.4	24.5	22.1	17.1	15.9
Samburu	3,974	2,794	19.2	13.7	14.4	21.1	31.5
Trans Nzoia	6,419	5,099	5.0	10.6	17.1	26.8	40.6
Uasin Gishu	6,806	5,663	5.1	10.7	18.1	28.6	37.5
Elgeyo/ Marakwet	5,501	4,369	7.7	15.0	19.6	25.9	31.8
Nandi	5,729	4,672	6.8	14.4	22.4	26.4	30.0
Baringo	6,046	4,585	5.3	10.4	14.1	23.0	47.3
Laikipia	7,648	6,154	3.6	7.8	14.1	24.7	49.9
Nakuru	8,192	6,907	2.9	7.0	14.3	27.7	48.1
Narok	8,144	6,544	2.2	6.4	13.3	25.1	53.0
Kajiado	7,504	6,165	6.4	10.2	15.1	25.2	43.1
Kericho	6,047	4,742	7.4	13.6	20.5	25.7	32.8
Bomet	4,990	3,966	9.8	21.3	23.8	23.8	21.4
Kakamega	5,698	4,653	6.8	14.9	22.4	26.9	28.9
Vihiga	4,891	3,942	11.8	21.2	23.5	23.7	19.9
Bungoma	6,037	4,656	6.6	13.5	20.1	25.9	33.9
Busia	4,322	3,373	15.0	18.5	21.3	20.4	24.8
Siaya	7,034	5,748	3.4	8.9	17.7	29.7	40.3
Kisumu	7,092	5,815	5.1	10.9	18.0	27.4	38.6
Homa Bay	6,398	5,231	4.1	10.6	19.3	29.0	37.0
Migori	5,589	4,513	6.8	17.1	21.7	27.2	27.2
Kisii	5,431	4,382	9.5	16.5	22.2	25.9	26.0
Nyamira	5,557	4,530	8.2	16.3	22.7	27.5	25.3
Nairobi City	14,761	12,118	0.1	0.4	2.7	12.5	84.4

3.2 Poverty Indicators in 2019, National Level and by Place of Residence

The poverty headcount rates and population of the poor at national level and by place of residence are shown in Table 3.2. Nationally, 30.5 per cent of the population of Kenya lived below the food poverty line in 2019, which translates to 14.4 million individuals. At 34 per cent (11.1 million individuals), the food poverty rate was higher in rural areas compared to 22.5 per cent (3.3 million) in urban areas. The absolute or overall poverty headcount rate for individuals at the national level was 33.6 per cent in 2019, which translates to 15.8 million individuals. The overall poverty incidence remains higher in rural areas, with 37 per cent of residents (12.1 million) being poor compared to 26 per cent (3.8 million) in urban areas. Hardcore (or extreme) poverty headcount rate for individuals in 2019 was 8.3 per cent. This translated to 3.9 million people living in abject poverty and unable to afford the minimum recommended daily intake of 2,250 kilocalories even if they allocated all their expenditure on food alone. Hardcore poverty incidence was highest in rural areas, with 10.9 per cent of residents (3.5 million).

Table 3.2: Summary of 2019 KCHS headcount poverty measures

Residence	Headcount Poverty Measures	Poor Individuals $P_{a=0}$		Poor Households $P_{h=0}$		Poor People (Adult equivalent-Adulteq) $P_{a=0}$	
		(% of Population)	(Number of people in thousands)	(% of Households)	(Number of households in thousands)	(% of Adulteq)	(Number of Adulteq in thousands)
National	Food Poverty	30.5	14,351	23.9	2,872	29.6	11,459
	Overall Poverty	33.6	15,839	26.6	3,204	32.6	12,591
	Hardcore Poverty	8.3	3,927	5.6	679	7.9	3,063
Rural	Food Poverty	34.0	11,075	26.5	1,957	33.2	8,758
	Overall Poverty	37.0	12,050	29.4	2,170	36.1	9,504
	Hardcore Poverty	10.9	3,536	7.9	585	10.4	2,752
Urban	Food Poverty	22.5	3,276	19.6	916	21.9	2,701
	Overall Poverty	26.0	3,790	22.2	1,034	25.1	3,087
	Hardcore Poverty	2.7	391	2.0	94	2.5	311

3.3 Poverty estimates by county in 2019

3.3.1 Food poverty by county

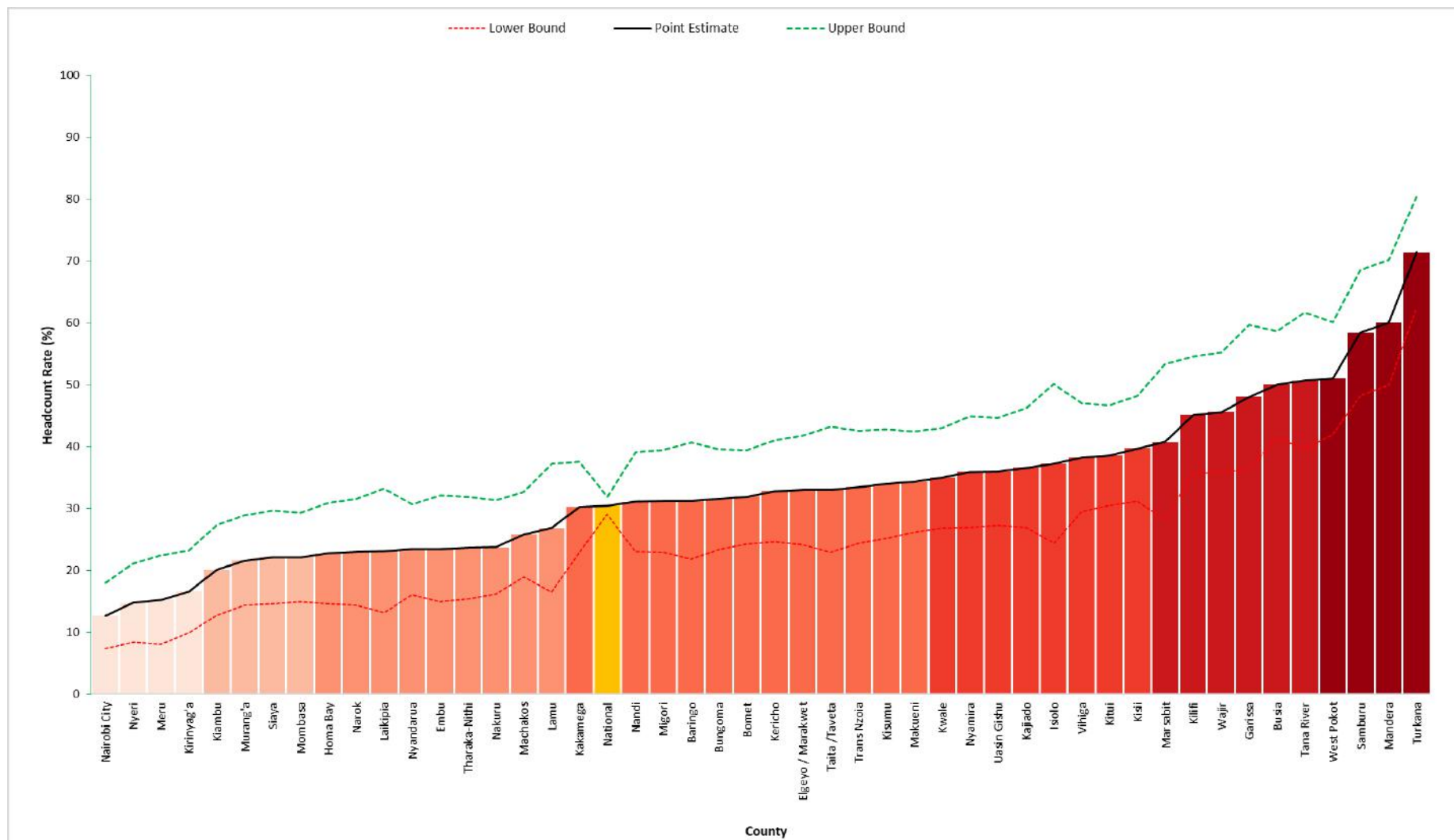
Food poverty rates for individuals by county are presented in Table 3.3. The results are also visualized in Figure 3.1 by ranking food poverty estimates at county level in ascending order, from least to highest poverty incidence. In addition, Map 3.1 visualizes the county level variation in food poverty incidence. The results across the counties show that there were notable variations in food poverty incidence ranging from 12.7 per

cent in Nairobi City County as the lowest to 71.4 per cent in Turkana County as the highest. Nyeri and Meru counties had the second and third lowest food poverty incidence levels of 14.7 and 15.3 per cent, respectively. Other counties that had high food poverty incidence levels were Mandera and Samburu at 60 and 58.4 per cent, respectively.

Table 3.3: Food poverty estimates (individuals) by residence and county, 2019

Residence / County	Headcount Rate (%)	Distribution of the Poor (%)	Poverty Gap (%)	Severity of Poverty (%)	Population ('000)	Number of Poor ('000)
National	30.5	100.0	9.6	4.4	47,105	14,351
Rural	34.0	77.2	10.8	5.0	32,552	11,075
Urban	22.5	22.8	6.8	3.0	14,553	3,276
Mombasa	22.2	1.8	6.5	2.9	1,189	263
Kwale	34.9	2.1	10.3	4.5	858	300
Kilifi	45.1	4.5	15.0	7.0	1,440	650
Tana River	50.7	1.1	17.7	8.5	313	159
Lamu	26.8	0.3	7.8	3.4	138	37
Taita Taveta	33.1	0.8	10.3	4.6	334	110
Garissa	48.0	2.8	16.4	8.0	833	400
Wajir	45.6	2.5	14.6	6.7	774	353
Mandera	60.0	3.6	23.0	11.7	860	516
Marsabit	40.8	1.3	12.9	5.9	446	182
Isiolo	37.3	0.7	11.5	5.1	263	98
Meru	15.3	1.6	4.2	1.8	1,533	234
Tharaka-Nithi	23.6	0.6	6.7	2.8	391	92
Embu	23.5	1.0	6.8	3.0	604	142
Kitui	38.6	3.0	11.7	5.2	1,129	436
Machakos	25.8	2.5	7.7	3.4	1,411	364
Makueni	34.3	2.3	10.4	4.6	976	335
Nyandarua	23.4	1.0	6.7	2.9	634	148
Nyeri	14.7	0.8	3.9	1.7	749	110
Kirinyaga	16.6	0.7	4.5	1.9	605	100
Murang'a	21.6	1.6	6.2	2.7	1,052	227
Kiambu	20.1	3.4	5.6	2.4	2,399	481
Turkana	71.4	4.6	35.7	22.0	920	657
West Pokot	51.1	2.2	17.4	8.2	618	316
Samburu	58.4	1.2	22.0	11.1	306	179
Trans Nzoia	33.5	2.3	9.9	4.3	984	330
Uasin Gishu	36.0	2.9	11.4	5.3	1,149	413
Elgeyo/ Marakwet	33.0	1.0	9.8	4.3	453	149
Nandi	31.1	1.9	9.0	3.9	883	274
Baringo	31.2	1.4	8.7	3.6	662	207
Laikipia	23.2	0.8	6.7	3.0	510	118
Nakuru	23.7	3.5	6.9	3.0	2,125	505
Narok	23.0	1.8	6.8	3.1	1,146	263
Kajiado	36.6	2.8	11.6	5.3	1,104	404
Kericho	32.8	2.0	9.7	4.2	897	294
Bomet	31.9	1.9	9.0	3.9	873	278
Kakamega	30.2	3.9	8.8	3.8	1,860	562
Vihiga	38.2	1.6	11.6	5.2	587	224
Bungoma	31.5	3.6	9.5	4.3	1,663	524
Busia	50.0	3.1	16.9	7.8	887	444
Siaya	22.1	1.5	6.1	2.6	988	219
Kisumu	33.9	2.7	10.5	4.7	1,141	387
Homa Bay	22.7	1.8	6.4	2.8	1,124	256
Migori	31.2	2.4	8.7	3.7	1,107	345
Kisii	39.7	3.5	11.9	5.2	1,260	500
Nyamira	35.9	1.5	11.0	4.9	603	216
Nairobi City	12.7	3.8	3.4	1.4	4,324	549

Figure 3.1: Individual food poverty incidence across counties



Kenya

South Sudan

Ethiopia

Uganda

Somalia

Tanzania

Indian Ocean

Counties: Turkana, West Pokot, Marsabit, Mandera, Wajir, Isiolo, Garissa, Tana River, Lamu, Kilifi, Mombasa, Kwana, Taita/Taveta, Makueni, Kajiado, Nairobi City, Kiambu, Murang'a, Nyeri, Kirinyaga, Embu, Tharaka-Nithi, Meru, Laikipia, Nandi, Elgeyo/Marakwet, Baringo, Trans Nzoia, Bungoma, Kakamega, Kisumu, Kericho, Nyanza, Bomet, Kisumu, Migori, Homabay, Siaya, Malindi.

Legend:

- International Boundary
- County Boundary
- Percent Food Poverty Estimates
- 58.82 - 71.45
- 44.95 - 58.81
- 35.76 - 44.94
- 28.54 - 35.75
- 22.85 - 28.53
- 18.38 - 22.84
- 12.89 - 18.37
- Forest/Park
- Lake/Ocean

Scale: 0 70 140 280 Km

North Arrow

NASSEP

3.3.2 Overall (absolute) poverty by county

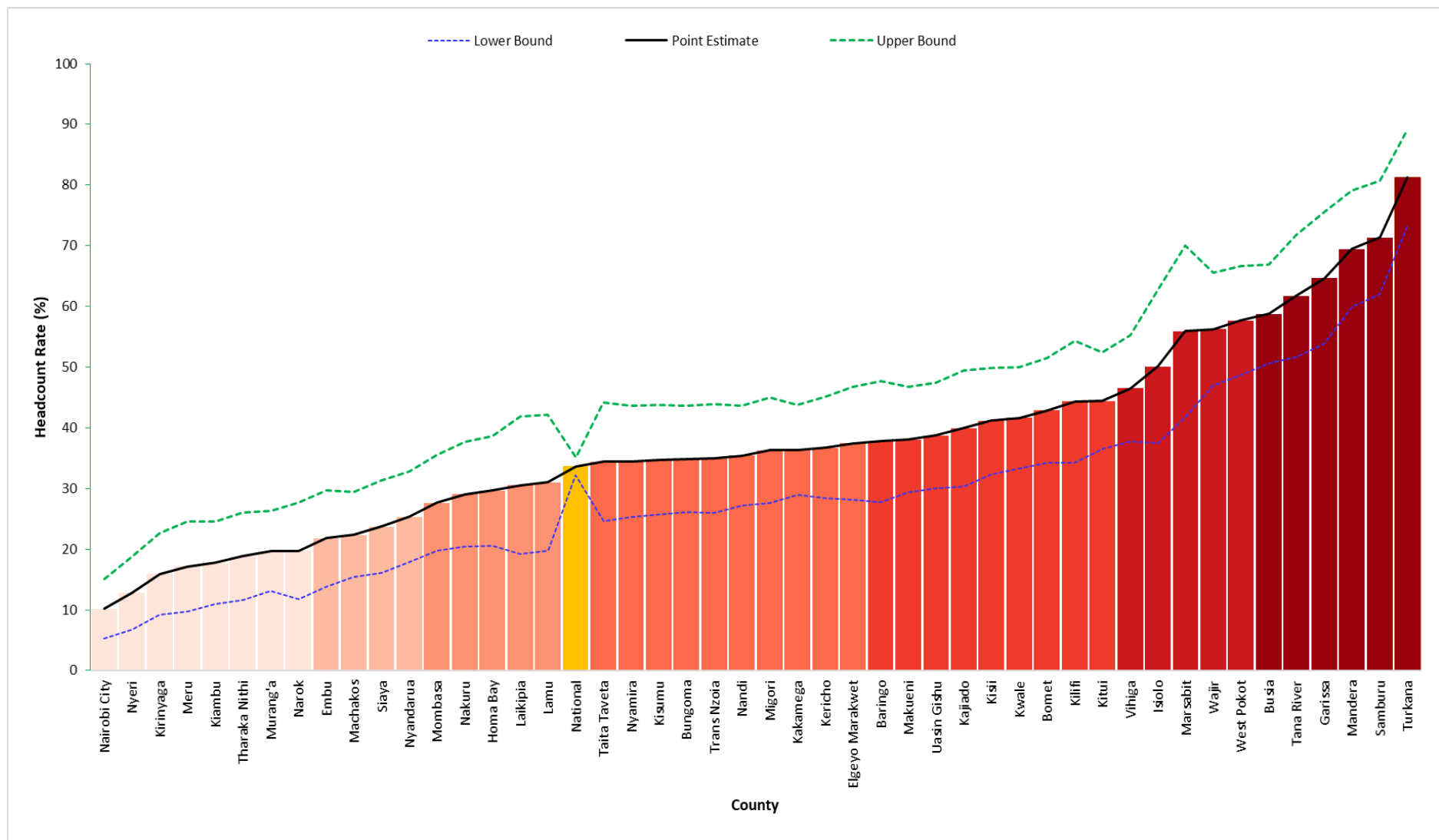
Table 3.4 presents a summary of the overall poverty rates for individuals by county while Figure 3.2 depicts overall poverty incidence estimates at the county level ranked in ascending order. Additionally, Map 3.2 shows county level variation in overall poverty incidence geographically while Map 3.3 visualizes county level geographic distribution of the number of overall poor individuals.

Overall (absolute) poverty headcount was highest in Turkana (81.3%), Samburu (71.3%), and Mandera (69.5%) counties. Counties with the lowest overall poverty headcount were Nairobi City (10.2%), Nyeri (12.8%), and Kirinyaga (15.9%). Overall poverty in 30 counties was higher than the national average.

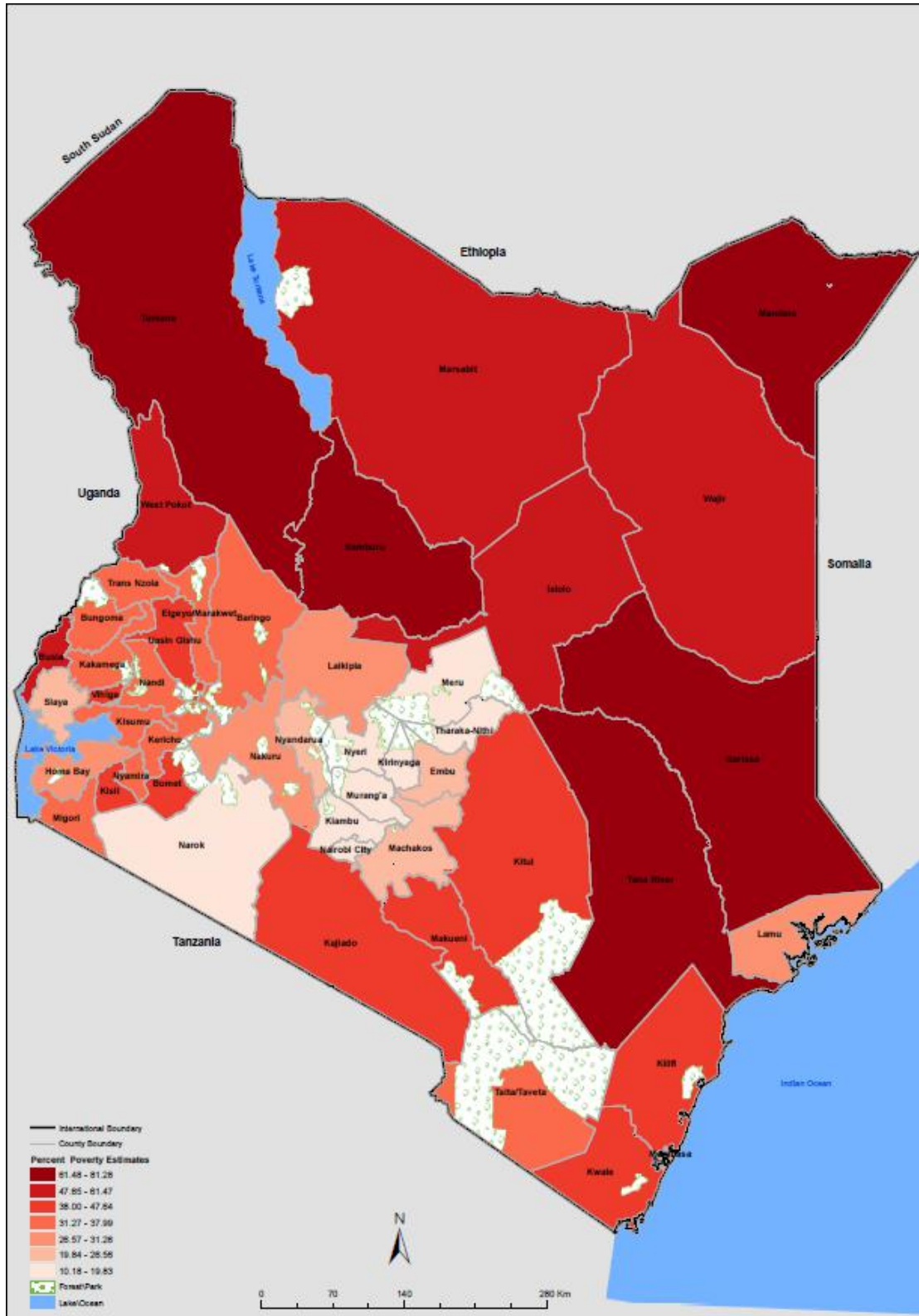
Table 3.4: Overall poverty estimates (individuals) by residence and county, 2019

Residence / County	Headcount Rate (%)	Distribution of the Poor (%)	Poverty Gap (%)	Severity of Poverty (%)	Population ('000)	Number of Poor ('000)
National	33.6	100.0	9.9	4.3	47,105	15,839
Rural	37.0	76.1	10.9	4.8	32,552	12,050
Urban	26.0	23.9	7.7	3.3	14,553	3,790
Mombasa	27.6	2.1	7.6	3.1	1,189	328
Kwale	41.6	2.3	10.8	4.3	858	357
Kilifi	44.3	4.0	12.6	5.2	1,440	638
Tana River	61.7	1.2	22.0	10.5	313	193
Lamu	31.0	0.3	7.8	3.1	138	43
Taita Taveta	34.4	0.7	9.5	3.8	334	115
Garissa	64.7	3.4	24.3	12.0	833	539
Wajir	56.2	2.7	17.7	7.8	774	435
Mandera	69.5	3.8	27.6	14.1	860	598
Marsabit	55.9	1.6	17.3	7.5	446	250
Isiolo	50.1	0.8	14.9	6.6	263	132
Meru	17.2	1.7	4.3	1.7	1,533	263
Tharaka-Nithi	18.8	0.5	4.0	1.4	391	74
Embu	21.8	0.8	5.1	1.9	604	132
Kitui	44.4	3.2	12.1	4.9	1,129	502
Machakos	22.4	2.0	5.5	2.1	1,411	316
Makueni	38.1	2.3	10.3	4.1	976	372
Nyandarua	25.4	1.0	6.2	2.4	634	161
Nyeri	12.8	0.6	2.7	1.0	749	96
Kirinyaga	15.9	0.6	3.6	1.4	605	96
Murang'a	19.7	1.3	4.8	1.8	1,052	207
Kiambu	17.8	2.7	4.3	1.6	2,399	426
Turkana	81.3	4.7	45.4	29.5	920	748
West Pokot	57.7	2.3	18.6	8.3	618	356
Samburu	71.3	1.4	28.9	14.9	306	218
Trans Nzoia	34.9	2.2	9.1	3.5	984	344
Uasin Gishu	38.8	2.8	11.4	4.9	1,149	445
Elgeyo/ Marakwet	37.5	1.1	10.4	4.2	453	170
Nandi	35.4	2.0	8.8	3.4	883	313
Baringo	37.8	1.6	9.2	3.5	662	250
Laikipia	30.6	1.0	8.2	3.4	510	156
Nakuru	29.1	3.9	7.6	2.9	2,125	617
Narok	19.7	1.4	4.7	1.8	1,146	226
Kajiado	39.9	2.8	12.1	5.1	1,104	441
Kericho	36.7	2.1	10.1	4.1	897	329
Bomet	42.8	2.4	10.6	4.1	873	374
Kakamega	36.3	4.3	9.6	3.8	1,860	676
Vihiga	46.5	1.7	13.2	5.5	587	273
Bungoma	34.9	3.7	9.0	3.4	1,663	580
Busia	58.7	3.3	19.7	8.9	887	521
Siaya	23.7	1.5	5.5	2.1	988	234
Kisumu	34.7	2.5	9.6	3.9	1,141	396
Homa Bay	29.6	2.1	7.4	2.9	1,124	333
Migori	36.3	2.5	8.7	3.3	1,107	402
Kisii	41.1	3.3	11.4	4.5	1,260	518
Nyamira	34.5	1.3	9.2	3.7	603	208
Nairobi City	10.2	2.8	2.2	0.8	4,324	440

Figure 3.2: Individual overall poverty incidence across counties



Map 3.2: Overall poverty headcount (individuals) by county



Map 3.3: Distribution of the overall poor by county

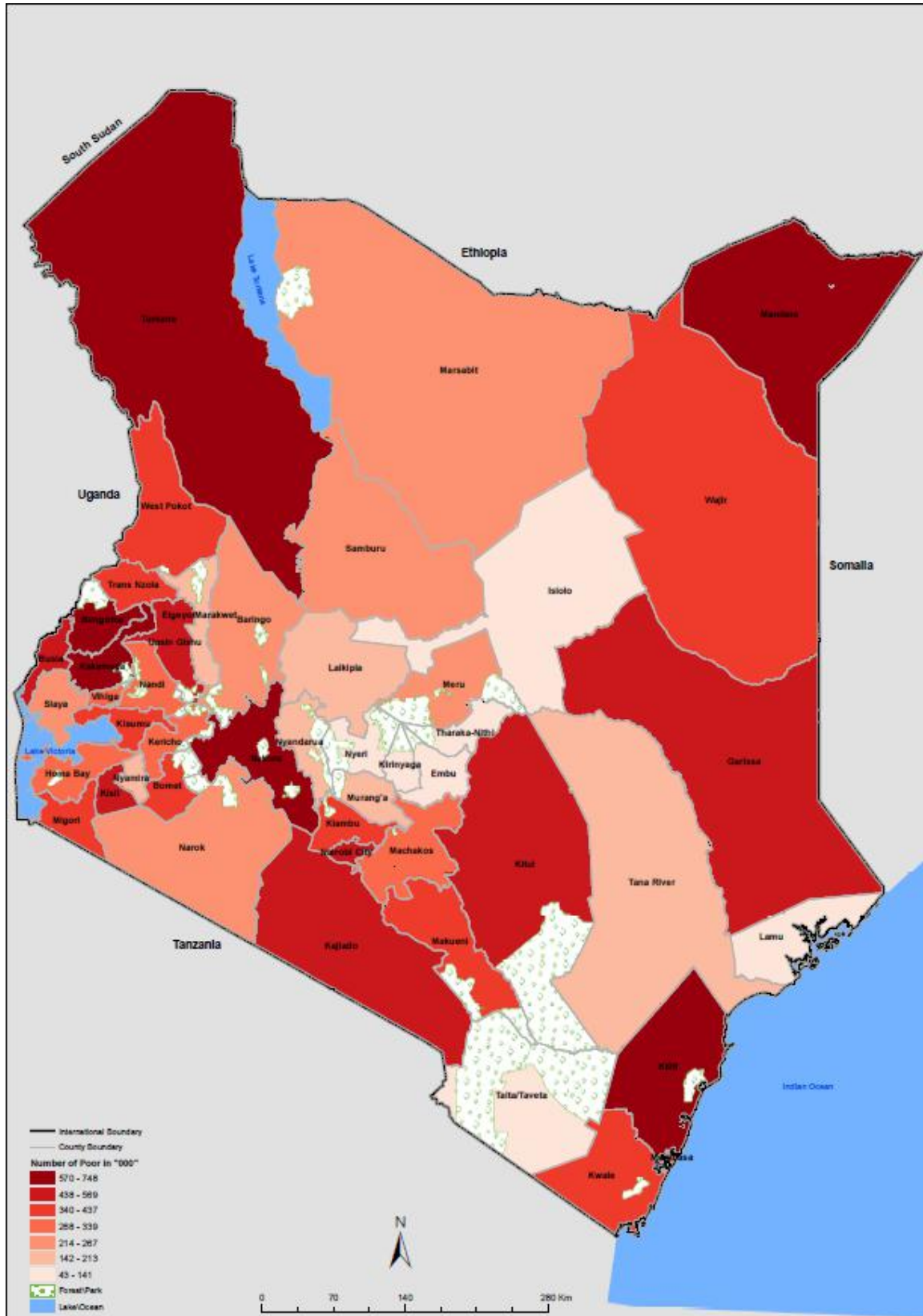
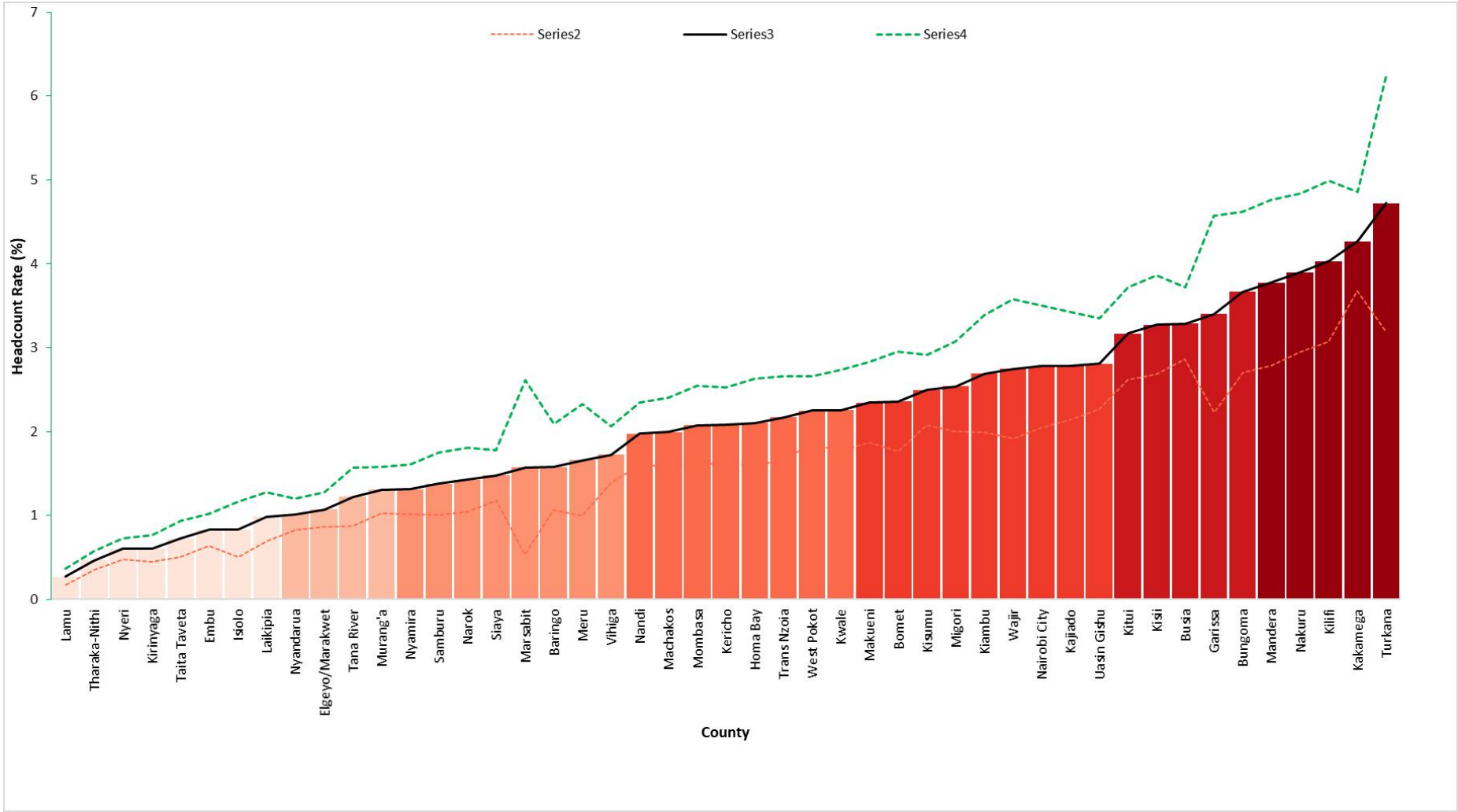


Figure 3.3: Contribution to overall poverty across counties



3.3.3 Hardcore poverty by county

Hardcore poverty rates for individuals and across counties are presented in (Table 3.5). Hardcore poverty incidence at the county level varied from a low of 0.7 per cent in Nairobi City to a high of 58.2 per cent in Turkana County. In 19 counties, the incidence of hardcore poverty incidence was higher than the national average, and these counties accounted for 64.3 per cent of the hardcore poor in 2019. In terms of the share of total population in Kenya, more than one third (31.2%) lived in these counties. With 535,000 individuals living in hardcore poverty in 2019, Turkana has not only the highest hardcore poverty rate, but also the highest concentrations of extreme poor followed by Mandera (253,000 hardcore) and Garissa (224,000 hardcore poor).

Table 3.5: Hardcore poverty estimates (individuals) by place of residence and county, 2019

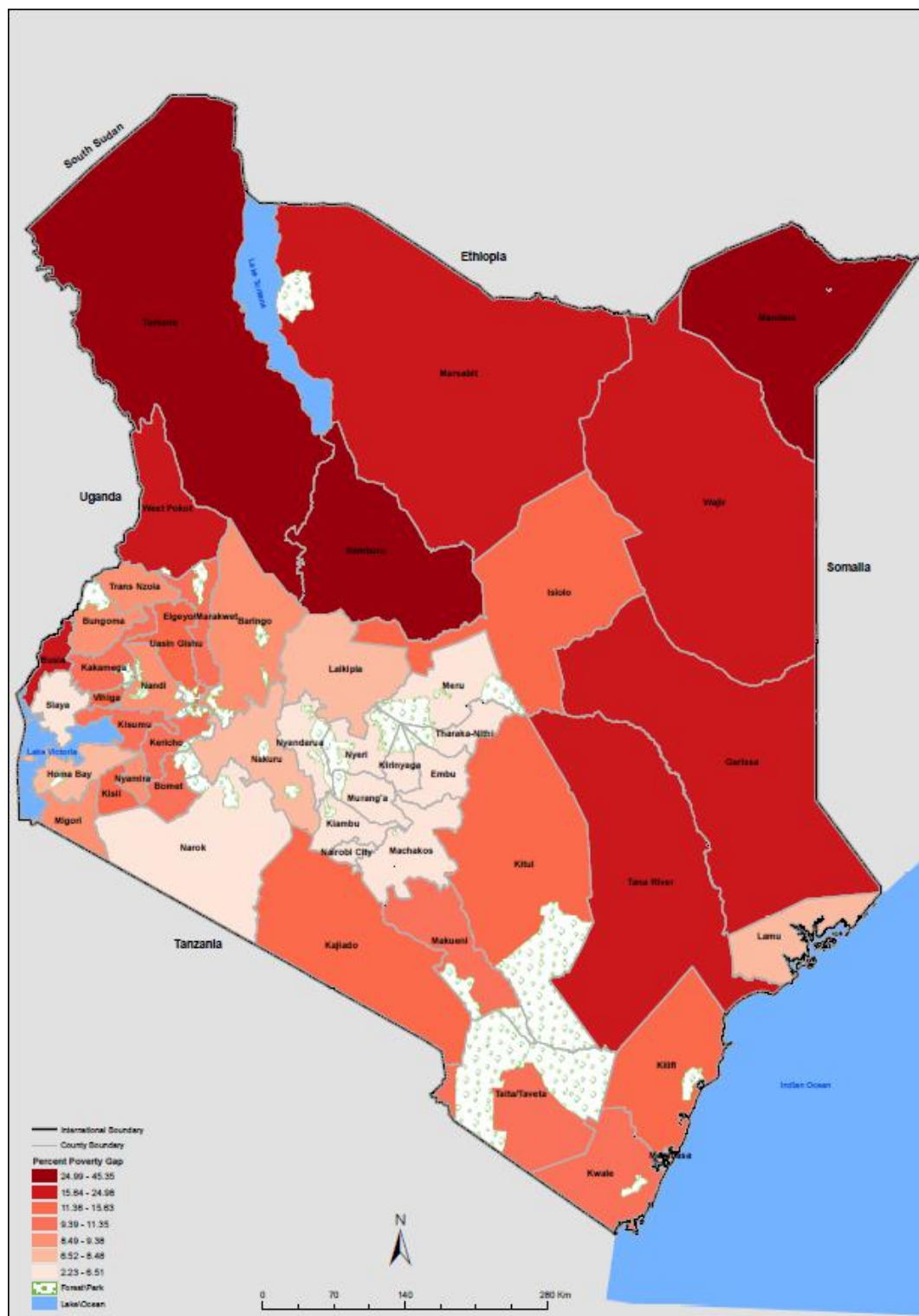
Residence/ County	Headcount Rate (%)	Distribution of the Poor (%)	Poverty Gap (%)	Severity of Poverty (%)	Population ('000)	Number of Poor ('000)
National	8.3	100.0	2.2	0.9	47,105	3,927
Rural	10.9	90.0	2.9	1.2	32,552	3,536
Urban	2.7	10.0	0.6	0.2	14,553	391
Mombasa	2.1	0.6	0.4	0.1	1,189	25
Kwale	8.9	1.9	2.1	0.8	858	76
Kilifi	9.6	3.5	2.2	0.8	1,440	139
Tana River	20.9	1.7	5.7	2.3	313	65
Lamu	5.0	0.2	1.2	0.5	138	7
Taita Taveta	6.8	0.6	1.3	0.4	334	23
Garissa	26.8	5.7	7.5	3.1	833	224
Wajir	15.2	3.0	3.5	1.3	774	117
Mandera	29.5	6.4	8.5	3.5	860	253
Marsabit	15.6	1.8	3.8	1.4	446	70
Isiolo	9.4	0.6	2.3	0.9	263	25
Meru	3.2	1.3	0.9	0.4	1,533	50
Tharaka-Nithi	3.1	0.3	0.6	0.2	391	12
Embu	3.8	0.6	0.9	0.4	604	23
Kitui	11.4	3.3	2.5	0.9	1,129	129
Machakos	4.1	1.5	0.9	0.4	1,411	59
Makueni	8.7	2.2	1.9	0.7	976	85
Nyandarua	4.3	0.7	1.0	0.4	634	28
Nyeri	1.7	0.3	0.4	0.2	749	13
Kirinyaga	2.3	0.3	0.6	0.2	605	14
Murang'a	3.6	1.0	0.8	0.3	1,052	38
Kiambu	1.7	1.1	0.3	0.1	2,399	41
Turkana	58.2	13.6	25.2	14.2	920	535
West Pokot	20.4	3.2	4.8	1.7	618	126
Samburu	34.4	2.7	10.4	4.4	306	105
Trans Nzoia	6.8	1.7	1.3	0.5	984	67
Uasin Gishu	7.4	2.2	1.7	0.7	1,149	85
Elgeyo/ Marakwet	9.5	1.1	2.1	0.8	453	43
Nandi	7.1	1.6	1.5	0.5	883	63
Baringo	6.9	1.2	1.6	0.6	662	46
Laikipia	6.6	0.9	1.6	0.6	510	34
Nakuru	4.0	2.2	0.8	0.3	2,125	85
Narok	3.7	1.1	0.9	0.4	1,146	43
Kajiado	8.2	2.3	1.8	0.6	1,104	91
Kericho	8.4	1.9	1.9	0.7	897	76
Bomet	9.0	2.0	1.9	0.7	873	78
Kakamega	7.4	3.5	1.7	0.6	1,860	138
Vihiga	11.9	1.8	2.6	0.9	587	70
Bungoma	6.8	2.9	1.5	0.6	1,663	113
Busia	21.9	4.9	5.0	1.8	887	194
Siaya	3.6	0.9	0.8	0.3	988	35
Kisumu	6.1	1.8	1.3	0.5	1,141	69
Homa Bay	5.4	1.5	1.2	0.5	1,124	60
Migori	6.0	1.7	1.3	0.5	1,107	66
Kisii	9.1	2.9	1.9	0.6	1,260	115
Nyamira	7.9	1.2	1.7	0.6	603	48
Nairobi City	0.7	0.7	0.1	0.0	4,324	29

3.3.4 Depth and severity of overall (absolute) poverty at national and county level

Map 3.4 depicts the spatial variation of the depth of overall poverty at county level as measured by the poverty gap (see Table 3.4 for county level poverty gap estimates). Table 3.4 shows that not only are poverty rates higher in rural compared to urban areas but also the depth of poverty is also higher. The poverty gap conveys how much poorer the poor are relative to the overall poverty line, and as such the table suggests the level of resources needed to lift the rural poor out of poverty is higher. The severity of poverty measure (squared overall poverty gap) puts more weight on the number of people who fall below the poverty line, and according to Table 3.4 inequality among the poor is higher in rural compared to urban areas.

Considering the spatial variation of the depth and severity of poverty highlights the dire poverty situation in Turkana: not only is this county the poorest in terms of the overall poverty headcount rate, but the poor also tend to be furthest away from the poverty line (the highest overall poverty gap) and the inequality among the poor tends to be highest (the highest squared overall poverty gap) in the country. In 21 counties, poverty is on average deeper compared to the national average poverty gap of 9.9 per cent.

Map 3.4: Overall poverty gap (individuals) by county



3.4 Poverty trends between 2015/16 and 2019

Table 3.6 presents trends in poverty incidence measures between the 2015/16 KIHBS and 2019 KCHS at national level and by place of residence while Table 3.7 presents trends at the county level. The trend is comparable given both the consumption aggregate and poverty lines are in 2015/16 prices.

The food poverty headcount rate for individuals at the national level decreased from 32 per cent in 2015/16 to 30.5 per cent in 2019. Both rural and urban areas experienced a decline in food poverty: in rural areas it declined from 35 per cent to 34 per cent in 2019 while urban food poverty incidence went down from 24.4 per cent to 22.5 per cent over the same period.

At national level, the overall poverty headcount rate for individuals reduced by about 2.5 percentage points from 36.1 per cent in 2015/16 to 33.6 per cent in 2019. The decline was higher in urban areas where the overall headcount poverty rate decreased by 3.4 percentage points from 29.4 to 26 per cent. In rural area, the rate decreased by 1.8 percentage points from 38.8 to 37 per cent. The decline in the total number of the poor at the overall poverty line was marginal, declining from 16.4 million in 2015/16 to 15.8 million in 2019. In rural areas the number of poor decreased from 12.6 to 12.1 million.

Nationally, the hardcore poverty headcount rate somewhat stagnated, declining marginally from 8.6 per cent in 2015/16 to 8.3 per cent in 2019.

Table 3.6: Trends in poverty incidence nationally between 2015/16 and 2019

Indicator	Place of Residence	Poor Individuals 2015/ 16 Pα=0	Poor Individuals 2019 Pα=0	Change: 2015/ 16- 2019
Overall Poverty Rate (%)	National	36.1	33.6	(2.5)
	Rural	38.8	37.0	(1.8)
	Urban	29.4	26.0	(3.4)
Food Poverty Rate (%)	National	32.0	30.5	(1.5)
	Rural	35.0	34.0	(1.0)
	Urban	24.4	22.5	(1.9)
Extreme or Hardcore Poverty Rate (%)	National	8.6	8.3	(0.3)
	Rural	10.7	10.9	0.2
	Urban	3.4	2.7	(0.7)
Distribution of the Overall Poor (%)	Rural	76.8	76.1	(0.7)
	Urban	23.2	23.9	0.7
Population Living in Overall Poverty (Millions)	National	16.4	15.8	(0.6)
	Rural	12.6	12.1	(0.5)
	Urban	3.8	3.7	(0.1)
Population Distribution (%)	Rural	71.6	69.1	(2.5)
	Urban	28.4	30.9	2.5

Table 3.7: Trends in poverty incidence by county between 2015/16 and 2019

Residence/ County	Food Poverty		Percentage point change	Overall Poverty		Percentage Point change
	2015	2019		2015	2019	
National	32.0	30.5	(1.5)	36.1	33.6	(2.5)
Rural	35.8	34.0	(1.8)	38.8	37.0	(1.8)
Urban	25.0	22.5	(2.5)	29.4	26.0	(3.4)
Mombasa	23.6	22.2	(1.4)	27.1	27.6	0.5
Kwale	41.1	34.9	(6.2)	47.4	41.6	(5.8)
Kilifi	48.8	45.1	(3.7)	46.6	44.3	(2.3)
Tana River	55.4	50.7	(4.7)	62.1	61.7	(0.4)
Lamu	19.9	26.8	6.9	28.5	31.0	2.5
Taita Taveta	38.9	33.1	(5.8)	32.3	34.4	2.1
Garissa	45.2	48.0	2.8	65.5	64.7	(0.8)
Wajir	41.3	45.6	4.3	62.6	56.2	(6.4)
Mandera	61.9	60.0	(1.9)	77.6	69.5	(8.1)
Marsabit	55.6	40.8	(14.8)	63.7	55.9	(7.8)
Isiolo	34.2	37.3	3.1	51.9	50.1	(1.8)
Meru	15.5	15.3	(0.2)	19.4	17.2	(2.2)
Tharaka-Nithi	31.2	23.6	(7.6)	23.6	18.8	(4.8)
Embu	28.3	23.5	(4.8)	28.2	21.8	(6.4)
Kitui	39.4	38.6	(0.8)	47.5	44.4	(3.1)
Machakos	24.1	25.8	1.7	23.3	22.4	(0.9)
Makueni	30.7	34.3	3.6	34.8	38.1	3.3
Nyandarua	29.8	23.4	(6.4)	34.8	25.4	(9.4)
Nyeri	15.5	14.7	(0.8)	19.3	12.8	(6.5)
Kirinyaga	18.8	16.6	(2.2)	20.0	15.9	(4.1)
Murang'a	22.7	21.6	(1.1)	25.3	19.7	(5.6)
Kiambu	23.5	20.1	(3.4)	23.3	17.8	(5.5)
Turkana	66.1	71.4	5.3	79.4	81.3	1.9
West Pokot	57.3	51.1	(6.2)	57.4	57.7	0.3
Samburu	60.1	58.4	(1.7)	75.8	71.3	(4.5)
Trans Nzoia	33.3	33.5	0.2	34.0	34.9	0.9
Uasin Gishu	38.2	36.0	(2.2)	41.0	38.8	(2.2)
Elgeyo/ Marakwet	44.8	33.0	(11.8)	43.4	37.5	(5.9)
Nandi	31.5	31.1	(0.4)	36.0	35.4	(0.6)
Baringo	41.4	31.2	(10.2)	39.6	37.8	(1.8)
Laikipia	28.5	23.2	(5.3)	45.9	30.6	(15.3)
Nakuru	19.6	23.7	4.1	29.1	29.1	(0.0)
Narok	22.1	23.0	0.9	22.6	19.7	(2.9)
Kajiado	36.9	36.6	(0.3)	40.7	39.9	(0.8)
Kericho	31.4	32.8	1.4	30.3	36.7	6.4
Bomet	32.8	31.9	(0.9)	48.8	42.8	(6.0)
Kakamega	33.3	30.2	(3.1)	35.8	36.3	0.5
Vihiga	36.6	38.2	1.6	43.2	46.5	3.3
Bungoma	32.4	31.5	(0.9)	35.7	34.9	(0.8)
Busia	59.5	50.0	(9.5)	69.3	58.7	(10.6)
Siaya	27.3	22.1	(5.2)	33.8	23.7	(10.1)
Kisumu	32.5	33.9	1.4	33.9	34.7	0.8
Homa Bay	22.7	22.7	0.0	33.5	29.6	(3.9)
Migori	32.0	31.2	(0.8)	41.2	36.3	(4.9)
Kisii	44.6	39.7	(4.9)	41.7	41.1	(0.6)
Nyamira	36.3	35.9	(0.4)	32.7	34.5	1.8
Nairobi City	16.1	12.7	(3.4)	16.7	10.2	(6.5)

The link between poverty and poverty is important in Kenya, where children and the elderly have historically been associated with higher probabilities of being poor. Accordingly, this chapter presents the results of the relationship between the conventional poverty measures and age groups.

4.1 Child Poverty

Estimates of overall child poverty prevalence and food poor children, along with the contribution of each county/area of residence to the national overall child and food poverty are presented in Table 4.1 and Table 4.2. To estimate the prevalence of child poverty in this report the absolute (overall) poverty line is applied to households. Children are therefore considered to be poor if they are living in households that have been deemed poor based on the absolute poverty lines. The food poor children are estimated from the food poverty lines. The prevalence of food poor children, therefore, refers to the percentage of all children living in households below the food poverty line.

4.1.1 Overall poor children

At national level, 39.5 per cent of all children (aged 17 or less) were categorised as poor in 2019. This translates to having about 8.2 million children living in poor households in 2019 (Table 4.1). Breaking this down by age suggests among all children of primary school going age group (aged 6-13 years), 40.6 per cent were poor. The poverty rate among all the secondary school going age group (aged 14-17 years) was 39.9 per cent, the highest among all age groups. Like all poverty measures, most of poor children (aged 0-17 years) were in rural areas (80.2%). In absolute numbers, rural areas account for approximately 6.6 million poor children compared to 1.6 million poor children in urban areas.

The spatial patterns of child poverty show that the prevalence of child poverty ranges from about 11.4 per cent in Nairobi City to almost 82 per cent in Turkana. Regarding contribution to overall child poverty at the county level, Turkana which has the highest child poverty prevalence also contributes the highest share of 5 per cent of poor children in Kenya. Bungoma County contributed the second highest share of 4.4 per cent of total poor children followed by Kakamega and Kilifi (4.4% each). At 0.2 per cent, Lamu accounted for the least share of children living in poverty.

Table 4.1: Proportion of poor children by age group, area of residence and county

Residence/ County	Total population		0-5 Years		6-13 Years		14-17 Years		0-17 Years	
	Poverty Headcount Rate (%)	Population ('000)	Poverty Headcount Rate (%)	Population ('000)	Poverty Headcount Rate (%)	Population ('000)	Poverty Headcount Rate (%)	Population ('000)	Poverty Headcount Rate (%)	Population ('000)
National	33.6	47,105	37.5	6,405	40.6	9,848	39.9	4,461	39.5	20,715
Rural	37.0	32,552	40.4	4,600	41.8	7,731	40.6	3,621	41.1	15,952
Urban	26.0	14,553	30.0	1,805	36.0	2,117	37.3	841	34.0	4,763
Mombasa	27.6	1,189	34.2	125	36.6	164	25.4	78	33.4	366
Kwale	41.6	858	45.1	156	45.6	220	42.7	99	44.8	475
Kilifi	44.3	1,440	45.5	229	49.2	359	48.5	168	47.9	756
Tana River	61.7	313	61.9	63	66.4	100	62.6	37	64.3	200
Lamu	31.0	138	31.5	19	35.5	25	34.5	15	34.0	60
Taita Taveta	34.4	334	41.9	42	40.4	69	41.7	29	41.1	140
Garissa	64.7	833	65.6	166	69.7	203	69.8	66	68.1	435
Wajir	56.2	774	55.1	178	58.4	250	58.4	96	57.3	524
Mandera	69.5	860	71.3	127	71.5	206	69.6	85	71.0	418
Marsabit	55.9	446	57.4	51	60.2	85	58.4	30	59.0	166
Isiolo	50.1	263	50.5	38	55.9	56	53.6	26	53.7	120
Meru	17.2	1,533	16.5	183	20.3	290	20.9	140	19.3	612
Tharaka-Nithi	18.8	391	20.3	46	22.3	72	22.9	36	21.8	154
Embu	21.8	604	20.4	63	26.5	95	27.2	45	24.8	202
Kitui	44.4	1,129	47.5	111	48.7	236	47.8	98	48.2	445
Machakos	22.4	1,411	23.6	159	28.4	225	28.0	132	26.8	516
Makueni	38.1	976	43.4	77	43.7	176	43.4	111	43.5	364
Nyandarua	25.4	634	28.8	87	27.6	146	29.5	79	28.4	312
Nyeri	12.8	749	15.5	85	16.1	118	13.8	61	15.4	264
Kirinyaga	15.9	605	16.3	72	18.9	90	22.0	47	18.7	209
Murang'a	19.7	1,052	21.1	112	25.4	170	23.3	95	23.6	377
Kiambu	17.8	2,399	17.8	270	23.5	347	24.5	142	21.7	760
Turkana	81.3	920	81.5	146	81.8	241	82.9	116	82.0	503
West Pokot	57.7	618	60.0	142	61.0	183	58.9	67	60.3	392
Samburu	71.3	306	73.1	71	74.9	106	72.5	39	73.9	216
Trans Nzoia	34.9	984	36.5	162	39.1	247	36.1	127	37.6	536
Uasin Gishu	38.8	1,149	41.7	182	42.8	242	40.4	127	41.9	552
Elgeyo/ Marakwet	37.5	453	40.0	37	39.5	77	43.2	43	40.6	157
Nandi	35.4	883	37.1	116	36.6	185	39.6	87	37.4	389
Baringo	37.8	662	39.6	103	41.1	184	40.4	81	40.5	368
Laikipia	30.6	510	36.5	57	39.5	83	39.1	41	38.5	181
Nakuru	29.1	2,125	31.2	278	33.9	409	35.3	197	33.4	884
Narok	19.7	1,146	21.3	183	21.7	298	23.4	116	21.9	596
Kajiado	39.9	1,104	43.9	168	44.9	187	43.9	82	44.3	437
Kericho	36.7	897	35.6	132	40.0	209	42.6	107	39.3	448
Bomet	42.8	873	44.3	127	46.7	223	44.2	117	45.4	466
Kakamega	36.3	1,860	38.8	249	39.1	464	38.5	206	38.9	919
Vihiga	46.5	587	47.9	75	51.3	150	49.5	71	50.0	296
Bungoma	34.9	1,663	34.5	278	39.6	472	38.2	217	37.8	966
Busia	58.7	887	60.0	152	63.1	227	59.8	101	61.4	479
Siaya	23.7	988	25.1	139	26.5	220	26.7	89	26.1	448
Kisumu	34.7	1,141	39.3	147	40.9	225	37.2	98	39.6	470
Homa Bay	29.6	1,124	32.5	176	33.3	288	31.3	143	32.6	608
Migori	36.3	1,107	36.2	137	39.9	345	37.4	132	38.5	614
Kisii	41.1	1,260	44.9	165	42.7	321	46.8	163	44.3	650
Nyamira	34.5	603	36.0	71	38.1	140	38.3	76	37.6	287
Nairobi City	10.2	4,324	10.3	455	11.6	417	14.9	106	11.4	978

4.1.2 Food poor children

Nationally, 35.3 per cent of children were food poor in 2019 (Table 4.2). Disaggregating by age groups shows that 33.2 per cent among the 0–5-year age group were food poor; and the corresponding food poverty rate among children aged 6–13 years and 14–17 years was 36.2 per cent. Child food poverty rates are consistently higher in rural than urban areas. Similar to the overall child poverty pattern, most (82%) of food poor children (aged 0–17 years) lived in rural areas, which was equivalent to 6 million children.

The spatial variation is stark: the prevalence of food poverty among children (0–17 years) ranged from a low of 13.3 per cent in Nairobi City to a high of 72.6 per cent in Turkana County. The highest food prevalence rates among children were registered in the following counties: Turkana (72.6%), Mandera (62.2%), Samburu (61.5%), and West Pokot (53.4%).

Table 4.2: Proportion of food poor children by age group, area of residence and county

Residence/ County	Total population		0-5 Years		6-13 Years		14-17 Years		0-17 Years	
	Poverty Headcount Estimate (%)	Population ('000)	Poverty Headcount Estimate (%)	Population ('000)	Poverty Headcount Estimate (%)	Population ('000)	Poverty Headcount Estimate (%)	Population ('000)	Poverty Headcount Estimate (%)	Population ('000)
National	30.5	47,105	33.2	6,405	36.2	9,848	36.2	4,461	35.3	20,715
Rural	34.0	32,552	36.7	4,600	38.1	7,731	37.6	3,621	37.6	15,952
Urban	22.5	14,553	24.4	1,805	29.1	2,117	30.3	841	27.6	4,763
Mombasa	22.2	1,189	25.1	125	28.5	164	21.9	78	26.0	366
Kwale	34.9	858	37.1	156	38.1	220	37.4	99	37.6	475
Kilifi	45.1	1,440	45.8	229	49.3	359	49.7	168	48.3	756
Tana River	50.7	313	50.4	63	55.5	100	51.8	37	53.2	200
Lamu	26.8	138	27.2	19	30.5	25	29.7	15	29.2	60
Taita Taveta	33.1	334	38.2	42	38.6	69	39.5	29	38.7	140
Garissa	48.0	833	48.5	166	52.7	203	54.8	66	51.4	435
Wajir	45.6	774	43.3	178	47.6	250	48.6	96	46.3	524
Mandera	60.0	860	61.7	127	63.0	206	61.0	85	62.2	418
Marsabit	40.8	446	42.2	51	44.2	85	44.4	30	43.6	166
Isiolo	37.3	263	36.6	38	43.0	56	42.6	26	40.9	120
Meru	15.3	1,533	15.5	183	17.2	290	19.7	140	17.3	612
Tharaka-Nithi	23.6	391	24.9	46	28.0	72	28.1	36	27.1	154
Embu	23.5	604	23.1	63	27.4	95	30.1	45	26.6	202
Kitui	38.6	1,129	42.0	111	42.4	236	42.6	98	42.3	445
Machakos	25.8	1,411	27.7	159	33.5	225	31.8	132	31.3	516
Makueni	34.3	976	38.3	77	39.4	176	38.8	111	39.0	364
Nyandarua	23.4	634	26.3	87	25.5	146	28.1	79	26.4	312
Nyeri	14.7	749	17.1	85	17.7	118	15.3	61	16.9	264
Kirinyaga	16.6	605	17.0	72	19.7	90	21.6	47	19.2	209
Murang'a	21.6	1,052	23.8	112	27.3	170	25.8	95	25.9	377
Kiambu	20.1	2,399	20.4	270	24.7	347	24.4	142	23.1	760
Turkana	71.4	920	72.1	146	72.8	241	72.9	116	72.6	503
West Pokot	51.1	618	52.8	142	54.0	183	53.0	67	53.4	392
Samburu	58.4	306	60.4	71	62.3	106	61.2	39	61.5	216
Trans Nzoia	33.5	984	34.0	162	37.2	247	36.0	127	36.0	536
Uasin Gishu	36.0	1,149	37.5	182	39.5	242	38.4	127	38.6	552
Elgeyo/ Marakwet	33.0	453	36.2	37	35.1	77	37.9	43	36.2	157
Nandi	31.1	883	32.0	116	32.1	185	35.3	87	32.8	389
Baringo	31.2	662	32.9	103	34.8	184	33.3	81	33.9	368
Laikipia	23.2	510	26.6	57	29.0	83	30.0	41	28.5	181
Nakuru	23.7	2,125	24.1	278	28.0	409	30.2	197	27.3	884
Narok	23.0	1,146	24.3	183	24.9	298	26.2	116	24.9	596
Kajiado	36.6	1,104	39.4	168	40.4	187	40.1	82	40.0	437
Kericho	32.8	897	31.1	132	35.4	209	38.4	107	34.8	448
Bomet	31.9	873	31.5	127	35.1	223	33.5	117	33.7	466
Kakamega	30.2	1,860	32.0	249	32.1	464	31.7	206	32.0	919
Vihiga	38.2	587	39.3	75	43.1	150	41.4	71	41.8	296
Bungoma	31.5	1,663	32.3	278	35.2	472	33.7	217	34.0	966
Busia	50.0	887	51.0	152	54.4	227	52.3	101	52.9	479
Siaya	22.1	988	22.9	139	25.1	220	25.9	89	24.5	448
Kisumu	33.9	1,141	36.7	147	39.3	225	37.1	98	38.0	470
Homa Bay	22.7	1,124	24.1	176	25.2	288	24.4	143	24.7	608
Migori	31.2	1,107	31.3	137	33.2	345	33.1	132	32.8	614
Kisii	39.7	1,260	43.1	165	41.0	321	44.6	163	42.4	650
Nyamira	35.9	603	37.1	71	40.1	140	39.5	76	39.2	287
Nairobi City	12.7	4,324	12.4	455	13.8	417	15.3	106	13.3	978

4.2

Poverty among the youth and the elderly

Table 4.3 shows that the relationship between age and poverty in Kenya is broadly “U” shaped. That is, poverty is shown to be highest among the very young and the very old. This pattern holds true across the major domains of analysis, rural and urban.⁷

Table 4.3: Poverty estimates for youth and elderly living in poor households by age group and area of residence

Residence/ County	Total population		0-17 Years		18-35 Years		36-59 Years		60-69 Years		70+ Years	
	Poverty Headcount Rate (%)	Population ('000)	Poverty Headcount Rate (%)	Population ('000)	Poverty Headcount Rate (%)	Population ('000)	Poverty Headcount Rate (%)	Population ('000)	Poverty Headcount Rate (%)	Population ('000)	Poverty Headcount Rate (%)	Population ('000)
National	33.6	47,105	39.5	20,715	28.7	13,375	30.4	8,547	31.2	1,732	33.0	1,371
Rural	37.0	32,552	41.1	15,952	34.0	7,810	32.7	5,921	30.7	1,463	31.1	1,245
Urban	26.0	14,553	34.0	4,763	21.2	5,565	25.3	2,626	34.1	269	51.5	126

⁷ Analysis by county is in Annex Table E3.

Chapter 5: Conclusions and Recommendations

This report uses the 2015/16 KIHBS and 2019 KCHS to provide an overview of levels and changes in poverty during this period. The estimates reported go beyond national level, further disaggregated by place of residence (rural vs urban) and county. It also provides the distribution of poverty across age groups.

5.1 Conclusions

Overall (absolute), food, and hardcore poverty headcount rates declined between 2015/16 and 2019. Nationally, the overall poverty rate fell by 2.5 percentage points from 36.1 to 33.6 per cent. The food poverty rate, on the other hand, fell at a slower pace, falling by 1.5 percentage points from 32 to 30.5 percent. Poverty marginally fell faster in urban areas compared to rural areas regardless of the poverty measure used. Poverty remains a rural phenomenon: it remains higher and more concentrated in rural areas. In 2019, 37 per cent of the rural population were poor at the overall poverty line, while the urban poverty rate was 26 per cent. A look at the poverty gap and poverty severity measures suggests that not only are rural residents more likely to be poor, but they also tend to be further away from the poverty line and inequality among the rural poor tends to be higher.

Spatial variation in poverty levels is significant, but there are counties that tend to have the highest poverty rates by any measure. These include Turkana, Samburu, Mandera, and Garissa. Turkana particularly stands out: not only is this county the poorest by any poverty headcount measure, but it also accounts for the largest share of poor, and the depth and severity of poverty is also the highest. A challenge around child poverty as well as poverty among the elderly is also highlighted.

In conclusion, while progress was made in reducing poverty between 2015/16 and 2019, poverty remains a developmental challenge for Kenya. The challenge is exacerbated by the threat of existing relatively high and persistent spatial inequalities, calling for more concerted efforts and commitment from all stakeholders to ensure the country's development path is made more inclusive.

5.2 Recommendations

Although the current methodology ensures comparability between the 2015/16 KIHBS and 2019 KCHS methodologies, there is scope to improve the way consumption and subsequently poverty is estimated in Kenya. Two possible ways to do that include: first, including the monetary value of the flow of consumption from owned durable goods,

and second, including the actual and imputed housing rents depending on whether a household lives in rented accommodation or in owner-occupied housing. Any modification or improvement in the definition of the consumption aggregate as a measure of household welfare will have to be accompanied by a re-estimation of the poverty line to ensure that the poverty line is appropriate for the modified consumption aggregate.

Given that the 2019 KCHS survey was conducted with the NASSEP V sampling frame, conducting subsequent KCHS with a new frame based on the 2019 KPHC Enumeration Areas (EAs) would be important. The new frame will provide a clear and easy weighting system and allow alignment to the new administrative units, thus making it easier to do further spatial analysis like small area estimation.

References

- Crawford, E. and E. Thorbecke (1978a). *Employment, Income Distribution, Poverty Alleviation and Basic Needs in Kenya*, Report of an ILO Consulting Mission. Ithaca: Cornell University.
- Crawford, E. and E. Thorbecke (1978b). *The Analysis of Food Poverty: An Illustration from Kenya*, Ithaca: Cornell University.
- Crawford, E. and E. Thorbecke (1980). "The Analysis of Food Poverty: An Illustration from Kenya," *Pakistan Development Review*, 19(4).
- Deaton, A. and S. Zaidi (2002) *Guidelines for Constructing Consumption Aggregates for Welfare Analysis*. LsMs Working Paper No. 135, Washington, DC: The World bank.
- Food and Nutrition Cooperation – East, Central and southern Africa (1987). *Food Composition Table for Energy and Eight Important Nutrients in Foods Commonly Eaten in East Africa*. ECsA/CTA.
- Foster, J., J. Greer and E. Thorbecke (1984). "A Class of Decomposable Poverty Measures," *Econometrica*, 52(3):761-66.
- Greer, J., and E. Thorbecke (1986a). *Food Poverty and Consumption Patterns in Kenya*, Geneva: ILO.
- Greer, J. and E. Thorbecke (1986b). "Food Poverty Profile Applied to Kenyan smallholders," *Economic Development and Cultural Change*, 35(1).
- Greer, J. and E. Thorbecke (1986c). "A Methodology for Measuring Food Poverty Applied to Kenya," *Journal of Development Economics*, 24:59-74.
- Kenya National Bureau of Statistics (2018), Ministry of Planning and National Development. Basic Report on Well-being in Kenya: Based on the 2015/16 Kenya Integrated Household Budget Survey (KIHBS).

Annex Tables

Annex Table A1: Overall poverty estimates (individuals) by area of residence and county, 2019

Residence / County	Headcount Rate (%)	Poverty Gap (%)	Severity of Poverty (%)	Contribution to Poverty			Population ('000)	Number of Poor ('000)
	(Std. errors)	(Std. errors)	(Std. errors)	P _{a=0} (Std. errors)	P _{a=1} (Std. errors)	P _{a=2} (Std. errors)		
National	33.6 (0.7)	9.9 (0.3)	4.3 (0.2)	100.0 0.0	100.0 0.0	100.0 0.0	47,105	15,839
Rural	37.0 (0.8)	10.9 (0.4)	4.8 (0.2)	76.1 (0.9)	75.9 (1.0)	76.3 (1.1)	32,552	12,050
Urban	26.0 (1.5)	7.7 (0.5)	3.3 (0.3)	23.9 (0.9)	24.1 (1.0)	23.7 (1.1)	14,553	3,790
Mombasa	27.6 (4.0)	7.6 (1.3)	3.1 (0.7)	2.1 (0.2)	1.9 (0.3)	1.8 (0.3)	1,189	328
Kwale	41.6 (4.2)	10.8 (1.6)	4.3 (0.9)	2.3 (0.2)	2.0 (0.2)	1.8 (0.2)	858	357
Kilifi	44.3 (5.1)	12.6 (2.0)	5.2 (1.2)	4.0 (0.5)	3.9 (0.5)	3.7 (0.5)	1,440	638
Tana River	61.7 (5.1)	22.0 (3.0)	10.5 (2.0)	1.2 (0.2)	1.5 (0.2)	1.6 (0.3)	313	193
Lamu	31.0 (5.7)	7.8 (2.0)	3.1 (1.1)	0.3 (0.0)	0.2 (0.0)	0.2 (0.0)	138	43
Taita Taveta	34.4 (5.0)	9.5 (1.9)	3.8 (1.0)	0.7 (0.1)	0.7 (0.1)	0.6 (0.1)	334	115
Garissa	64.7 (5.5)	24.3 (3.1)	12.0 (2.1)	3.4 (0.6)	4.4 (0.8)	4.9 (0.9)	833	539
Wajir	56.2 (4.7)	17.7 (2.4)	7.8 (1.5)	2.7 (0.4)	2.9 (0.5)	3.0 (0.5)	774	435
Mandera	69.5 (4.9)	27.6 (2.9)	14.1 (2.0)	3.8 (0.5)	5.1 (0.6)	6.0 (0.7)	860	598
Marsabit	55.9 (7.2)	17.3 (3.0)	7.5 (1.9)	1.6 (0.5)	1.7 (0.5)	1.7 (0.5)	446	250
Isiolo	50.1 (6.4)	14.9 (2.7)	6.6 (1.6)	0.8 (0.2)	0.8 (0.2)	0.8 (0.2)	263	132
Meru	17.2 (3.8)	4.3 (1.2)	1.7 (0.7)	1.7 (0.3)	1.4 (0.3)	1.3 (0.3)	1,533	263
Tharaka-Nithi	18.8 (3.7)	4.0 (1.1)	1.4 (0.6)	0.5 (0.1)	0.3 (0.0)	0.3 (0.0)	391	74
Embu	21.8 (4.0)	5.1 (1.2)	1.9 (0.7)	0.8 (0.1)	0.7 (0.1)	0.6 (0.1)	604	132
Kitui	44.4 (4.1)	12.1 (1.6)	4.9 (0.9)	3.2 (0.3)	2.9 (0.3)	2.7 (0.3)	1,129	502
Machakos	22.4 (3.6)	5.5 (1.1)	2.1 (0.6)	2.0 (0.2)	1.7 (0.2)	1.5 (0.2)	1,411	316
Makueni	38.1 (4.4)	10.3 (1.7)	4.1 (0.9)	2.3 (0.2)	2.2 (0.2)	2.0 (0.2)	976	372
Nyandarua	25.4 (3.8)	6.2 (1.3)	2.4 (0.7)	1.0 (0.1)	0.8 (0.1)	0.7 (0.1)	634	161
Nyeri	12.8 (3.1)	2.7 (0.9)	1.0 (0.5)	0.6 (0.1)	0.4 (0.1)	0.4 (0.0)	749	96
Kirinyaga	15.9 (3.5)	3.6 (1.1)	1.4 (0.6)	0.6 (0.1)	0.5 (0.1)	0.4 (0.1)	605	96
Murang'a	19.7 (3.4)	4.8 (1.1)	1.8 (0.6)	1.3 (0.1)	1.1 (0.1)	0.9 (0.1)	1,052	207
Kiambu	17.8 (3.5)	4.3 (1.1)	1.6 (0.5)	2.7 (0.4)	2.2 (0.3)	1.9 (0.3)	2,399	426
Turkana	81.3 (4.0)	45.4 (3.3)	29.5 (2.9)	4.7 (0.8)	9.0 (1.4)	13.4 (1.9)	920	748
West Pokot	57.7 (4.6)	18.6 (2.2)	8.3 (1.3)	2.3 (0.2)	2.5 (0.2)	2.5 (0.3)	618	356
Sambaru	71.3 (4.8)	28.9 (2.9)	14.9 (2.2)	1.4 (0.2)	1.9 (0.3)	2.2 (0.4)	306	218
Trans Nzoia	34.9 (4.6)	9.1 (1.6)	3.5 (0.8)	2.2 (0.3)	1.9 (0.2)	1.7 (0.2)	984	344
Uasin Gishu	38.8 (4.4)	11.4 (1.8)	4.9 (1.0)	2.8 (0.3)	2.8 (0.3)	2.7 (0.3)	1,149	445
Elgeyo/ Marakwet	37.5 (4.8)	10.4 (1.7)	4.2 (0.9)	1.1 (0.1)	1.0 (0.1)	0.9 (0.1)	453	170
Nandi	35.4 (4.2)	8.8 (1.4)	3.4 (0.7)	2.0 (0.2)	1.7 (0.2)	1.5 (0.1)	883	313
Baringo	37.8 (5.1)	9.2 (1.7)	3.5 (1.0)	1.6 (0.3)	1.3 (0.2)	1.1 (0.2)	662	250
Laikipia	30.6 (5.8)	8.2 (2.0)	3.4 (1.1)	1.0 (0.1)	0.9 (0.2)	0.8 (0.2)	510	156
Nakuru	29.1 (4.4)	7.6 (1.5)	2.9 (0.7)	3.9 (0.5)	3.5 (0.5)	3.0 (0.4)	2,125	617
Narok	19.7 (4.0)	4.7 (1.3)	1.8 (0.7)	1.4 (0.2)	1.2 (0.2)	1.0 (0.1)	1,146	226
Kajiado	39.9 (4.9)	12.1 (2.0)	5.1 (1.1)	2.8 (0.3)	2.9 (0.4)	2.8 (0.4)	1,104	441
Kericho	36.7 (4.3)	10.1 (1.5)	4.1 (0.8)	2.1 (0.2)	1.9 (0.2)	1.8 (0.2)	897	329
Bomet	42.8 (4.4)	10.6 (1.6)	4.1 (0.8)	2.4 (0.3)	2.0 (0.3)	1.7 (0.2)	873	374
Kakamega	36.3 (3.8)	9.6 (1.4)	3.8 (0.8)	4.3 (0.3)	3.8 (0.3)	3.5 (0.3)	1,860	676
Vihiga	46.5 (4.5)	13.2 (1.8)	5.5 (1.0)	1.7 (0.2)	1.7 (0.2)	1.6 (0.2)	587	273
Bungoma	34.9 (4.5)	9.0 (1.6)	3.4 (0.9)	3.7 (0.5)	3.2 (0.4)	2.8 (0.4)	1,663	580
Busia	58.7 (4.2)	19.7 (2.0)	8.9 (1.2)	3.3 (0.2)	3.7 (0.3)	3.9 (0.4)	887	521
Siaya	23.7 (3.9)	5.5 (1.2)	2.1 (0.6)	1.5 (0.2)	1.2 (0.1)	1.0 (0.1)	988	234
Kisumu	34.7 (4.6)	9.6 (1.7)	3.9 (1.0)	2.5 (0.2)	2.4 (0.2)	2.2 (0.2)	1,141	396
Homa Bay	29.6 (4.6)	7.4 (1.5)	2.9 (0.8)	2.1 (0.3)	1.8 (0.2)	1.6 (0.2)	1,124	333
Migori	36.3 (4.5)	8.7 (1.5)	3.3 (0.8)	2.5 (0.3)	2.1 (0.2)	1.8 (0.2)	1,107	402
Kisii	41.1 (4.5)	11.4 (1.7)	4.5 (0.9)	3.3 (0.3)	3.1 (0.3)	2.8 (0.3)	1,260	518
Nyamira	34.5 (4.7)	9.2 (1.6)	3.7 (0.9)	1.3 (0.2)	1.2 (0.1)	1.1 (0.1)	603	208
Nairobi City	10.2 (2.5)	2.2 (0.7)	0.8 (0.4)	2.8 (0.4)	2.1 (0.3)	1.7 (0.3)	4,324	440

Annex Table A2: Overall poverty estimates (adult equivalent) by area of residence and county, 2019

Residence/ County	Headcount Rate (%) P _{a=0}	Poverty Gap (%) P _{a=1}	Severity of Poverty (%) P _{a=2}	Contribution to Poverty			Adulte Population (‘000)	Number of Poor- Adulte (‘000)
				Adulte P _{a=0}	Adulte P _{a=1}	Adulte P _{a=2}		
	(Std. errors)	(Std. errors)	(Std. errors)	(Std. errors)	(Std. errors)	(Std. errors)		
National	32.6 (0.7)	9.5 (0.3)	4.1 (0.2)	100.0 0.0	100.0 0.0	100.0 0.0	38,680	12,591
Rural	36.1 (0.8)	10.5 (0.4)	4.6 (0.2)	75.5 (0.9)	75.4 (1.0)	75.7 (1.1)	26,361	9,504
Urban	25.1 (1.4)	7.3 (0.5)	3.1 (0.3)	24.5 (0.9)	24.6 (1.0)	24.3 (1.1)	12,319	3,087
Mombasa	26.5 (3.9)	7.2 (1.3)	2.9 (0.7)	2.1 (0.2)	2.0 (0.3)	1.8 (0.3)	1,019	270
Kwale	40.7 (4.2)	10.5 (1.5)	4.2 (0.9)	2.2 (0.2)	1.9 (0.2)	1.8 (0.2)	677	275
Kilifi	43.7 (5.0)	12.4 (2.0)	5.1 (1.1)	4.0 (0.5)	3.9 (0.5)	3.7 (0.5)	1,148	502
Tana River	61.0 (5.2)	21.6 (3.0)	10.3 (2.0)	1.2 (0.2)	1.4 (0.2)	1.5 (0.3)	240	147
Lamu	30.7 (5.7)	7.8 (2.0)	3.1 (1.1)	0.3 (0.0)	0.2 (0.0)	0.2 (0.0)	117	36
Taita Taveta	32.9 (4.6)	8.9 (1.7)	3.6 (0.9)	0.7 (0.1)	0.7 (0.1)	0.6 (0.1)	277	91
Garissa	64.1 (5.5)	24.1 (3.1)	11.9 (2.1)	3.2 (0.6)	4.1 (0.8)	4.7 (0.9)	628	403
Wajir	56.0 (4.8)	17.6 (2.4)	7.8 (1.5)	2.6 (0.4)	2.8 (0.5)	2.8 (0.5)	574	321
Mandera	68.9 (4.9)	27.2 (2.9)	13.8 (1.9)	3.6 (0.5)	4.9 (0.6)	5.7 (0.7)	662	456
Marsabit	55.3 (7.3)	17.1 (3.0)	7.4 (1.9)	1.6 (0.5)	1.6 (0.5)	1.6 (0.5)	353	195
Isiolo	49.3 (6.4)	14.7 (2.7)	6.5 (1.6)	0.8 (0.2)	0.8 (0.2)	0.9 (0.2)	211	104
Meru	16.9 (3.8)	4.2 (1.2)	1.7 (0.7)	1.7 (0.4)	1.5 (0.3)	1.4 (0.3)	1,288	217
Tharaka-Nithi	18.4 (3.5)	3.9 (1.1)	1.4 (0.6)	0.5 (0.1)	0.4 (0.0)	0.3 (0.0)	329	61
Embu	21.5 (4.0)	5.0 (1.2)	1.9 (0.7)	0.9 (0.1)	0.7 (0.1)	0.6 (0.1)	519	112
Kitui	43.8 (4.0)	11.9 (1.6)	4.8 (0.9)	3.3 (0.3)	3.1 (0.3)	2.8 (0.3)	945	414
Machakos	22.0 (3.5)	5.4 (1.1)	2.1 (0.6)	2.1 (0.2)	1.8 (0.2)	1.6 (0.2)	1,213	267
Makueni	37.2 (4.4)	10.0 (1.6)	4.0 (0.9)	2.5 (0.3)	2.3 (0.3)	2.1 (0.2)	838	312
Nyandarua	24.7 (3.7)	6.0 (1.2)	2.3 (0.7)	1.0 (0.1)	0.9 (0.1)	0.8 (0.1)	525	130
Nyeri	12.3 (2.9)	2.6 (0.8)	0.9 (0.4)	0.6 (0.1)	0.5 (0.1)	0.4 (0.0)	642	79
Kirinyaga	15.6 (3.4)	3.5 (1.0)	1.3 (0.6)	0.6 (0.1)	0.5 (0.1)	0.4 (0.1)	514	80
Murang'a	19.1 (3.2)	4.6 (1.1)	1.8 (0.6)	1.4 (0.1)	1.1 (0.1)	1.0 (0.1)	894	170
Kiambu	17.3 (3.4)	4.2 (1.1)	1.6 (0.5)	2.8 (0.4)	2.4 (0.4)	2.1 (0.3)	2,064	356
Turkana	81.3 (4.0)	45.2 (3.3)	29.4 (2.9)	4.6 (0.8)	8.8 (1.4)	13.1 (1.9)	715	581
West Pokot	56.8 (4.6)	18.2 (2.1)	8.1 (1.3)	2.1 (0.2)	2.3 (0.2)	2.4 (0.2)	466	264
Samburu	70.5 (4.8)	28.4 (2.9)	14.5 (2.1)	1.3 (0.2)	1.7 (0.3)	2.1 (0.3)	226	159
Trans Nzoia	34.2 (4.5)	8.9 (1.5)	3.4 (0.8)	2.2 (0.2)	1.9 (0.2)	1.7 (0.2)	792	271
Uasin Gishu	38.0 (4.4)	11.1 (1.7)	4.7 (1.0)	2.8 (0.3)	2.8 (0.3)	2.8 (0.3)	943	358
Elgeyo/ Marakwet	37.0 (4.7)	10.3 (1.7)	4.2 (0.9)	1.1 (0.1)	1.1 (0.1)	1.0 (0.1)	385	143
Nandi	35.0 (4.1)	8.7 (1.4)	3.3 (0.7)	2.0 (0.2)	1.7 (0.2)	1.5 (0.1)	731	256
Baringo	37.1 (5.2)	8.9 (1.7)	3.4 (0.9)	1.5 (0.3)	1.3 (0.2)	1.1 (0.2)	522	193
Laikipia	29.2 (5.6)	7.7 (1.9)	3.2 (1.0)	1.0 (0.1)	0.9 (0.1)	0.8 (0.1)	429	125
Nakuru	28.3 (4.3)	7.4 (1.4)	2.8 (0.7)	3.9 (0.5)	3.5 (0.5)	3.1 (0.4)	1,751	495
Narok	19.3 (4.0)	4.6 (1.3)	1.8 (0.7)	1.4 (0.2)	1.1 (0.1)	1.0 (0.1)	901	174
Kajiado	38.8 (4.8)	11.7 (2.0)	4.9 (1.1)	2.8 (0.3)	2.9 (0.4)	2.8 (0.4)	898	349
Kericho	36.5 (4.2)	10.0 (1.5)	4.0 (0.8)	2.1 (0.2)	2.0 (0.2)	1.8 (0.2)	733	268
Bomet	42.3 (4.5)	10.5 (1.6)	4.0 (0.8)	2.4 (0.3)	2.0 (0.3)	1.8 (0.3)	715	303
Kakamega	35.6 (3.7)	9.4 (1.4)	3.7 (0.8)	4.2 (0.3)	3.8 (0.3)	3.5 (0.3)	1,493	532
Vihiga	45.8 (4.4)	13.0 (1.8)	5.4 (1.0)	1.8 (0.2)	1.7 (0.2)	1.6 (0.2)	482	221
Bungoma	34.3 (4.4)	8.8 (1.6)	3.4 (0.9)	3.6 (0.5)	3.1 (0.4)	2.8 (0.4)	1,310	449
Busia	58.1 (4.2)	19.4 (2.0)	8.7 (1.2)	3.2 (0.2)	3.7 (0.3)	3.8 (0.4)	700	406
Siaya	23.2 (3.8)	5.4 (1.2)	2.0 (0.7)	1.5 (0.2)	1.2 (0.1)	1.0 (0.1)	801	186
Kisumu	33.7 (4.5)	9.2 (1.7)	3.8 (0.9)	2.5 (0.2)	2.3 (0.2)	2.2 (0.3)	931	313
Homa Bay	28.9 (4.5)	7.2 (1.4)	2.8 (0.8)	2.1 (0.3)	1.8 (0.2)	1.6 (0.2)	898	259
Migori	35.9 (4.4)	8.6 (1.5)	3.3 (0.8)	2.5 (0.3)	2.1 (0.2)	1.8 (0.2)	895	321
Kisii	40.5 (4.4)	11.2 (1.7)	4.5 (0.9)	3.3 (0.3)	3.1 (0.3)	2.9 (0.3)	1,031	418
Nyamira	33.8 (4.6)	9.0 (1.6)	3.6 (0.8)	1.3 (0.2)	1.2 (0.1)	1.1 (0.1)	502	170
Nairobi City	10.1 (2.4)	2.2 (0.7)	0.8 (0.4)	3.0 (0.4)	2.3 (0.3)	1.9 (0.3)	3,755	379

Annex Table A3: Overall poverty estimates (households) by area of residence and county, 2019

Residence / County	Headcount Rate (%)	Poverty Gap (%)	Severity of Poverty (%)	Contribution to Poverty			Number of Households (’000)	Number of Poor Households (’000)
				Households P _{a=0}	Households P _{a=1}	Households P _{a=2}		
	(Std. errors)	(Std. errors)	(Std. errors)	(Std. errors)	(Std. errors)	(Std. errors)		
National	26.6 (0.6)	7.5 (0.2)	3.2 (0.1)	100.0 0.0	100.0 0.0	100.0 0.0	12,041	3,204
Rural	29.4 (0.7)	8.2 (0.3)	3.5 (0.2)	67.7 (0.9)	67.5 (1.0)	67.9 (1.1)	7,377	2,170
Urban	22.2 (1.2)	6.3 (0.4)	2.6 (0.2)	32.3 (0.9)	32.5 (1.0)	32.1 (1.1)	4,664	1,034
Mombasa	24.9 (3.4)	6.7 (1.1)	2.6 (0.5)	2.9 (0.3)	2.8 (0.3)	2.6 (0.3)	376	94
Kwale	34.3 (3.6)	8.6 (1.2)	3.4 (0.7)	1.8 (0.2)	1.7 (0.2)	1.5 (0.2)	173	59
Kilifi	36.9 (4.2)	10.1 (1.5)	4.1 (0.8)	3.4 (0.4)	3.4 (0.4)	3.2 (0.4)	298	110
Tana River	56.8 (5.3)	19.3 (2.7)	9.0 (1.7)	1.2 (0.2)	1.4 (0.2)	1.6 (0.3)	67	38
Lamu	25.3 (4.6)	6.3 (1.5)	2.4 (0.8)	0.3 (0.0)	0.2 (0.0)	0.2 (0.0)	34	9
Taita Taveta	27.3 (3.7)	7.2 (1.3)	2.9 (0.7)	0.8 (0.1)	0.8 (0.1)	0.7 (0.1)	94	26
Garissa	59.7 (5.7)	21.4 (2.9)	10.2 (1.8)	2.6 (0.5)	3.3 (0.7)	3.7 (0.8)	139	83
Wajir	53.6 (4.7)	16.6 (2.3)	7.3 (1.4)	2.1 (0.3)	2.3 (0.4)	2.4 (0.5)	127	68
Mandera	67.3 (4.7)	25.8 (2.7)	12.9 (1.8)	2.6 (0.3)	3.6 (0.4)	4.2 (0.5)	124	83
Marsabit	50.4 (7.3)	15.1 (2.8)	6.4 (1.6)	1.2 (0.4)	1.3 (0.4)	1.3 (0.4)	77	39
Isiolo	44.8 (5.9)	13.2 (2.5)	5.8 (1.4)	0.7 (0.1)	0.8 (0.1)	0.8 (0.1)	53	24
Meru	13.9 (3.0)	3.4 (0.9)	1.3 (0.5)	1.8 (0.3)	1.6 (0.3)	1.5 (0.3)	424	59
Tharaka-Nithi	14.7 (2.9)	3.2 (0.8)	1.1 (0.4)	0.5 (0.1)	0.4 (0.0)	0.3 (0.0)	109	16
Embu	17.6 (3.2)	4.1 (0.9)	1.6 (0.5)	1.0 (0.1)	0.8 (0.1)	0.7 (0.1)	182	32
Kitui	38.2 (3.6)	10.0 (1.3)	3.9 (0.7)	3.1 (0.2)	2.9 (0.2)	2.7 (0.2)	262	100
Machakos	18.3 (3.2)	4.4 (0.9)	1.6 (0.5)	2.3 (0.2)	1.9 (0.2)	1.7 (0.2)	399	73
Makueni	30.5 (3.8)	7.9 (1.3)	3.1 (0.7)	2.3 (0.2)	2.2 (0.2)	2.0 (0.2)	244	74
Nyandarua	20.9 (3.0)	5.0 (0.9)	1.9 (0.5)	1.2 (0.1)	1.0 (0.1)	0.9 (0.1)	178	37
Nyeri	10.2 (2.2)	2.2 (0.6)	0.8 (0.3)	0.8 (0.1)	0.6 (0.1)	0.5 (0.1)	245	25
Kirinyaga	13.5 (2.7)	3.1 (0.8)	1.2 (0.4)	0.9 (0.1)	0.7 (0.1)	0.6 (0.1)	204	28
Murang’a	15.7 (2.6)	3.7 (0.8)	1.4 (0.4)	1.6 (0.1)	1.3 (0.1)	1.1 (0.1)	317	50
Kiambu	15.5 (3.0)	3.7 (0.9)	1.4 (0.4)	3.8 (0.5)	3.3 (0.5)	2.9 (0.5)	792	123
Turkana	78.7 (3.8)	41.6 (2.9)	26.3 (2.4)	4.0 (0.6)	7.5 (1.1)	11.2 (1.5)	163	128
West Pokot	52.2 (4.5)	16.4 (2.0)	7.2 (1.2)	1.9 (0.2)	2.1 (0.2)	2.2 (0.2)	116	60
Samburu	65.5 (4.6)	24.8 (2.5)	12.2 (1.7)	1.3 (0.2)	1.8 (0.2)	2.0 (0.3)	64	42
Trans Nzoia	28.8 (3.8)	7.5 (1.2)	2.9 (0.6)	2.0 (0.2)	1.9 (0.2)	1.7 (0.2)	223	64
Uasin Gishu	35.8 (4.3)	10.4 (1.6)	4.4 (0.9)	3.4 (0.3)	3.5 (0.3)	3.5 (0.4)	301	108
Elgeyo/ Marakwet	31.2 (4.4)	8.5 (1.5)	3.5 (0.8)	1.0 (0.1)	0.9 (0.1)	0.9 (0.1)	99	31
Nandi	29.5 (3.7)	7.2 (1.2)	2.7 (0.6)	1.8 (0.2)	1.6 (0.1)	1.4 (0.1)	199	59
Baringo	30.9 (4.2)	7.4 (1.4)	2.8 (0.8)	1.4 (0.2)	1.2 (0.2)	1.1 (0.2)	142	44
Laikipia	23.0 (5.0)	5.8 (1.5)	2.3 (0.8)	1.0 (0.1)	0.9 (0.1)	0.9 (0.1)	146	34
Nakuru	23.3 (3.5)	6.1 (1.1)	2.3 (0.5)	4.4 (0.4)	4.0 (0.5)	3.6 (0.4)	598	140
Narok	14.7 (3.1)	3.5 (0.9)	1.4 (0.5)	1.1 (0.1)	0.9 (0.1)	0.8 (0.1)	238	35
Kajiado	35.8 (4.5)	10.6 (1.8)	4.4 (0.9)	3.5 (0.4)	3.7 (0.4)	3.6 (0.4)	313	112
Kericho	30.2 (3.9)	8.1 (1.3)	3.2 (0.7)	1.9 (0.2)	1.9 (0.2)	1.7 (0.2)	206	62
Bomet	35.5 (4.0)	8.3 (1.3)	3.1 (0.6)	2.1 (0.3)	1.7 (0.2)	1.5 (0.2)	187	67
Kakamega	30.4 (3.1)	8.1 (1.1)	3.3 (0.7)	4.1 (0.2)	3.9 (0.3)	3.7 (0.3)	432	131
Vihiga	39.7 (4.0)	10.9 (1.5)	4.4 (0.8)	1.8 (0.2)	1.7 (0.2)	1.7 (0.2)	143	57
Bungoma	29.6 (3.7)	7.5 (1.3)	2.9 (0.7)	3.3 (0.4)	3.0 (0.3)	2.7 (0.3)	358	106
Busia	52.5 (3.7)	16.6 (1.6)	7.3 (0.9)	3.2 (0.2)	3.7 (0.2)	3.8 (0.3)	198	104
Siaya	19.6 (3.1)	4.6 (0.9)	1.7 (0.5)	1.5 (0.1)	1.3 (0.1)	1.1 (0.1)	249	49
Kisumu	29.7 (4.0)	8.2 (1.5)	3.3 (0.8)	2.8 (0.2)	2.7 (0.2)	2.6 (0.2)	297	88
Homa Bay	24.0 (3.5)	6.0 (1.1)	2.4 (0.6)	1.9 (0.2)	1.7 (0.2)	1.6 (0.2)	260	62
Migori	32.3 (4.0)	7.9 (1.3)	3.0 (0.7)	2.4 (0.3)	2.1 (0.2)	1.9 (0.2)	238	77
Kisii	34.9 (3.8)	9.7 (1.4)	3.9 (0.8)	3.3 (0.3)	3.3 (0.3)	3.1 (0.3)	307	107
Nyamira	30.2 (4.0)	8.1 (1.4)	3.3 (0.7)	1.4 (0.2)	1.4 (0.2)	1.3 (0.1)	150	45
Nairobi City	9.6 (2.1)	2.1 (0.6)	0.8 (0.3)	4.5 (0.5)	3.5 (0.4)	3.0 (0.4)	1,494	143

Annex Table B1: Food poverty estimates (individuals) by residence and county, 2019

Residence / County	Headcount Rate (%)	Poverty Gap (%)	Severity of Poverty (%)	Contribution to Poverty			Population (000)	Number of Poor (000)
				P _{α=0}	P _{α=1}	P _{α=2}		
	(Std. errors)	(Std. errors)	(Std. errors)	(Std. errors)	(Std. errors)	(Std. errors)		
National	30.5 (0.7)	9.6 (0.3)	4.4 (0.2)	100.0 0.0	100.0 0.0	100.0 0.0	47,105	14,351
Rural	34.0 (0.8)	10.8 (0.4)	5.0 (0.2)	77.2 (0.8)	78.2 (0.8)	78.9 (0.9)	32,552	11,075
Urban	22.5 (1.3)	6.8 (0.5)	3.0 (0.3)	22.8 (0.8)	21.8 (0.8)	21.1 (0.9)	14,553	3,276
Mombasa	22.2 (3.7)	6.5 (1.3)	2.9 (0.8)	1.8 (0.2)	1.7 (0.2)	1.6 (0.2)	1,189	263
Kwale	34.9 (4.1)	10.3 (1.7)	4.5 (1.0)	2.1 (0.2)	2.0 (0.2)	1.9 (0.2)	858	300
Kilifi	45.1 (4.8)	15.0 (2.2)	7.0 (1.4)	4.5 (0.5)	4.8 (0.6)	4.9 (0.6)	1,440	650
Tana River	50.7 (5.6)	17.7 (2.8)	8.5 (1.8)	1.1 (0.2)	1.2 (0.2)	1.3 (0.2)	313	159
Lamu	26.8 (5.3)	7.8 (2.1)	3.4 (1.3)	0.3 (0.0)	0.2 (0.0)	0.2 (0.0)	138	37
Taita Taveta	33.1 (5.2)	10.3 (2.1)	4.6 (1.2)	0.8 (0.1)	0.8 (0.1)	0.7 (0.1)	334	110
Garissa	48.0 (5.9)	16.4 (2.8)	8.0 (1.8)	2.8 (0.5)	3.0 (0.5)	3.2 (0.6)	833	400
Wajir	45.6 (4.9)	14.6 (2.4)	6.7 (1.5)	2.5 (0.4)	2.5 (0.4)	2.5 (0.4)	774	353
Mandera	60.0 (5.1)	23.0 (2.7)	11.7 (1.8)	3.6 (0.5)	4.4 (0.6)	4.8 (0.7)	860	516
Marsabit	40.8 (6.4)	12.9 (3.1)	5.9 (2.1)	1.3 (0.4)	1.3 (0.4)	1.3 (0.4)	446	182
Isiolo	37.3 (6.6)	11.5 (2.6)	5.1 (1.6)	0.7 (0.1)	0.7 (0.1)	0.6 (0.1)	263	98
Meru	15.3 (3.7)	4.2 (1.3)	1.8 (0.7)	1.6 (0.3)	1.4 (0.3)	1.3 (0.3)	1,533	234
Tharaka-Nithi	23.6 (4.2)	6.7 (1.5)	2.8 (0.9)	0.6 (0.1)	0.6 (0.1)	0.5 (0.1)	391	92
Embu	23.5 (4.4)	6.8 (1.6)	3.0 (0.9)	1.0 (0.1)	0.9 (0.1)	0.9 (0.1)	604	142
Kitui	38.6 (4.1)	11.7 (1.8)	5.2 (1.1)	3.0 (0.3)	2.9 (0.3)	2.8 (0.3)	1,129	436
Machakos	25.8 (3.5)	7.7 (1.4)	3.4 (0.8)	2.5 (0.2)	2.4 (0.3)	2.3 (0.3)	1,411	364
Makueni	34.3 (4.2)	10.4 (1.7)	4.6 (1.0)	2.3 (0.2)	2.3 (0.2)	2.2 (0.2)	976	335
Nyandarua	23.4 (3.7)	6.7 (1.4)	2.9 (0.9)	1.0 (0.1)	0.9 (0.1)	0.9 (0.1)	634	148
Nyeri	14.7 (3.2)	3.9 (1.2)	1.7 (0.7)	0.8 (0.1)	0.7 (0.1)	0.6 (0.1)	749	110
Kirinyaga	16.6 (3.4)	4.5 (1.2)	1.9 (0.8)	0.7 (0.1)	0.6 (0.1)	0.6 (0.1)	605	100
Murang'a	21.6 (3.7)	6.2 (1.3)	2.7 (0.8)	1.6 (0.2)	1.4 (0.2)	1.4 (0.2)	1,052	227
Kiambu	20.1 (3.7)	5.6 (1.3)	2.4 (0.7)	3.4 (0.3)	3.0 (0.3)	2.8 (0.3)	2,399	481
Turkana	71.4 (4.6)	35.7 (3.3)	22.0 (2.7)	4.6 (0.8)	7.3 (1.2)	9.7 (1.6)	920	657
West Pokot	51.1 (4.6)	17.4 (2.1)	8.2 (1.3)	2.2 (0.2)	2.4 (0.2)	2.4 (0.2)	618	316
Samburu	58.4 (5.1)	22.0 (3.1)	11.1 (2.2)	1.2 (0.2)	1.5 (0.2)	1.6 (0.3)	306	179
Trans Nzoia	33.5 (4.6)	9.9 (1.7)	4.3 (1.0)	2.3 (0.2)	2.2 (0.2)	2.0 (0.2)	984	330
Uasin Gishu	36.0 (4.4)	11.4 (1.8)	5.3 (1.1)	2.9 (0.3)	2.9 (0.3)	2.9 (0.3)	1,149	413
Elgeyo/Marakwet	33.0 (4.5)	9.8 (1.8)	4.3 (1.0)	1.0 (0.1)	1.0 (0.1)	0.9 (0.1)	453	149
Nandi	31.1 (4.1)	9.0 (1.6)	3.9 (0.9)	1.9 (0.2)	1.8 (0.2)	1.6 (0.1)	883	274
Baringo	31.2 (4.8)	8.7 (1.8)	3.6 (1.1)	1.4 (0.2)	1.3 (0.2)	1.2 (0.2)	662	207
Laikipia	23.2 (5.1)	6.7 (1.9)	3.0 (1.1)	0.8 (0.1)	0.8 (0.1)	0.7 (0.1)	510	118
Nakuru	23.7 (3.9)	6.9 (1.5)	3.0 (0.9)	3.5 (0.4)	3.2 (0.4)	3.1 (0.4)	2,125	505
Narok	23.0 (4.4)	6.8 (1.6)	3.1 (1.0)	1.8 (0.2)	1.7 (0.2)	1.7 (0.2)	1,146	263
Kajiado	36.6 (4.9)	11.6 (2.0)	5.3 (1.2)	2.8 (0.3)	2.8 (0.3)	2.8 (0.3)	1,104	404
Kericho	32.8 (4.2)	9.7 (1.6)	4.2 (1.0)	2.0 (0.2)	1.9 (0.2)	1.8 (0.2)	897	294
Bomet	31.9 (3.9)	9.0 (1.5)	3.9 (0.9)	1.9 (0.2)	1.7 (0.2)	1.6 (0.2)	873	278
Kakamega	30.2 (3.7)	8.8 (1.5)	3.8 (0.9)	3.9 (0.3)	3.6 (0.3)	3.4 (0.3)	1,860	562
Vihiga	38.2 (4.4)	11.6 (1.8)	5.2 (1.1)	1.6 (0.2)	1.5 (0.2)	1.5 (0.2)	587	224
Bungoma	31.5 (4.1)	9.5 (1.9)	4.3 (1.3)	3.6 (0.5)	3.5 (0.6)	3.5 (0.7)	1,663	524
Busia	50.0 (4.4)	16.9 (2.0)	7.8 (1.3)	3.1 (0.2)	3.3 (0.3)	3.3 (0.3)	887	444
Siaya	22.1 (3.8)	6.1 (1.4)	2.6 (0.8)	1.5 (0.2)	1.3 (0.1)	1.2 (0.1)	988	219
Kisumu	33.9 (4.5)	10.5 (1.9)	4.7 (1.2)	2.7 (0.2)	2.7 (0.2)	2.6 (0.2)	1,141	387
Homa Bay	22.7 (4.2)	6.4 (1.5)	2.8 (0.9)	1.8 (0.2)	1.6 (0.2)	1.5 (0.2)	1,124	256
Migori	31.2 (4.2)	8.7 (1.6)	3.7 (0.9)	2.4 (0.3)	2.1 (0.2)	2.0 (0.2)	1,107	345
Kisii	39.7 (4.3)	11.9 (1.9)	5.2 (1.1)	3.5 (0.3)	3.3 (0.3)	3.1 (0.3)	1,260	500
Nyamira	35.9 (4.6)	11.0 (1.8)	4.9 (1.1)	1.5 (0.2)	1.5 (0.2)	1.4 (0.2)	603	216
Nairobi City	12.7 (2.7)	3.4 (0.9)	1.4 (0.5)	3.8 (0.5)	3.3 (0.4)	2.9 (0.4)	4,324	549

Annex Table B2: Food poverty estimates (adult equivalent) by residence and county, 2019

Residence/ County	Headcount Rate (% P _{a=0}) (Std. errors)	Poverty Gap (% P _{a=1}) (Std. errors)	Severity of Poverty (% P _{a=2}) (Std. errors)	Contribution to Poverty			Adulteq Population (000)	Number of Poor- Adulteq (000)
				Adulteq P _{a=0} (Std. errors)	Adulteq P _{a=1} (Std. errors)	Adulteq P _{a=2} (Std. errors)		
National	29.6 (0.7)	9.3 (0.3)	4.3 (0.2)	100.0 0.0	100.0 0.0	100.0 0.0	38,680	11,459
Rural	33.2 (0.8)	10.5 (0.4)	4.9 (0.2)	76.4 (0.8)	77.4 (0.8)	78.1 (0.9)	26,361	8,758
Urban	21.9 (1.3)	6.6 (0.5)	2.9 (0.3)	23.6 (0.8)	22.6 (0.8)	21.9 (0.9)	12,319	2,701
Mombasa	21.5 (3.6)	6.3 (1.3)	2.8 (0.8)	1.9 (0.2)	1.8 (0.2)	1.7 (0.2)	1,019	219
Kwale	34.3 (4.0)	10.1 (1.6)	4.4 (1.0)	2.0 (0.2)	1.9 (0.2)	1.8 (0.2)	677	232
Kilifi	44.5 (4.7)	14.7 (2.2)	6.9 (1.4)	4.5 (0.5)	4.7 (0.6)	4.8 (0.6)	1,148	511
Tana River	50.0 (5.6)	17.4 (2.8)	8.4 (1.8)	1.0 (0.1)	1.2 (0.2)	1.2 (0.2)	240	120
Lamu	26.6 (5.2)	7.7 (2.1)	3.4 (1.3)	0.3 (0.0)	0.3 (0.0)	0.2 (0.0)	117	31
Taita Taveta	31.8 (4.8)	9.8 (1.9)	4.4 (1.1)	0.8 (0.1)	0.8 (0.1)	0.7 (0.1)	277	88
Garissa	47.5 (5.8)	16.3 (2.8)	7.9 (1.9)	2.6 (0.5)	2.9 (0.5)	3.0 (0.6)	628	299
Wajir	45.6 (5.0)	14.6 (2.4)	6.7 (1.5)	2.3 (0.4)	2.3 (0.4)	2.3 (0.4)	574	262
Mandera	59.4 (5.2)	22.6 (2.7)	11.4 (1.8)	3.4 (0.5)	4.2 (0.6)	4.6 (0.7)	662	393
Marsabit	40.1 (6.4)	12.7 (3.1)	5.8 (2.1)	1.2 (0.4)	1.3 (0.4)	1.2 (0.4)	353	142
Isiolo	36.8 (6.6)	11.3 (2.6)	5.1 (1.5)	0.7 (0.1)	0.7 (0.1)	0.6 (0.1)	211	78
Meru	15.0 (3.6)	4.2 (1.3)	1.8 (0.7)	1.7 (0.3)	1.5 (0.3)	1.4 (0.3)	1,288	193
Tharaka-Nithi	23.2 (4.1)	6.5 (1.5)	2.7 (0.9)	0.7 (0.1)	0.6 (0.1)	0.5 (0.1)	329	76
Embu	23.2 (4.4)	6.7 (1.6)	2.9 (0.9)	1.1 (0.1)	1.0 (0.1)	0.9 (0.1)	519	120
Kitui	37.9 (4.1)	11.5 (1.8)	5.1 (1.1)	3.1 (0.3)	3.0 (0.3)	2.9 (0.3)	945	358
Machakos	25.3 (3.5)	7.5 (1.4)	3.3 (0.8)	2.7 (0.2)	2.6 (0.3)	2.5 (0.3)	1,213	306
Makueni	33.5 (4.1)	10.2 (1.7)	4.5 (1.0)	2.5 (0.2)	2.4 (0.2)	2.3 (0.2)	838	281
Nyandarua	22.8 (3.6)	6.5 (1.4)	2.8 (0.8)	1.0 (0.1)	1.0 (0.1)	0.9 (0.1)	525	120
Nyeri	14.3 (3.1)	3.8 (1.1)	1.6 (0.6)	0.8 (0.1)	0.7 (0.1)	0.6 (0.1)	642	92
Kirinyaga	16.3 (3.3)	4.4 (1.2)	1.9 (0.7)	0.7 (0.1)	0.6 (0.1)	0.6 (0.1)	514	84
Murang'a	20.9 (3.5)	6.0 (1.3)	2.7 (0.8)	1.6 (0.2)	1.5 (0.2)	1.4 (0.2)	894	187
Kiambu	19.6 (3.7)	5.5 (1.2)	2.3 (0.7)	3.5 (0.4)	3.2 (0.3)	2.9 (0.3)	2,064	405
Turkana	71.1 (4.6)	35.5 (3.4)	21.9 (2.8)	4.4 (0.8)	7.1 (1.2)	9.5 (1.6)	715	508
West Pokot	50.4 (4.6)	17.2 (2.1)	8.1 (1.3)	2.0 (0.2)	2.2 (0.2)	2.3 (0.2)	466	235
Samburu	57.5 (5.1)	21.6 (3.0)	10.9 (2.1)	1.1 (0.2)	1.4 (0.2)	1.5 (0.2)	226	130
Trans Nzoia	33.0 (4.6)	9.8 (1.7)	4.3 (1.0)	2.3 (0.2)	2.2 (0.2)	2.0 (0.2)	792	261
Uasin Gishu	35.4 (4.4)	11.2 (1.8)	5.2 (1.1)	2.9 (0.3)	3.0 (0.3)	3.0 (0.3)	943	334
Elgeyo/ Marakwet	32.5 (4.5)	9.7 (1.7)	4.2 (1.0)	1.1 (0.1)	1.0 (0.1)	1.0 (0.1)	385	125
Nandi	30.8 (4.1)	8.9 (1.6)	3.8 (0.9)	2.0 (0.2)	1.8 (0.2)	1.7 (0.2)	731	225
Baringo	30.6 (4.8)	8.5 (1.8)	3.6 (1.1)	1.4 (0.2)	1.2 (0.2)	1.1 (0.2)	522	159
Laikipia	22.3 (5.0)	6.4 (1.8)	2.9 (1.1)	0.8 (0.1)	0.8 (0.1)	0.7 (0.1)	429	96
Nakuru	23.3 (3.8)	6.8 (1.5)	3.0 (0.9)	3.6 (0.4)	3.3 (0.4)	3.2 (0.4)	1,751	407
Narok	22.6 (4.3)	6.7 (1.6)	3.0 (1.0)	1.8 (0.2)	1.7 (0.2)	1.6 (0.2)	901	203
Kajiado	35.7 (4.8)	11.2 (2.0)	5.1 (1.2)	2.8 (0.3)	2.8 (0.3)	2.8 (0.3)	898	321
Kericho	32.6 (4.2)	9.7 (1.6)	4.2 (1.0)	2.1 (0.2)	2.0 (0.2)	1.9 (0.2)	733	239
Bomet	31.7 (3.9)	9.0 (1.5)	3.8 (0.9)	2.0 (0.2)	1.8 (0.2)	1.7 (0.2)	715	226
Kakamega	29.8 (3.6)	8.6 (1.5)	3.7 (0.9)	3.9 (0.3)	3.6 (0.3)	3.4 (0.3)	1,493	444
Vihiga	37.6 (4.4)	11.4 (1.8)	5.0 (1.1)	1.6 (0.2)	1.5 (0.2)	1.5 (0.2)	482	181
Bungoma	30.9 (4.1)	9.3 (1.8)	4.2 (1.2)	3.5 (0.5)	3.4 (0.5)	3.3 (0.6)	1,310	405
Busia	49.4 (4.4)	16.6 (2.0)	7.7 (1.3)	3.0 (0.2)	3.2 (0.3)	3.3 (0.3)	700	346
Siaya	21.8 (3.7)	6.0 (1.4)	2.6 (0.8)	1.5 (0.2)	1.4 (0.1)	1.3 (0.1)	801	174
Kisumu	33.1 (4.4)	10.2 (1.9)	4.6 (1.2)	2.7 (0.2)	2.7 (0.2)	2.6 (0.2)	931	309
Homa Bay	22.3 (4.1)	6.3 (1.5)	2.7 (0.9)	1.7 (0.2)	1.6 (0.2)	1.5 (0.2)	898	200
Migori	30.9 (4.2)	8.6 (1.6)	3.6 (0.9)	2.4 (0.3)	2.1 (0.2)	2.0 (0.2)	895	276
Kisii	39.1 (4.3)	11.7 (1.8)	5.1 (1.1)	3.5 (0.3)	3.4 (0.3)	3.2 (0.3)	1,031	404
Nyamira	35.3 (4.5)	10.9 (1.8)	4.8 (1.0)	1.5 (0.2)	1.5 (0.2)	1.5 (0.2)	502	177
Nairobi City	12.7 (2.7)	3.4 (0.9)	1.4 (0.5)	4.2 (0.5)	3.6 (0.5)	3.2 (0.5)	3,755	476

Annex Table B3: Food poverty estimates (households) by residence and county, 2019

Residence / County	Headcount Rate (%) (Std. errors)	Poverty Gap (%) (Std. errors)	Severity of Poverty (%) (Std. errors)	Contribution to Poverty			Number of Households (‘000)	Number of Poor Households (‘000)
				Households	Households	Households		
				P _{a=0} (Std. errors)	P _{a=1} (Std. errors)	P _{a=2} (Std. errors)		
National	23.9 (0.6)	7.2 (0.2)	3.3 (0.1)	100.0 0.0	100.0 0.0	100.0 0.0	12,041	2,872
Rural	26.5 (0.7)	8.1 (0.3)	3.7 (0.2)	68.1 (0.9)	69.0 (0.9)	69.5 (1.0)	7,377	1,957
Urban	19.6 (1.2)	5.8 (0.4)	2.6 (0.2)	31.9 (0.9)	31.0 (0.9)	30.5 (1.0)	4,664	916
Mombasa	19.5 (3.0)	5.7 (1.1)	2.5 (0.7)	2.5 (0.2)	2.4 (0.2)	2.4 (0.2)	376	73
Kwale	27.6 (3.2)	7.9 (1.2)	3.4 (0.7)	1.7 (0.2)	1.6 (0.1)	1.5 (0.1)	173	48
Kilifi	36.4 (4.0)	11.6 (1.7)	5.3 (1.0)	3.8 (0.4)	4.0 (0.5)	4.0 (0.5)	298	108
Tana River	44.9 (5.6)	15.2 (2.6)	7.3 (1.6)	1.0 (0.2)	1.2 (0.2)	1.2 (0.2)	67	30
Lamu	21.4 (4.0)	6.1 (1.6)	2.7 (0.9)	0.3 (0.0)	0.2 (0.0)	0.2 (0.0)	34	7
Taita Taveta	24.6 (3.6)	7.4 (1.4)	3.3 (0.8)	0.8 (0.1)	0.8 (0.1)	0.8 (0.1)	94	23
Garissa	41.9 (5.8)	13.7 (2.4)	6.4 (1.5)	2.0 (0.4)	2.2 (0.4)	2.3 (0.4)	139	58
Wajir	42.1 (4.8)	13.4 (2.2)	6.1 (1.4)	1.9 (0.3)	1.9 (0.3)	1.9 (0.3)	127	53
Mandera	55.9 (4.8)	20.6 (2.4)	10.2 (1.6)	2.4 (0.3)	2.9 (0.4)	3.2 (0.4)	124	69
Marsabit	35.5 (6.1)	11.1 (2.8)	5.1 (1.9)	0.9 (0.3)	1.0 (0.3)	1.0 (0.3)	77	27
Isiolo	32.3 (5.6)	9.8 (2.2)	4.4 (1.3)	0.6 (0.1)	0.6 (0.1)	0.6 (0.1)	53	17
Meru	12.1 (2.8)	3.3 (0.9)	1.4 (0.5)	1.8 (0.3)	1.6 (0.3)	1.5 (0.3)	424	51
Tharaka-Nithi	18.4 (3.3)	5.1 (1.1)	2.1 (0.6)	0.7 (0.1)	0.6 (0.1)	0.6 (0.1)	109	20
Embu	18.2 (3.2)	5.2 (1.1)	2.3 (0.7)	1.2 (0.1)	1.1 (0.1)	1.1 (0.1)	182	33
Kitui	31.9 (3.6)	9.4 (1.4)	4.1 (0.9)	2.9 (0.2)	2.8 (0.2)	2.7 (0.2)	262	84
Machakos	20.0 (2.9)	5.8 (1.0)	2.5 (0.6)	2.8 (0.2)	2.6 (0.2)	2.5 (0.2)	399	80
Makueni	26.4 (3.4)	7.8 (1.3)	3.4 (0.8)	2.2 (0.2)	2.2 (0.2)	2.1 (0.2)	244	64
Nyandarua	18.8 (2.9)	5.2 (1.1)	2.3 (0.7)	1.2 (0.1)	1.1 (0.1)	1.0 (0.1)	178	33
Nyeri	11.5 (2.3)	3.0 (0.8)	1.3 (0.5)	1.0 (0.1)	0.9 (0.1)	0.8 (0.1)	245	28
Kirinyaga	13.8 (2.6)	3.7 (0.9)	1.6 (0.6)	1.0 (0.1)	0.9 (0.1)	0.9 (0.1)	204	28
Murang’a	16.7 (2.7)	4.7 (1.0)	2.1 (0.6)	1.9 (0.2)	1.7 (0.2)	1.7 (0.2)	317	53
Kiambu	17.3 (3.3)	4.8 (1.1)	2.1 (0.6)	4.8 (0.5)	4.4 (0.4)	4.1 (0.4)	792	137
Turkana	66.1 (4.4)	31.4 (2.9)	18.8 (2.3)	3.7 (0.6)	5.9 (0.9)	7.7 (1.1)	163	107
West Pokot	44.7 (4.5)	14.9 (1.9)	6.9 (1.1)	1.8 (0.2)	2.0 (0.2)	2.0 (0.2)	116	52
Samburu	51.2 (4.8)	18.2 (2.5)	8.9 (1.7)	1.1 (0.2)	1.3 (0.2)	1.4 (0.2)	64	33
Trans Nzoia	27.2 (3.8)	8.0 (1.3)	3.5 (0.7)	2.1 (0.2)	2.0 (0.2)	2.0 (0.2)	223	61
Uasin Gishu	31.9 (4.0)	10.0 (1.5)	4.6 (0.9)	3.3 (0.3)	3.5 (0.3)	3.5 (0.3)	301	96
Elgeyo/ Marakwet	26.5 (3.9)	7.8 (1.4)	3.4 (0.9)	0.9 (0.1)	0.9 (0.1)	0.9 (0.1)	99	26
Nandi	25.0 (3.5)	7.1 (1.2)	3.1 (0.7)	1.7 (0.2)	1.6 (0.1)	1.5 (0.1)	199	50
Baringo	25.1 (3.9)	6.9 (1.4)	2.9 (0.8)	1.2 (0.2)	1.1 (0.1)	1.0 (0.1)	142	36
Laikipia	17.4 (4.1)	4.9 (1.4)	2.2 (0.8)	0.9 (0.1)	0.8 (0.1)	0.8 (0.1)	146	25
Nakuru	19.0 (3.0)	5.6 (1.2)	2.6 (0.8)	3.9 (0.4)	3.8 (0.4)	3.9 (0.5)	598	113
Narok	17.5 (3.4)	5.1 (1.2)	2.3 (0.7)	1.5 (0.1)	1.4 (0.1)	1.4 (0.1)	238	42
Kajiado	32.6 (4.5)	10.0 (1.8)	4.5 (1.0)	3.5 (0.3)	3.6 (0.3)	3.5 (0.4)	313	102
Kericho	26.6 (3.6)	7.7 (1.3)	3.3 (0.8)	1.9 (0.2)	1.8 (0.2)	1.7 (0.2)	206	55
Bomet	24.9 (3.1)	6.9 (1.2)	3.0 (0.7)	1.6 (0.2)	1.5 (0.2)	1.4 (0.1)	187	47
Kakamega	24.9 (2.9)	7.2 (1.1)	3.2 (0.7)	3.8 (0.2)	3.6 (0.2)	3.5 (0.2)	432	108
Vihiga	31.0 (3.6)	9.1 (1.4)	4.0 (0.8)	1.5 (0.1)	1.5 (0.2)	1.5 (0.2)	143	44
Bungoma	25.9 (3.3)	7.6 (1.4)	3.4 (0.9)	3.2 (0.4)	3.1 (0.4)	3.1 (0.5)	358	93
Busia	42.4 (3.7)	13.7 (1.5)	6.2 (0.9)	2.9 (0.2)	3.1 (0.2)	3.1 (0.2)	198	84
Siaya	17.5 (2.8)	4.9 (1.0)	2.1 (0.6)	1.5 (0.1)	1.4 (0.1)	1.3 (0.1)	249	44
Kisumu	28.8 (3.8)	8.7 (1.6)	3.9 (0.9)	3.0 (0.2)	3.0 (0.2)	2.9 (0.2)	297	85
Homa Bay	18.1 (3.0)	5.1 (1.1)	2.2 (0.6)	1.6 (0.2)	1.5 (0.2)	1.5 (0.2)	260	47
Migori	26.8 (3.5)	7.4 (1.3)	3.2 (0.7)	2.2 (0.2)	2.0 (0.2)	1.9 (0.2)	238	64
Kisii	33.0 (3.7)	9.7 (1.5)	4.2 (0.9)	3.5 (0.3)	3.4 (0.3)	3.3 (0.3)	307	101
Nyamira	30.7 (3.9)	9.3 (1.5)	4.2 (0.9)	1.6 (0.2)	1.6 (0.2)	1.6 (0.2)	150	46
Nairobi City	12.3 (2.3)	3.3 (0.8)	1.4 (0.4)	6.4 (0.7)	5.7 (0.7)	5.3 (0.7)	1,494	184

Annex Table C1: Hardcore poverty estimates (individual) by residence and county, 2019

Residence / County	Headcount Rate (%)	Poverty Gap (%)	Severity of Poverty (%)	Contribution to Poverty			Population (000)	Number of Poor (000)
	$P_{\alpha=0}$	$P_{\alpha=1}$	$P_{\alpha=2}$	Individuals	Individuals	Individuals		
	(Std. errors)	(Std. errors)	(Std. errors)	$P_{\alpha=0}$ (Std. errors)	$P_{\alpha=1}$ (Std. errors)	$P_{\alpha=2}$ (Std. errors)		
National	8.3 (0.5)	2.2 (0.2)	0.9 (0.1)	100.0 0.0	100.0 0.0	100.0 0.0	47,105	3,927
Rural	10.9 (0.6)	2.9 (0.2)	1.2 (0.1)	90.0 (0.7)	91.6 (0.7)	92.9 (0.7)	32,552	3,536
Urban	2.7 (0.4)	0.6 (0.1)	0.2 (0.1)	10.0 (0.7)	8.4 (0.7)	7.1 (0.7)	14,553	391
Mombasa	2.1 (1.2)	0.4 (0.3)	0.1 (0.1)	0.6 (0.1)	0.5 (0.1)	0.3 (0.1)	1,189	25
Kwale	8.9 (2.6)	2.1 (0.8)	0.8 (0.5)	1.9 (0.3)	1.8 (0.3)	1.6 (0.3)	858	76
Kilifi	9.6 (2.9)	2.2 (0.9)	0.8 (0.5)	3.5 (0.5)	3.0 (0.5)	2.8 (0.6)	1,440	139
Tana River	20.9 (5.1)	5.7 (1.8)	2.3 (0.9)	1.7 (0.3)	1.7 (0.4)	1.7 (0.4)	313	65
Lamu	5.0 (2.9)	1.2 (0.9)	0.5 (0.5)	0.2 (0.0)	0.2 (0.0)	0.2 (0.0)	138	7
Taita Taveta	6.8 (3.0)	1.3 (0.7)	0.4 (0.3)	0.6 (0.1)	0.4 (0.1)	0.3 (0.1)	334	23
Garissa	26.8 (5.5)	7.5 (2.0)	3.1 (1.1)	5.7 (1.2)	6.0 (1.3)	5.9 (1.3)	833	224
Wajir	15.2 (3.7)	3.5 (1.1)	1.3 (0.5)	3.0 (0.5)	2.7 (0.5)	2.3 (0.4)	774	117
Mandera	29.5 (4.7)	8.5 (1.8)	3.5 (0.9)	6.4 (0.8)	7.1 (1.0)	6.9 (1.0)	860	253
Marsabit	15.6 (5.7)	3.8 (1.9)	1.4 (0.9)	1.8 (0.7)	1.6 (0.6)	1.5 (0.6)	446	70
Isiolo	9.4 (3.9)	2.3 (1.2)	0.9 (0.6)	0.6 (0.2)	0.6 (0.1)	0.5 (0.1)	263	25
Meru	3.2 (1.7)	0.9 (0.6)	0.4 (0.3)	1.3 (0.3)	1.3 (0.3)	1.3 (0.3)	1,533	50
Tharaka-Nithi	3.1 (1.7)	0.6 (0.5)	0.2 (0.3)	0.3 (0.0)	0.2 (0.0)	0.2 (0.0)	391	12
Embu	3.8 (1.8)	0.9 (0.6)	0.4 (0.3)	0.6 (0.1)	0.5 (0.1)	0.5 (0.1)	604	23
Kitui	11.4 (2.7)	2.5 (0.8)	0.9 (0.4)	3.3 (0.3)	2.8 (0.3)	2.3 (0.3)	1,129	129
Machakos	4.1 (1.6)	0.9 (0.5)	0.4 (0.3)	1.5 (0.2)	1.3 (0.2)	1.2 (0.2)	1,411	59
Makueni	8.7 (2.7)	1.9 (0.7)	0.7 (0.4)	2.2 (0.3)	1.8 (0.2)	1.5 (0.2)	976	85
Nyandarua	4.3 (2.1)	1.0 (0.6)	0.4 (0.4)	0.7 (0.1)	0.6 (0.1)	0.6 (0.1)	634	28
Nyeri	1.7 (1.2)	0.4 (0.4)	0.2 (0.2)	0.3 (0.0)	0.3 (0.0)	0.3 (0.0)	749	13
Kirinyaga	2.3 (1.5)	0.6 (0.4)	0.2 (0.3)	0.3 (0.1)	0.3 (0.1)	0.3 (0.1)	605	14
Murang'a	3.6 (1.6)	0.8 (0.5)	0.3 (0.3)	1.0 (0.1)	0.8 (0.1)	0.8 (0.1)	1,052	38
Kiambu	1.7 (1.0)	0.3 (0.2)	0.1 (0.1)	1.1 (0.2)	0.8 (0.1)	0.6 (0.1)	2,399	41
Turkana	58.2 (5.4)	25.2 (3.2)	14.2 (2.3)	13.6 (2.1)	22.5 (3.1)	30.1 (3.7)	920	535
West Pokot	20.4 (3.9)	4.8 (1.2)	1.7 (0.6)	3.2 (0.4)	2.9 (0.4)	2.5 (0.4)	618	126
Samburu	34.4 (5.3)	10.4 (2.3)	4.4 (1.4)	2.7 (0.4)	3.1 (0.5)	3.1 (0.6)	306	105
Trans Nzoia	6.8 (2.5)	1.3 (0.6)	0.5 (0.3)	1.7 (0.2)	1.3 (0.2)	1.0 (0.2)	984	67
Uasin Gishu	7.4 (2.2)	1.7 (0.7)	0.7 (0.4)	2.2 (0.3)	1.9 (0.2)	1.7 (0.2)	1,149	85
Elgeyo/Marakwet	9.5 (2.6)	2.1 (0.8)	0.8 (0.4)	1.1 (0.1)	0.9 (0.1)	0.8 (0.1)	453	43
Nandi	7.1 (2.2)	1.5 (0.6)	0.5 (0.3)	1.6 (0.2)	1.3 (0.1)	1.1 (0.1)	883	63
Baringo	6.9 (2.8)	1.6 (0.8)	0.6 (0.5)	1.2 (0.2)	1.0 (0.2)	0.9 (0.2)	662	46
Laikipia	6.6 (2.9)	1.6 (1.0)	0.6 (0.5)	0.9 (0.2)	0.8 (0.2)	0.8 (0.2)	510	34
Nakuru	4.0 (1.9)	0.8 (0.5)	0.3 (0.2)	2.2 (0.4)	1.7 (0.4)	1.5 (0.3)	2,125	85
Narok	3.7 (1.9)	0.9 (0.6)	0.4 (0.4)	1.1 (0.2)	1.0 (0.2)	1.0 (0.2)	1,146	43
Kajiado	8.2 (2.8)	1.8 (0.8)	0.6 (0.4)	2.3 (0.4)	1.9 (0.4)	1.7 (0.3)	1,104	91
Kericho	8.4 (2.6)	1.9 (0.7)	0.7 (0.4)	1.9 (0.3)	1.7 (0.2)	1.4 (0.2)	897	76
Bomet	9.0 (2.6)	1.9 (0.7)	0.7 (0.4)	2.0 (0.3)	1.6 (0.2)	1.3 (0.2)	873	78
Kakamega	7.4 (2.3)	1.7 (0.7)	0.6 (0.4)	3.5 (0.4)	3.0 (0.3)	2.6 (0.3)	1,860	138
Vihiga	11.9 (3.0)	2.6 (0.8)	0.9 (0.4)	1.8 (0.2)	1.5 (0.2)	1.3 (0.2)	587	70
Bungoma	6.8 (2.6)	1.5 (0.8)	0.6 (0.4)	2.9 (0.4)	2.4 (0.4)	2.1 (0.4)	1,663	113
Busia	21.9 (3.5)	5.0 (1.1)	1.8 (0.6)	4.9 (0.5)	4.3 (0.5)	3.7 (0.5)	887	194
Siaya	3.6 (1.7)	0.8 (0.5)	0.3 (0.3)	0.9 (0.1)	0.8 (0.1)	0.7 (0.1)	988	35
Kisumu	6.1 (2.2)	1.3 (0.6)	0.5 (0.3)	1.8 (0.2)	1.5 (0.2)	1.3 (0.2)	1,141	69
Homa Bay	5.4 (2.3)	1.2 (0.6)	0.5 (0.3)	1.5 (0.2)	1.3 (0.2)	1.2 (0.2)	1,124	60
Migori	6.0 (2.2)	1.3 (0.6)	0.5 (0.3)	1.7 (0.2)	1.4 (0.2)	1.2 (0.2)	1,107	66
Kisii	9.1 (2.7)	1.9 (0.7)	0.6 (0.4)	2.9 (0.3)	2.3 (0.3)	1.9 (0.3)	1,260	115
Nyamira	7.9 (2.5)	1.7 (0.7)	0.6 (0.4)	1.2 (0.2)	1.0 (0.1)	0.9 (0.1)	603	48
Nairobi City	0.7 (0.7)	0.1 (0.2)	0.0 (0.1)	0.7 (0.2)	0.6 (0.2)	0.5 (0.1)	4,324	29

Annex Table C2: Hardcore poverty estimates (adult equivalent) by residence and county, 2019

Residence/ County	Headcount Rate (%) $P_{a=0}$	Poverty Gap (%) $P_{a=1}$	Severity of Poverty (%) $P_{a=2}$	Contribution to Poverty			Adulteq Population (000)	Number of Poor- Adulteq (000)
	(Std. errors)	(Std. errors)	(Std. errors)	Adulteq $P_{a=0}$ (Std. errors)	Adulteq $P_{a=1}$ (Std. errors)	Adulteq $P_{a=2}$ (Std. errors)		
National	7.9 (0.4)	2.1 (0.1)	0.9 (0.1)	100.0 0.0	100.0 0.0	100.0 0.0	38,680	3,063
Rural	10.4 (0.6)	2.8 (0.2)	1.2 (0.1)	89.8 (0.7)	91.4 (0.7)	92.8 (0.7)	26,361	2,752
Urban	2.5 (0.4)	0.6 (0.1)	0.2 (0.1)	10.2 (0.7)	8.6 (0.7)	7.2 (0.7)	12,319	311
Mombasa	1.9 (1.1)	0.4 (0.3)	0.1 (0.1)	0.6 (0.1)	0.5 (0.1)	0.3 (0.1)	1,019	20
Kwale	8.6 (2.5)	2.1 (0.8)	0.8 (0.5)	1.9 (0.3)	1.7 (0.3)	1.6 (0.3)	677	58
Kilifi	9.5 (2.9)	2.2 (0.9)	0.8 (0.5)	3.6 (0.5)	3.1 (0.5)	2.9 (0.7)	1,148	109
Tana River	20.3 (5.0)	5.6 (1.8)	2.2 (0.9)	1.6 (0.3)	1.7 (0.3)	1.6 (0.3)	240	49
Lamu	5.0 (2.8)	1.2 (0.9)	0.5 (0.4)	0.2 (0.0)	0.2 (0.0)	0.2 (0.0)	117	6
Taita Taveta	6.2 (2.6)	1.2 (0.6)	0.4 (0.3)	0.6 (0.1)	0.4 (0.1)	0.3 (0.1)	277	17
Garissa	26.4 (5.4)	7.4 (2.1)	3.1 (1.2)	5.4 (1.2)	5.8 (1.2)	5.7 (1.3)	628	166
Wajir	15.0 (3.7)	3.5 (1.1)	1.3 (0.5)	2.8 (0.5)	2.5 (0.5)	2.1 (0.4)	574	86
Mandera	28.5 (4.7)	8.2 (1.7)	3.3 (0.9)	6.2 (0.8)	6.7 (0.9)	6.5 (1.0)	662	189
Marsabit	15.2 (5.7)	3.7 (1.8)	1.4 (0.9)	1.8 (0.7)	1.6 (0.6)	1.5 (0.6)	353	54
Isiolo	9.3 (3.8)	2.3 (1.1)	0.9 (0.6)	0.6 (0.2)	0.6 (0.2)	0.5 (0.1)	211	20
Meru	3.2 (1.8)	0.9 (0.6)	0.4 (0.3)	1.4 (0.3)	1.4 (0.4)	1.4 (0.4)	1,288	41
Tharaka-Nithi	3.0 (1.6)	0.6 (0.5)	0.2 (0.3)	0.3 (0.0)	0.2 (0.0)	0.2 (0.0)	329	10
Embu	3.7 (1.8)	0.9 (0.6)	0.3 (0.3)	0.6 (0.1)	0.6 (0.1)	0.5 (0.1)	519	19
Kitui	11.2 (2.7)	2.5 (0.8)	0.9 (0.4)	3.4 (0.4)	2.9 (0.3)	2.4 (0.3)	945	105
Machakos	4.1 (1.7)	0.9 (0.5)	0.4 (0.3)	1.6 (0.2)	1.4 (0.2)	1.3 (0.2)	1,213	50
Makueni	8.4 (2.6)	1.9 (0.7)	0.7 (0.4)	2.3 (0.3)	1.9 (0.2)	1.7 (0.2)	838	71
Nyandarua	4.2 (2.0)	1.0 (0.6)	0.4 (0.4)	0.7 (0.1)	0.6 (0.1)	0.6 (0.1)	525	22
Nyeri	1.6 (1.1)	0.4 (0.4)	0.2 (0.2)	0.3 (0.0)	0.3 (0.0)	0.3 (0.0)	642	10
Kirinyaga	2.3 (1.5)	0.6 (0.4)	0.2 (0.3)	0.4 (0.1)	0.4 (0.1)	0.4 (0.1)	514	12
Murang'a	3.5 (1.5)	0.8 (0.5)	0.3 (0.3)	1.0 (0.1)	0.9 (0.1)	0.8 (0.1)	894	31
Kiambu	1.7 (0.9)	0.3 (0.2)	0.1 (0.1)	1.1 (0.2)	0.8 (0.1)	0.7 (0.1)	2,064	34
Turkana	57.7 (5.4)	25.0 (3.3)	14.1 (2.4)	13.4 (2.1)	22.3 (3.1)	29.9 (3.7)	715	412
West Pokot	19.8 (3.8)	4.6 (1.2)	1.7 (0.6)	3.0 (0.3)	2.7 (0.3)	2.3 (0.3)	466	92
Samburu	33.6 (5.2)	10.1 (2.3)	4.3 (1.3)	2.5 (0.4)	2.9 (0.5)	2.9 (0.5)	226	76
Trans Nzoia	6.6 (2.4)	1.3 (0.6)	0.4 (0.3)	1.7 (0.2)	1.3 (0.2)	1.1 (0.2)	792	52
Uasin Gishu	7.2 (2.2)	1.7 (0.7)	0.6 (0.4)	2.2 (0.3)	2.0 (0.2)	1.8 (0.2)	943	68
Elgeyo/ Marakwet	9.3 (2.6)	2.1 (0.8)	0.8 (0.4)	1.2 (0.1)	1.0 (0.1)	0.9 (0.1)	385	36
Nandi	7.0 (2.2)	1.4 (0.6)	0.5 (0.3)	1.7 (0.2)	1.3 (0.1)	1.2 (0.1)	731	51
Baringo	6.7 (2.7)	1.5 (0.8)	0.6 (0.4)	1.1 (0.2)	1.0 (0.2)	0.9 (0.2)	522	35
Laikipia	6.2 (2.7)	1.5 (0.9)	0.6 (0.5)	0.9 (0.2)	0.8 (0.2)	0.8 (0.2)	429	27
Nakuru	3.8 (1.8)	0.8 (0.5)	0.3 (0.2)	2.2 (0.4)	1.8 (0.4)	1.5 (0.3)	1,751	67
Narok	3.6 (1.8)	0.9 (0.6)	0.4 (0.4)	1.1 (0.2)	1.0 (0.2)	1.0 (0.2)	901	33
Kajiado	7.7 (2.7)	1.7 (0.7)	0.6 (0.4)	2.3 (0.4)	1.9 (0.4)	1.6 (0.3)	898	70
Kericho	8.4 (2.6)	1.9 (0.7)	0.7 (0.4)	2.0 (0.3)	1.8 (0.3)	1.5 (0.2)	733	62
Bomet	8.8 (2.6)	1.9 (0.7)	0.7 (0.4)	2.1 (0.3)	1.7 (0.3)	1.4 (0.2)	715	63
Kakamega	7.2 (2.2)	1.6 (0.6)	0.6 (0.4)	3.5 (0.3)	3.0 (0.3)	2.7 (0.3)	1,493	108
Vihiga	11.5 (2.9)	2.5 (0.8)	0.9 (0.4)	1.8 (0.2)	1.5 (0.2)	1.3 (0.2)	482	56
Bungoma	6.7 (2.5)	1.5 (0.8)	0.6 (0.4)	2.9 (0.4)	2.4 (0.4)	2.1 (0.4)	1,310	87
Busia	21.5 (3.5)	4.9 (1.1)	1.8 (0.6)	4.9 (0.5)	4.3 (0.5)	3.6 (0.5)	700	151
Siaya	3.5 (1.7)	0.8 (0.5)	0.3 (0.4)	0.9 (0.1)	0.8 (0.1)	0.8 (0.1)	801	28
Kisumu	5.8 (2.1)	1.3 (0.6)	0.5 (0.3)	1.8 (0.2)	1.5 (0.2)	1.3 (0.2)	931	54
Homa Bay	5.2 (2.2)	1.2 (0.6)	0.4 (0.3)	1.5 (0.2)	1.3 (0.2)	1.2 (0.2)	898	47
Migori	5.9 (2.2)	1.3 (0.6)	0.5 (0.3)	1.7 (0.2)	1.4 (0.2)	1.3 (0.2)	895	53
Kisii	9.0 (2.7)	1.8 (0.7)	0.6 (0.4)	3.0 (0.3)	2.4 (0.3)	2.0 (0.3)	1,031	92
Nyamira	7.7 (2.5)	1.7 (0.7)	0.6 (0.4)	1.3 (0.2)	1.0 (0.1)	0.9 (0.1)	502	39
Nairobi City	0.7 (0.7)	0.2 (0.2)	0.0 (0.1)	0.9 (0.2)	0.7 (0.2)	0.5 (0.2)	3,755	26

Annex Table C. 3: Hardcore poverty estimates (households) by residence and county, 2019

Residence / County	Headcount	Poverty Gap	Severity of	Contribution to Poverty			Number of Households (000)	Number of Poor Households (000)
	Rate (% $P_{\alpha=0}$)	(% $P_{\alpha=1}$)	Poverty (% $P_{\alpha=2}$)	Households	Households	Households		
	(Std. errors)	(Std. errors)	(Std. errors)	$P_{\alpha=0}$ (Std. errors)	$P_{\alpha=1}$ (Std. errors)	$P_{\alpha=2}$ (Std. errors)		
National	5.6 (0.3)	1.4 (0.1)	0.6 (0.1)	100.0 0.0	100.0 0.0	100.0 0.0	12,041	679
Rural	7.9 (0.4)	2.1 (0.1)	0.9 (0.1)	86.1 (0.8)	88.2 (0.8)	90.1 (0.8)	7,377	585
Urban	2.0 (0.3)	0.4 (0.1)	0.2 (0.0)	13.9 (0.8)	11.8 (0.8)	9.9 (0.8)	4,664	94
Mombasa	1.6 (0.8)	0.3 (0.2)	0.1 (0.1)	0.9 (0.2)	0.7 (0.1)	0.5 (0.1)	376	6
Kwale	6.5 (1.9)	1.5 (0.6)	0.6 (0.3)	1.7 (0.2)	1.5 (0.2)	1.4 (0.2)	173	11
Kilifi	6.9 (2.0)	1.6 (0.7)	0.6 (0.4)	3.0 (0.4)	2.7 (0.5)	2.6 (0.6)	298	20
Tana River	17.0 (4.2)	4.6 (1.5)	1.9 (0.8)	1.7 (0.3)	1.8 (0.4)	1.7 (0.4)	67	11
Lamu	3.5 (1.9)	0.8 (0.6)	0.3 (0.3)	0.2 (0.0)	0.2 (0.0)	0.2 (0.0)	34	1
Taita Taveta	4.5 (1.7)	0.9 (0.4)	0.3 (0.2)	0.6 (0.1)	0.5 (0.1)	0.4 (0.1)	94	4
Garissa	23.0 (5.1)	6.0 (1.7)	2.4 (0.9)	4.7 (1.1)	4.9 (1.1)	4.7 (1.1)	139	32
Wajir	13.5 (3.3)	3.2 (1.0)	1.2 (0.5)	2.5 (0.4)	2.3 (0.4)	2.1 (0.4)	127	17
Mandera	26.3 (4.2)	7.3 (1.5)	2.9 (0.7)	4.8 (0.6)	5.2 (0.7)	5.0 (0.7)	124	33
Marsabit	13.0 (5.0)	3.1 (1.6)	1.2 (0.8)	1.5 (0.6)	1.4 (0.6)	1.2 (0.5)	77	10
Isiolo	7.6 (2.9)	1.9 (0.9)	0.7 (0.4)	0.6 (0.1)	0.6 (0.1)	0.5 (0.1)	53	4
Meru	2.3 (1.2)	0.6 (0.4)	0.3 (0.3)	1.5 (0.3)	1.5 (0.3)	1.6 (0.4)	424	10
Tharaka-Nithi	2.2 (1.1)	0.4 (0.4)	0.2 (0.2)	0.4 (0.0)	0.3 (0.0)	0.3 (0.0)	109	2
Embu	3.0 (1.3)	0.7 (0.4)	0.3 (0.2)	0.8 (0.1)	0.7 (0.1)	0.7 (0.1)	182	6
Kitui	9.0 (2.2)	1.9 (0.6)	0.7 (0.3)	3.5 (0.3)	3.0 (0.3)	2.5 (0.2)	262	23
Machakos	2.9 (1.1)	0.6 (0.3)	0.3 (0.2)	1.7 (0.2)	1.5 (0.2)	1.4 (0.2)	399	12
Makueni	6.2 (1.9)	1.4 (0.6)	0.5 (0.3)	2.2 (0.2)	2.0 (0.2)	1.8 (0.2)	244	15
Nyandarua	3.3 (1.4)	0.7 (0.5)	0.3 (0.3)	0.9 (0.1)	0.8 (0.1)	0.8 (0.1)	178	6
Nyeri	1.2 (0.7)	0.3 (0.2)	0.1 (0.1)	0.4 (0.0)	0.4 (0.0)	0.4 (0.1)	245	3
Kirinyaga	1.9 (1.0)	0.5 (0.3)	0.2 (0.2)	0.6 (0.1)	0.6 (0.1)	0.7 (0.2)	204	4
Murang'a	2.6 (1.1)	0.6 (0.3)	0.2 (0.2)	1.2 (0.1)	1.1 (0.1)	1.0 (0.1)	317	8
Kiambu	1.4 (0.7)	0.3 (0.2)	0.1 (0.1)	1.6 (0.2)	1.2 (0.2)	1.1 (0.2)	792	11
Turkana	52.2 (4.8)	21.5 (2.6)	11.8 (1.8)	12.5 (1.7)	20.3 (2.5)	26.8 (3.0)	163	85
West Pokot	17.5 (3.4)	4.1 (1.0)	1.5 (0.5)	3.0 (0.3)	2.7 (0.4)	2.4 (0.3)	116	20
Samburu	27.7 (4.5)	7.9 (1.8)	3.3 (1.0)	2.6 (0.4)	2.9 (0.5)	2.9 (0.5)	64	18
Trans Nzoia	5.3 (1.7)	1.1 (0.5)	0.4 (0.3)	1.7 (0.2)	1.4 (0.2)	1.2 (0.1)	223	12
Uasin Gishu	5.9 (1.8)	1.3 (0.5)	0.5 (0.3)	2.6 (0.3)	2.3 (0.3)	2.1 (0.2)	301	18
Elgeyo/ Marakwet	7.8 (2.1)	1.8 (0.7)	0.7 (0.4)	1.1 (0.1)	1.0 (0.1)	0.9 (0.1)	99	8
Nandi	5.6 (1.7)	1.1 (0.5)	0.4 (0.3)	1.6 (0.2)	1.3 (0.1)	1.2 (0.1)	199	11
Baringo	5.3 (2.0)	1.2 (0.7)	0.5 (0.4)	1.1 (0.2)	1.0 (0.2)	1.0 (0.3)	142	8
Laikipia	4.1 (1.8)	1.0 (0.6)	0.4 (0.4)	0.9 (0.2)	0.8 (0.1)	0.8 (0.1)	146	6
Nakuru	2.6 (1.1)	0.5 (0.3)	0.2 (0.2)	2.3 (0.3)	1.9 (0.3)	1.6 (0.3)	598	15
Narok	2.6 (1.3)	0.6 (0.4)	0.3 (0.3)	0.9 (0.1)	0.9 (0.1)	0.9 (0.1)	238	6
Kajiado	5.5 (1.7)	1.2 (0.5)	0.4 (0.2)	2.5 (0.3)	2.1 (0.3)	1.8 (0.3)	313	17
Kericho	6.2 (1.9)	1.4 (0.5)	0.5 (0.3)	1.9 (0.2)	1.7 (0.2)	1.5 (0.2)	206	13
Bomet	6.6 (1.9)	1.4 (0.5)	0.5 (0.3)	1.8 (0.2)	1.5 (0.2)	1.3 (0.2)	187	12
Kakamega	6.0 (1.6)	1.4 (0.5)	0.6 (0.4)	3.8 (0.3)	3.6 (0.4)	3.6 (0.6)	432	26
Vihiga	9.3 (2.2)	2.0 (0.6)	0.7 (0.3)	2.0 (0.2)	1.7 (0.2)	1.5 (0.2)	143	13
Bungoma	5.3 (1.9)	1.2 (0.6)	0.5 (0.3)	2.8 (0.3)	2.5 (0.3)	2.3 (0.3)	358	19
Busia	17.0 (2.7)	3.8 (0.8)	1.3 (0.4)	5.0 (0.4)	4.3 (0.4)	3.7 (0.4)	198	34
Siaya	2.9 (1.2)	0.6 (0.4)	0.3 (0.2)	1.1 (0.1)	0.9 (0.1)	0.9 (0.1)	249	7
Kisumu	4.8 (1.6)	1.0 (0.5)	0.4 (0.2)	2.1 (0.2)	1.8 (0.2)	1.6 (0.2)	297	14
Homa Bay	4.4 (1.7)	1.0 (0.4)	0.4 (0.2)	1.7 (0.2)	1.5 (0.2)	1.3 (0.2)	260	12
Migori	5.1 (1.8)	1.1 (0.5)	0.5 (0.3)	1.8 (0.2)	1.6 (0.2)	1.5 (0.2)	238	12
Kisii	7.1 (2.0)	1.5 (0.6)	0.6 (0.3)	3.2 (0.3)	2.7 (0.3)	2.4 (0.3)	307	22
Nyamira	7.0 (2.1)	1.5 (0.6)	0.6 (0.3)	1.6 (0.2)	1.3 (0.2)	1.2 (0.2)	150	11
Nairobi City	0.7 (0.6)	0.2 (0.2)	0.0 (0.1)	1.6 (0.4)	1.4 (0.4)	1.0 (0.3)	1,494	11

Annex Table D. 1: Estimated population, adult equivalent and household numbers, 2019

Residence / County	Individuals ('000)	Adult Equivalents ('000)	Households ('000)
National	47,105	38,680	12,041
Rural	32,552	26,361	7,377
Urban	14,553	12,319	4,664
Mombasa	1,189	1,019	376
Kwale	858	677	173
Kilifi	1,440	1,148	298
Tana River	313	240	67
Lamu	138	117	34
Taita Taveta	334	277	94
Garissa	833	628	139
Wajir	774	574	127
Mandera	860	662	124
Marsabit	446	353	77
Isiolo	263	211	53
Meru	1,533	1,288	424
Tharaka-Nithi	391	329	109
Embu	604	519	182
Kitui	1,129	945	262
Machakos	1,411	1,213	399
Makueni	976	838	244
Nyandarua	634	525	178
Nyeri	749	642	245
Kirinyaga	605	514	204
Murang'a	1,052	894	317
Kiambu	2,399	2,064	792
Turkana	920	715	163
West Pokot	618	466	116
Samburu	306	226	64
Trans Nzoia	984	792	223
Uasin Gishu	1,149	943	301
Elgeyo/Marakwet	453	385	99
Nandi	883	731	199
Baringo	662	522	142
Laikipia	510	429	146
Nakuru	2,125	1,751	598
Narok	1,146	901	238
Kajiado	1,104	898	313
Kericho	897	733	206
Bomet	873	715	187
Kakamega	1,860	1,493	432
Vihiga	587	482	143
Bungoma	1,663	1,310	358
Busia	887	700	198
Siaya	988	801	249
Kisumu	1,141	931	297
Homa Bay	1,124	898	260
Migori	1,107	895	238
Kisii	1,260	1,031	307
Nyamira	603	502	150
Nairobi City	4,324	3,755	1,494

Annex Table E1: Overall child poverty by age groups and area of residence, 2019

Residence / County	Total population			0 - 5 Years			6 - 13 Years			14 - 17 Years			0 - 17 Years		
	Poverty Headcount Rate (%)	(Std. errors)	Population ('000)	Poverty Headcount Rate (%)	(Std. errors)	Population ('000)	Poverty Headcount Rate (%)	(Std. errors)	Population ('000)	Poverty Headcount Rate (%)	(Std. errors)	Population ('000)	Poverty Headcount Rate (%)	(Std. errors)	Population ('000)
National	33.6	(0.7)	47,105	37.5	(1.0)	6,405	40.6	(1.0)	9,848	39.9	(1.2)	4,461	39.5	(0.9)	20,715
Rural	37.0	(0.8)	32,552	40.4	(1.1)	4,600	41.8	(1.0)	7,731	40.6	(1.2)	3,621	41.1	(0.9)	15,952
Urban	26.0	(1.5)	14,553	30.0	(2.2)	1,805	36.0	(2.4)	2,117	37.3	(3.0)	841	34.0	(1.9)	4,763
Mombasa	27.6	(4.0)	1,189	34.2	(6.8)	125	36.6	(7.3)	164	25.4	(8.4)	78	33.4	(5.8)	366
Kwale	41.6	(4.2)	858	45.1	(5.5)	156	45.6	(5.4)	220	42.7	(6.3)	99	44.8	(4.9)	475
Kilifi	44.3	(5.1)	1,440	45.5	(6.7)	229	49.2	(6.9)	359	48.5	(6.8)	168	47.9	(6.0)	756
Tana River	61.7	(5.1)	313	61.9	(5.9)	63	66.4	(6.3)	100	62.6	(7.5)	37	64.3	(5.4)	200
Lamu	31.0	(5.7)	138	31.5	(8.5)	19	35.5	(7.7)	25	34.5	(8.8)	15	34.0	(6.8)	60
Taita Taveta	34.4	(5.0)	334	41.9	(8.5)	42	40.4	(7.1)	69	41.7	(8.2)	29	41.1	(6.6)	140
Garissa	64.7	(5.5)	833	65.6	(6.8)	166	69.7	(6.6)	203	69.8	(7.7)	66	68.1	(6.2)	435
Wajir	56.2	(4.7)	774	55.1	(6.0)	178	58.4	(5.4)	250	58.4	(7.8)	96	57.3	(5.1)	524
Mandera	69.5	(4.9)	860	71.3	(6.2)	127	71.5	(6.0)	206	69.6	(7.1)	85	71.0	(5.4)	418
Marsabit	55.9	(7.2)	446	57.4	(8.3)	51	60.2	(8.5)	85	58.4	(9.9)	30	59.0	(7.5)	166
Isiolo	50.1	(6.4)	263	50.5	(8.0)	38	55.9	(8.0)	56	53.6	(9.6)	26	53.7	(7.2)	120
Meru	17.2	(3.8)	1,533	16.5	(4.8)	183	20.3	(4.7)	290	20.9	(7.5)	140	19.3	(4.5)	612
Tharaka-Nithi	18.8	(3.7)	391	20.3	(5.9)	46	22.3	(5.2)	72	22.9	(6.1)	36	21.8	(4.7)	154
Embu	21.8	(4.0)	604	20.4	(5.8)	63	26.5	(6.1)	95	27.2	(7.4)	45	24.8	(5.2)	202
Kitui	44.4	(4.1)	1,129	47.5	(7.1)	111	48.7	(5.4)	236	47.8	(6.7)	98	48.2	(4.8)	445
Machakos	22.4	(3.6)	1,411	23.6	(5.4)	159	28.4	(5.5)	225	28.0	(5.8)	132	26.8	(4.6)	516
Makueni	38.1	(4.4)	976	43.4	(7.6)	77	43.7	(6.3)	176	43.4	(6.6)	111	43.5	(5.6)	364
Nyandarua	25.4	(3.8)	634	28.8	(6.1)	87	27.6	(5.3)	146	29.5	(6.3)	79	28.4	(4.8)	312
Nyeri	12.8	(3.1)	749	15.5	(6.0)	85	16.1	(5.5)	118	13.8	(5.7)	61	15.4	(4.4)	264
Kirinyaga	15.9	(3.5)	605	16.3	(5.0)	72	18.9	(5.4)	90	22.0	(7.0)	47	18.7	(4.5)	209
Murang'a	19.7	(3.4)	1,052	21.1	(5.6)	112	25.4	(5.4)	170	23.3	(5.4)	95	23.6	(4.5)	377
Kiambu	17.8	(3.5)	2,399	17.8	(5.5)	270	23.5	(5.8)	347	24.5	(7.7)	142	21.7	(4.7)	760
Turkana	81.3	(4.0)	920	81.5	(5.3)	146	81.8	(4.7)	241	82.9	(6.5)	116	82.0	(4.3)	503
West Pokot	57.7	(4.6)	618	60.0	(5.4)	142	61.0	(5.4)	183	58.9	(6.1)	67	60.3	(4.9)	392
Siaya	71.3	(4.8)	306	73.1	(5.6)	71	74.9	(5.4)	106	72.5	(7.0)	39	73.9	(5.0)	216
Trans Nzoia	34.9	(4.6)	984	36.5	(5.6)	162	39.1	(5.8)	247	36.1	(6.6)	127	37.6	(5.1)	536
Uasin Gishu	38.8	(4.4)	1,149	41.7	(5.6)	182	42.8	(5.6)	242	40.4	(6.3)	127	41.9	(5.0)	552
Elgeyo/Marakwet	37.5	(4.8)	453	40.0	(7.5)	37	39.5	(6.1)	77	43.2	(7.2)	43	40.6	(5.5)	157
Nandi	35.4	(4.2)	883	37.1	(5.9)	116	36.6	(5.4)	185	39.6	(6.4)	87	37.4	(4.8)	389
Baringo	37.8	(5.1)	662	39.6	(6.9)	103	41.1	(6.0)	184	40.4	(7.2)	81	40.5	(5.5)	368
Laikipia	30.6	(5.8)	510	36.5	(9.4)	57	39.5	(7.8)	83	39.1	(8.9)	41	38.5	(7.1)	181
Nakuru	29.1	(4.4)	2,125	31.2	(6.2)	278	33.9	(6.3)	409	35.3	(7.4)	197	33.4	(5.4)	884
Narok	19.7	(4.0)	1,146	21.3	(5.3)	183	21.7	(4.9)	298	23.4	(5.8)	116	21.9	(4.5)	596
Kajiado	39.9	(4.9)	1,104	43.9	(6.6)	168	44.9	(6.6)	187	43.9	(9.1)	82	44.3	(5.6)	437
Kericho	36.7	(4.3)	897	35.6	(5.6)	132	40.0	(5.9)	209	42.6	(6.3)	107	39.3	(4.9)	448
Bomet	42.8	(4.4)	873	44.3	(5.4)	127	46.7	(5.3)	223	44.2	(5.9)	117	45.4	(4.6)	466
Kakamega	36.3	(3.8)	1,860	38.8	(5.4)	249	39.1	(5.1)	464	38.5	(5.8)	206	38.9	(4.4)	919
Vihiga	46.5	(4.5)	587	47.9	(6.7)	75	51.3	(5.8)	150	49.5	(6.6)	71	50.0	(5.3)	296
Bungoma	34.9	(4.5)	1,663	34.5	(6.3)	278	39.6	(5.6)	472	38.2	(7.3)	217	37.8	(5.2)	966
Busia	58.7	(4.2)	887	60.0	(5.3)	152	63.1	(5.1)	227	59.8	(5.9)	101	61.4	(4.6)	479
Siaya	23.7	(3.9)	988	25.1	(5.4)	139	26.5	(5.7)	220	26.7	(6.4)	89	26.1	(4.8)	448
Kisumu	34.7	(4.6)	1,141	39.3	(6.9)	147	40.9	(6.1)	225	37.2	(6.9)	98	39.6	(5.4)	470
Homa Bay	29.6	(4.6)	1,124	32.5	(6.0)	176	33.3	(5.5)	288	31.3	(6.3)	143	32.6	(5.2)	608
Migori	36.3	(4.5)	1,107	36.2	(6.5)	137	39.9	(5.3)	345	37.4	(6.3)	132	38.5	(4.9)	614
Kisii	41.1	(4.5)	1,260	44.9	(6.5)	165	42.7	(5.5)	321	46.8	(6.5)	163	44.3	(5.0)	650
Nyamira	34.5	(4.7)	603	36.0	(7.4)	71	38.1	(5.7)	140	38.3	(6.7)	76	37.6	(5.3)	287
Nairobi City	10.2	(2.5)	4,324	10.3	(4.1)	455	11.6	(4.8)	417	14.9	(8.8)	106	11.4	(3.8)	978

Annex Table E2: Child food poverty by age group and place of residence, 2019

Residence / County	Total population			0 - 5 Years			6 - 13 Years			14 - 17 Years			0 - 17 Years		
	Poverty Headcount Rate (%)	(Std. errors)	Population ('000)	Poverty Headcount Rate (%)	(Std. errors)	Population ('000)	Poverty Headcount Rate (%)	(Std. errors)	Population ('000)	Poverty Headcount Rate (%)	(Std. errors)	Population ('000)	Poverty Headcount Rate (%)	(Std. errors)	Population ('000)
National	30.5	(0.7)	47,105	33.2	(1.0)	6,405	36.2	(0.9)	9,848	36.2	(1.2)	4,461	35.3	(0.8)	20,715
Rural	34.0	(0.8)	32,552	36.7	(1.1)	4,600	38.1	(1.0)	7,731	37.6	(1.2)	3,621	37.6	(0.9)	15,952
Urban	22.5	(1.3)	14,553	24.4	(2.0)	1,805	29.1	(2.2)	2,117	30.3	(2.9)	841	27.6	(1.7)	4,763
Mombasa	22.2	(3.7)	1,189	25.1	(6.1)	125	28.5	(6.6)	164	21.9	(8.3)	78	26.0	(5.2)	366
Kwale	34.9	(4.1)	858	37.1	(5.3)	156	38.1	(5.1)	220	37.4	(6.2)	99	37.6	(4.7)	475
Kilifi	45.1	(4.8)	1,440	45.8	(6.6)	229	49.3	(6.6)	359	49.7	(6.7)	168	48.3	(5.7)	756
Tana River	50.7	(5.6)	313	50.4	(6.6)	63	55.5	(7.2)	100	51.8	(7.3)	37	53.2	(6.2)	200
Lamu	26.8	(5.3)	138	27.2	(8.3)	19	30.5	(7.5)	25	29.7	(8.2)	15	29.2	(6.6)	60
Taita Taveta	33.1	(5.2)	334	38.2	(9.2)	42	38.6	(7.3)	69	39.5	(8.8)	29	38.7	(7.0)	140
Garissa	48.0	(5.9)	833	48.5	(7.3)	166	52.7	(7.5)	203	54.8	(8.1)	66	51.4	(6.8)	435
Wajir	45.6	(4.9)	774	43.3	(6.3)	178	47.6	(5.8)	250	48.6	(7.8)	96	46.3	(5.5)	524
Mandera	60.0	(5.1)	860	61.7	(6.9)	127	63.0	(6.1)	206	61.0	(7.4)	85	62.2	(5.7)	418
Marsabit	40.8	(6.4)	446	42.2	(7.8)	51	44.2	(8.1)	85	44.4	(10.7)	30	43.6	(7.0)	166
Isiolo	37.3	(6.6)	263	36.6	(7.5)	38	43.0	(8.6)	56	42.6	(10.3)	26	40.9	(7.6)	120
Meru	15.3	(3.7)	1,533	15.5	(5.1)	183	17.2	(4.9)	290	19.7	(7.4)	140	17.3	(4.7)	612
Tharaka-Nithi	23.6	(4.2)	391	24.9	(6.1)	46	28.0	(5.9)	72	28.1	(7.0)	36	27.1	(5.2)	154
Embu	23.5	(4.4)	604	23.1	(6.0)	63	27.4	(6.6)	95	30.1	(7.7)	45	26.6	(5.5)	202
Kitui	38.6	(4.1)	1,129	42.0	(7.0)	111	42.4	(5.4)	236	42.6	(7.2)	98	42.3	(4.9)	445
Machakos	25.8	(3.5)	1,411	27.7	(5.6)	159	33.5	(5.4)	225	31.8	(5.7)	132	31.3	(4.5)	516
Makueni	34.3	(4.2)	976	38.3	(7.3)	77	39.4	(5.8)	176	38.8	(6.1)	111	39.0	(5.1)	364
Nyandarua	23.4	(3.7)	634	26.3	(6.0)	87	25.5	(5.1)	146	28.1	(6.3)	79	26.4	(4.7)	312
Nyeri	14.7	(3.2)	749	17.1	(6.5)	85	17.7	(5.8)	118	15.3	(5.9)	61	16.9	(4.6)	264
Kirinyaga	16.6	(3.4)	605	17.0	(5.3)	72	19.7	(5.2)	90	21.6	(7.1)	47	19.2	(4.5)	209
Murang'a	21.6	(3.7)	1,052	23.8	(6.4)	112	27.3	(5.6)	170	25.8	(5.9)	95	25.9	(4.9)	377
Kitale	20.1	(3.7)	2,399	20.4	(6.0)	270	24.7	(5.7)	347	24.4	(7.9)	142	23.1	(4.7)	760
Turkana	71.4	(4.6)	920	72.1	(6.5)	146	72.8	(5.2)	241	72.9	(6.8)	116	72.6	(4.9)	503
West Pokot	51.1	(4.6)	618	52.8	(5.5)	142	54.0	(5.5)	183	53.0	(6.1)	67	53.4	(4.9)	392
Samburu	58.4	(5.1)	306	60.4	(6.4)	71	62.3	(6.0)	106	61.2	(7.5)	39	61.5	(5.5)	216
Trans Nzoia	33.5	(4.6)	984	34.0	(6.1)	162	37.2	(5.8)	247	36.0	(6.7)	127	36.0	(5.3)	536
Uasin Gishu	36.0	(4.4)	1,149	37.5	(5.8)	182	39.5	(5.9)	242	38.4	(6.2)	127	38.6	(5.0)	552
Elgeyo/Marakwet	33.0	(4.5)	453	36.2	(7.5)	37	35.1	(5.9)	77	37.9	(7.3)	43	36.2	(5.3)	157
Nandi	31.1	(4.1)	883	32.0	(5.8)	116	32.1	(5.2)	185	35.3	(6.2)	87	32.8	(4.8)	389
Baringo	31.2	(4.8)	662	32.9	(6.7)	103	34.8	(5.8)	184	33.3	(6.9)	81	33.9	(5.3)	368
Laikipia	23.2	(5.1)	510	26.6	(8.4)	57	29.0	(7.5)	83	30.0	(8.5)	41	28.5	(6.7)	181
Nakuru	23.7	(3.9)	2,125	24.1	(5.5)	278	28.0	(5.6)	409	30.2	(7.1)	197	27.3	(4.9)	884
Narok	23.0	(4.4)	1,146	24.3	(6.0)	183	24.9	(5.2)	298	26.2	(6.1)	116	24.9	(4.9)	596
Kajiado	36.6	(4.9)	1,104	39.4	(6.8)	168	40.4	(6.5)	187	40.1	(8.6)	82	40.0	(5.5)	437
Kericho	32.8	(4.2)	897	31.1	(5.4)	132	35.4	(5.6)	209	38.4	(6.2)	107	34.8	(4.7)	448
Bomet	31.9	(3.9)	873	31.5	(5.2)	127	35.1	(4.9)	223	33.5	(5.5)	117	33.7	(4.3)	466
Kakamega	30.2	(3.7)	1,860	32.0	(5.6)	249	32.1	(4.8)	464	31.7	(5.7)	206	32.0	(4.3)	919
Vihiga	38.2	(4.4)	587	39.3	(6.2)	75	43.1	(5.8)	150	41.4	(7.0)	71	41.8	(5.3)	296
Bungoma	31.5	(4.1)	1,663	32.3	(6.0)	278	35.2	(5.1)	472	33.7	(7.0)	217	34.0	(4.8)	966
Busia	50.0	(4.4)	887	51.0	(5.7)	152	54.4	(5.4)	227	52.3	(6.2)	101	52.9	(4.9)	479
Siaya	22.1	(3.8)	988	22.9	(5.2)	139	25.1	(5.8)	220	25.9	(6.8)	89	24.5	(4.9)	448
Kisumu	33.9	(4.5)	1,141	36.7	(6.4)	147	39.3	(6.3)	225	37.1	(7.1)	98	38.0	(5.4)	470
Homa Bay	22.7	(4.2)	1,124	24.1	(5.4)	176	25.2	(5.1)	288	24.4	(6.1)	143	24.7	(4.7)	608
Migori	31.2	(4.2)	1,107	31.3	(6.1)	137	33.2	(5.2)	345	33.1	(6.0)	132	32.8	(4.7)	614
Kisii	39.7	(4.3)	1,260	43.1	(6.5)	165	41.0	(5.5)	321	44.6	(6.5)	163	42.4	(4.9)	650
Nyamira	35.9	(4.6)	603	37.1	(7.3)	71	40.1	(5.7)	140	39.5	(6.4)	76	39.2	(5.1)	287
Nairobi City	12.7	(2.7)	4,324	12.4	(4.5)	455	13.8	(5.3)	417	15.3	(8.9)	106	13.3	(4.0)	978

Annex Table E3 Overall poverty by all age groups and place of residence, 2019

Residence/ County	Total population			0-17 Years			18-35 Years			36-59 Years			60-69 Years			70+ Years		
	Poverty Headcount Rate (%)	(Std. errors)	Population (’000)	Poverty Headcount Rate (%)	(Std. errors)	Population (’000)	Poverty Headcount Rate (%)	(Std. errors)	Population (’000)	Poverty Headcount Rate (%)	(Std. errors)	Population (’000)	Poverty Headcount Rate (%)	(Std. errors)	Population (’000)	Poverty Headcount Rate (%)	(Std. errors)	Population (’000)
National	33.6	(0.7)	47,105	39.5	(0.9)	20,715	28.7	(0.8)	13,375	30.4	(0.9)	8,547	31.2	(0.9)	1,732	33.0	(0.9)	1,371
Rural	37.0	(0.8)	32,552	41.1	(0.9)	15,952	34.0	(0.9)	7,810	32.7	(0.9)	5,921	30.7	(0.9)	1,463	31.1	(0.9)	1,245
Urban	26.0	(1.5)	14,553	34.0	(1.9)	4,763	21.2	(1.4)	5,565	25.3	(1.9)	2,626	34.1	(1.7)	269	51.5	(1.7)	126
Mombasa	27.6	(4.0)	1,189	33.4	(5.8)	366	24.4	(4.0)	429	24.3	(4.7)	227	23.7	(4.4)	16	39.8	(4.4)	9
Kwale	41.6	(4.2)	858	44.8	(4.9)	475	38.6	(4.7)	223	37.1	(4.8)	134	40.1	(4.8)	40	38.2	(4.8)	33
Kilifi	44.3	(5.1)	1,440	47.9	(6.0)	756	38.5	(5.3)	367	41.9	(5.8)	233	41.6	(5.6)	75	47.7	(5.6)	32
Tana River	61.7	(5.1)	313	64.3	(5.4)	200	56.5	(6.1)	74	59.7	(6.8)	51	63.6	(6.5)	12	57.8	(6.5)	7
Lamu	31.0	(5.7)	138	34.0	(6.8)	60	28.6	(6.2)	48	28.9	(6.2)	34	32.2	(6.2)	4	34.1	(6.2)	3
Taita Taveta	34.4	(5.0)	334	41.1	(6.6)	140	29.4	(4.8)	92	31.7	(5.3)	68	29.2	(5.1)	16	29.6	(5.1)	13
Garissa	64.7	(5.5)	833	68.1	(6.2)	435	60.3	(6.3)	185	65.1	(6.6)	115	62.9	(6.4)	24	69.1	(6.4)	22
Wajir	56.2	(4.7)	774	57.3	(5.1)	524	53.6	(6.4)	172	56.3	(5.4)	108	59.8	(5.9)	25	54.2	(5.9)	24
Mandera	69.5	(4.9)	860	71.0	(5.4)	418	67.2	(5.8)	168	69.6	(5.7)	97	66.2	(5.7)	27	62.6	(5.7)	27
Marsabit	55.9	(7.2)	446	59.0	(7.5)	166	48.7	(7.8)	79	57.2	(10.3)	64	62.2	(9.0)	11	56.4	(9.0)	8
Isiolo	50.1	(6.4)	263	53.7	(7.2)	120	43.1	(7.7)	61	48.7	(7.3)	39	50.2	(7.5)	11	51.0	(7.5)	8
Meru	17.2	(3.8)	1,533	19.3	(4.5)	612	15.3	(3.8)	382	16.4	(4.4)	349	12.7	(4.1)	69	15.5	(4.1)	83
Tharaka-Nithi	18.8	(3.7)	391	21.8	(4.7)	154	17.9	(4.1)	99	16.2	(4.1)	80	17.3	(4.1)	20	14.7	(4.1)	23
Embu	21.8	(4.0)	604	24.8	(5.2)	202	19.8	(5.0)	175	20.0	(4.2)	144	19.3	(4.6)	28	24.9	(4.6)	24
Kitui	44.4	(4.1)	1,129	48.2	(4.8)	445	42.4	(4.8)	270	41.6	(4.7)	196	38.4	(4.7)	45	42.0	(4.7)	58
Machakos	22.4	(3.6)	1,411	26.8	(4.6)	516	19.6	(4.1)	432	21.7	(4.0)	295	21.6	(4.0)	83	27.1	(4.0)	69
Makueni	38.1	(4.4)	976	43.5	(5.6)	364	36.1	(5.7)	205	35.7	(4.8)	178	30.2	(5.2)	63	28.3	(5.2)	61
Nyandarua	25.4	(3.8)	634	28.4	(4.8)	312	24.1	(4.0)	144	23.3	(4.2)	159	18.3	(4.1)	30	19.2	(4.1)	27
Nyeri	12.8	(3.1)	749	15.4	(4.4)	264	12.3	(3.6)	190	11.2	(3.1)	200	7.9	(3.3)	46	11.4	(3.3)	45
Kirinyaga	15.9	(3.5)	605	18.7	(4.5)	209	13.0	(3.8)	177	15.0	(3.8)	151	14.1	(3.8)	25	22.6	(3.8)	20
Murang’a	19.7	(3.4)	1,052	23.6	(4.5)	377	17.3	(4.1)	221	18.4	(3.5)	230	12.9	(3.8)	63	16.3	(3.8)	66
Kiambu	17.8	(3.5)	2,399	21.7	(4.7)	760	14.4	(3.6)	829	15.9	(4.0)	565	20.8	(3.8)	82	30.2	(3.8)	47
Turkana	81.3	(4.0)	920	82.0	(4.3)	503	80.6	(4.6)	197	81.3	(4.8)	122	78.2	(4.7)	31	82.9	(4.7)	21
West Pokot	57.7	(4.6)	618	60.3	(4.9)	392	53.2	(5.1)	168	56.5	(5.6)	90	54.4	(5.4)	16	51.8	(5.4)	14
Samburu	71.3	(4.8)	306	73.9	(5.0)	216	64.5	(5.7)	73	71.3	(6.0)	38	70.6	(5.9)	9	70.1	(5.9)	8
Trans Nzoia	34.9	(4.6)	984	37.6	(5.1)	536	31.7	(4.8)	288	31.9	(5.0)	183	35.9	(4.9)	47	32.4	(4.9)	23
Uasin Gishu	38.8	(4.4)	1,149	41.9	(5.0)	552	34.5	(4.8)	390	37.3	(5.1)	242	47.6	(5.0)	33	37.9	(5.0)	33
Elgeyo/ Marakwet	37.5	(4.8)	453	40.6	(5.5)	157	36.1	(5.3)	105	34.0	(5.6)	88	38.1	(5.4)	18	33.7	(5.4)	15
Nandi	35.4	(4.2)	883	37.4	(4.8)	389	34.2	(4.6)	261	33.2	(4.5)	158	33.1	(4.6)	39	35.2	(4.6)	24
Baringo	37.8	(5.1)	662	40.5	(5.5)	368	34.9	(6.1)	159	34.4	(5.9)	111	35.3	(6.0)	22	31.4	(6.0)	19
Laikipia	30.6	(5.8)	510	38.5	(7.1)	181	23.2	(6.8)	153	27.8	(5.3)	94	19.7	(6.1)	14	34.0	(6.1)	15
Nakuru	29.1	(4.4)	2,125	33.4	(5.4)	884	24.6	(4.5)	644	27.7	(5.6)	399	26.0	(5.1)	66	24.1	(5.1)	33
Narok	19.7	(4.0)	1,146	21.9	(4.5)	596	16.4	(4.0)	311	18.4	(4.3)	164	19.6	(4.2)	29	18.0	(4.2)	18
Kajiado	39.9	(4.9)	1,104	44.3	(5.6)	437	34.3	(5.3)	340	37.3	(6.1)	214	36.3	(5.7)	20	51.3	(5.7)	12
Kericho	36.7	(4.3)	897	39.3	(4.9)	448	32.5	(4.6)	289	36.1	(4.8)	164	38.5	(4.7)	34	40.4	(4.7)	21
Bomet	42.8	(4.4)	873	45.4	(4.6)	466	39.5	(5.0)	292	43.3	(5.3)	146	37.0	(5.1)	33	39.1	(5.1)	25
Kakamega	36.3	(3.8)	1,860	38.9	(4.4)	919	33.2	(4.3)	431	33.6	(4.4)	304	33.2	(4.4)	72	33.1	(4.4)	64
Vihiga	46.5	(4.5)	587	50.0	(5.3)	296	43.6	(5.5)	140	43.6	(5.1)	103	41.3	(5.3)	42	42.1	(5.3)	33
Bungoma	34.9	(4.5)	1,663	37.8	(5.2)	966	30.6	(4.8)	375	33.8	(5.2)	306	25.8	(5.0)	57	32.8	(5.0)	42
Busia	58.7	(4.2)	887	61.4	(4.6)	479	56.6	(4.8)	227	56.3	(5.1)	145	50.3	(4.9)	33	58.6	(4.9)	32
Siaya	23.7	(3.9)	988	26.1	(4.8)	448	22.1	(4.3)	263	22.2	(4.5)	158	20.1	(4.4)	38	18.3	(4.4)	43
Kisumu	34.7	(4.6)	1,141	39.6	(5.4)	470	31.8	(5.4)	304	31.8	(5.7)	195	27.4	(5.5)	53	23.2	(5.5)	28
Homa Bay	29.6	(4.6)	1,124	32.6	(5.2)	608	28.0	(4.9)	287	27.1	(5.1)	177	17.9	(5.0)	53	22.7	(5.0)	39
Migori	36.3	(4.5)	1,107	38.5	(4.9)	614	33.9	(4.8)	326	34.3	(4.8)	172	33.7	(4.8)	33	34.2	(4.8)	26
Kisii	41.1	(4.5)	1,260	44.3	(5.0)	650	38.4	(5.4)	319	38.9	(5.1)	231	34.2	(5.3)	60	37.3	(5.3)	49
Nyamira	34.5	(4.7)	603	37.6	(5.3)	287	32.2	(5.2)	168	31.4	(5.2)	127	29.1	(5.2)	26	34.7	(5.2)	21
Nairobi City	10.2	(2.5)	4,324	11.4	(3.8)	978	9.3	(2.4)	1,842	10.8	(3.9)	702	11.3	(3.1)	37	15.7	(3.1)	5



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ISBN 978-9966-102-23-2



BASED ON THE 2019 KENYA CONTINUOUS HOUSEHOLD SURVEY