## KENYA NATIONAL

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# LABOUR FORCE BASIC REPORT 



March 2018

# THE 2015/16 KENYA INTEGRATED HOUSEHOLD BUDGET SURVEY (KIHBS) 

Labour Force Basic Report

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## Foreword

The 2015/16 Kenya Integrated Household Budget Survey (KIHBS) collected information on the socio-economic characteristics of the population and its activity status at the household level. The survey aimed at collecting quality and timely data on demographic and socioeconomic characteristics of households. The derived indicators are for monitoring national development performance. The 2015/16 KIHBS comprised of various modules including one on Labour force.
This Report presents some key findings based on the labour force module. There are eight key labour market indicators in this Basic Report, namely; labour force participation rate; employment-to-population ratio; part-time workers; hours of work; unemployment; time-related under-employment; persons outside the workforce; and educational attainment of the labour force. These indicators are mainly presented at national, rural and urban levels. Further analytical work will be undertaken to provide additional labour market indicators.
This Report provides information discussed in four chapters. The first chapter presents background information and introduction while chapter two presents the survey methodology. Chapter three outlines the findings of selected labour indicators and chapter four gives recommendations.

Kenya National Bureau of Statistics would like to encourage stakeholders to utilise the information in this Report. We hope that the findings will contribute to the knowledge base and assist stakeholders in planning and policy formulation.
I congratulate the core technical team for their excellent work and extend my special gratitude to Mr. Zachary Mwangi, Director General KNBS, for his leadership role in implementing the 2015/16 Kenya Integrated Household Budget Survey.


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My gratitude also goes to all the KNBS staff and the field personnel who contributed to the success of the survey.
Finally, I am grateful to the survey respondents who generously provided the information on which this report is based.


## Zachary Mwangi <br> Director General

## Key Indicators

Indicator Total
Labour Force Participation Rate (per cent) ..... 77.4 ..... 77.4
Male ..... 79.2
Female ..... 75.6
Employment to Population Ratio ..... 71.6
Rural ..... 73.2
Urban ..... 69.4
Unemployment Rate (per cent) ..... 7.4
Underemployment Rate (per cent) ..... 20.4
Rural ..... 26.6
Urban ..... 11.0
Total Dependency Ratio (per cent) ..... 81.6
Rural ..... 96.7
Urban ..... 59.7
Child dependency Ratio (per cent) ..... 74.7
Rural ..... 87.4
Urban ..... 56.1
Aged dependency Ratio (per cent) ..... 7.0
Rural ..... 9.3
Urban ..... 3.6
Employed Population 15-64 (Million) ..... 17.9
Rural ..... 10.8
Urban ..... 7.0
Unemployed Population 15-64 (Million) ..... 1.4
Economically Active 5+ (Million) ..... 21.8
Rural ..... 13.4
Urban ..... 8.4
Labour Underutilization(LU2) ..... 26.4
Employed Population 65+ (Million) ..... 1.1
Rural ..... 1.0
Urban ..... 0.2
Working Children (5-17) (Million) ..... 2.1
Rural ..... 1.8
Urban ..... 0.3

| Acronyms |  |
| :---: | :---: |
| CAPI | Computer Assisted Personal Interview |
| CHSP | Continuous Household Survey Programme |
| CSO | County Statistics Officer |
| EAC | East African community |
| EAs | Enumeration Areas |
| GDP | Gross Domestic Product |
| ICLS | International Conference of Labour Statistics |
| ICT | Information Communication Technology |
| ILO | International Labour Organization |
| JOA | Job Opportunity Analysis |
| KIHBS | Kenya Integrated Household Budget Survey |
| KLMIS | Kenya Labour Market Information System |
| KNBS | Kenya National Bureau of Statistics |
| KPHC | Kenya Population and Housing Census |
| LFIS | Labour Force Information System |
| LFPR | Labour Force Participation Rate |
| LU | Labour Under-utilisation |
| MDGs | Millennium Development Goals |
| MRAs | Mutual Recognition Agreement |
| MSE | Micro and Small Enterprises |
| MSMEs | Micro Small and Medium Enterprises |
| MTP | Medium Term Plan |
| NASSEP | National Sample Survey and Evaluation Programme |
| NEET | Not in Employment, Education or Training |
| NSSF | National Social Security Fund |
| OECD | Organisation for Economic Cooperation and Development |
| PAPI | Paper Assisted Personal Interview |
| PforR | Programme-for-Results |
| SDGs | Sustainable Development Goals |
| SEZs | Special Economic Zones |
| SME | Small and Medium Enterprises |
| SNA | System of National Accounts |

## Executive Summary

## Introduction

Kenya's global competitiveness depends on the country's ability to create a human resource base with the necessary skills and competencies that match requirements of the economy. To achieve this goal, there is need to establish strong linkages between the training institutions, the industries and other stakeholders in the labour market. Updated statistics on the main characteristics of the workforce engaged or available to be engaged in productive activities during a given period and its distribution in various sectors of the economy is therefore required. Inclusion of a labour module in the 2015/16 Kenya Integrated Household Budget Survey (KIHBS) was therefore intended to respond to this requirement.

## Findings

## Survey population

During the 1999 Kenya Population and Housing Census (KPHC), the recorded number of persons aged 15-64 was 15.9 million. This number was estimated to have risen to 19.9 million during the 2005/06 KIHBS and was recorded as 20.6 million during the 2009 KPHC. In the $2015 / 16$ KIHBS, this population was estimated at 25.0 million.
The number of economically inactive population as recorded during the 1999 KPHC was 2.9 million. This was estimated to have increased to 5.3 million during the 2005/06 KIHBS and further to 5.6 million in $2015 / 16$. This number had however been recorded at 4.7 million during the 2009 KPHC .

Overall, dependency ratio in the country increased to 81.6 per cent as per the 2015/16 KIHBS compared to 76.8 per cent as per the 2005/06 KIHBS. Dependency ratio in the rural areas increased from 84.6 per cent in 2005/06 to 96.7 per cent in $2015 / 16$. Similarly, urban dependency ratio increased from 57.1 in 2005/06 to 59.7 per cent estimated from 2015/16 KIHBS. Thus, the rural dependency ratio was much higher than the urban one.

## Key Labour Market Indicators

Dependency Ratio: The total dependency ratio measures the burden which the productive part of the population shoulders to support the economically dependent. An increase in the indicator impacts negatively on financial and social welfare of the people. The survey revealed that total Dependency Ratio in the country decreased to 81.6 per cent in 2016 compared to 86.9 per cent recorded in the 2009 KPHC.
Economically Active: In 2016, out of 39.3 million Kenyans aged five years and above, 55.5 per cent were economically active. The active population between ages 5 and 44 shows an increasing trend with the age cohort " $40-44$ " reporting a maximum of 96.2 per cent. Overall, 93.7 per cent of the household heads were active. Majority of them ( 62.2 per cent) were from households with a maximum of four members. Analysis by sex shows that of the total active household heads, 69.1 per cent were male. Further, 95.7 per cent of the male household heads were active. In addition, 89.5 per cent of the female household heads were active.

Labour Force Participation Rate: The overall labour force participation rate was 77.4 per cent. This indicates that slightly over 77 per cent of the working age population was either working for pay, profit, family gain or seeking employment. The highest
participation rate was in the age cohort " $40-44$ " at 96.2 per cent while the lowest was in the age cohort " $15-19$ " at 32.4 per cent.

Employment to Population Ratio: The overall employment to population ratio in the country increased to 71.6 per cent in 2016, from 69.3 per cent as recorded in the 2009 KPHC. The survey results also show that the ratio of person aged below 24 years had declined between 2009 and 2016. This indicator is used to evaluate the ability of the economy to create jobs. A high ratio implies that a large proportion of the population in the working age is employed, which generally has positive effects to the Gross Domestic Product (GDP) per capita.

Hours worked: Data on hours of work are important in distinguishing the various intensities of employment. More so, the information is useful in monitoring the working conditions which impact on the health and wellbeing of workers as well as levels of productivity and labour costs. The highest proportion of people ( 27.7 per cent) worked between " $40-48$ " hours in a week. The age cohort " $15-19$ " reported the highest proportion of 30.8 per cent working for less than 15 hours mainly attributable to schooling activities.

Part Time Workers: Part time workers are the individuals who work fewer hours than full time employees. Based on 35 hours per week cut off, overall part time workers constituted 28.5 per cent of the 17.9 million working population. In total, the working males were 9.2 million out of which 21.1 per cent were part time workers. Further, of the 8.7 million working females, part time workers accounted for 36.2 per cent.

Education Attainment: Overall, 51.4 per cent of the total population reported primary level of education as the highest attained while 21.2 per cent had secondary level of education. Person with university level of education (undergraduate and postgraduate) accounted for 3.0 per cent of the population.

Working Patterns: Out of the total employed persons aged 15-64, 63.2 per cent were full-time employees in 2016 . Seasonal workers constituted 13.6 per cent while casual employees were 12.6 per cent. Majority of the fulltime and casual workers were aged below 45 years. On the other hand, most of the part-time workers were aged below 40 while majority of seasonal workers were below 35 years.

Time-Related Under-Employment: The survey revealed that 3.7 million or 20.4 per cent of the employed persons in the working age population were under-employed. This number refers to those who were engaged during the reference period and worked less hours than desired and were willing and available to work for longer time period. Under-employment was higher in the rural areas at 26.6 per cent compared to the urban areas at 11.0 per cent. Majority of the under-employed ( 61.8 per cent) were females.

Labour Underutilization: Labour underutilization gives an indication of the unmet need of employment among the population. Measures of underutilization identify groups among the employed and persons outside the labourforce who share similarities with the unemployed. The focus is on issues of insufficient labour absorption.
i) Unemployment Rate (LU1): The survey results under the "strict" definition (not working, available and looking for work) show an overall 7.4 per cent unemployment rate. About 85 per cent of the unemployed were aged below 35. The largest unemployment rate was recorded in the age cohort "20-24" at 19.2 per cent. Majority of the unemployed for both Male and female were
in the same age cohort. Female constituted 64.5 per cent of the unemployed.
ii) Labour Underutilization (LU2): This measure is computed as the combined rate of time-related under-employment and unemployment. LU2 was calculated as 26.4 per cent with the highest rates of underutilization being observed in the youth age groups 15-29 and in the age category 55-64.
Economically Inactivity: The main two reasons of inactivity were school attendance and family responsibilities accounting for 73.8 per cent and 13.1 per cent, respectively. Considering the prime age of " $25-54$ ", family responsibility and sickness/ injury were the two main reasons for inactivity.

## Recommendations

- To supplement the information contained in this report, further analysis targeting: engagement in economic activities; multiple jobs; earnings; literacy; formality and informality; persons not in the labour force and occupations should be undertaken.
- To update labour force indicators, Labour force surveys should be carried out more frequently (Preferably on a quarterly basis. Such surveys should be designed to provide key indicators up to the county levels.
- Future labour force surveys should be designed taking into account the emerging recommendations on labour statistics measurement and particularly, the recommendations of the $19^{\text {th }}$ conference of labour statisticians.
- Special studies targeting skills level and literacy should be designed and undertaken.
- To cover the whole aspect of the labour force, special studies should be undertaken targeting population living in non-conventional households.


## CHAPTER 1

## Background and Introduction

### 1.1 Overview of Labour Force Information

Labour is a key factor of production which, if well nurtured and optimally engaged, can lead to faster growth of the economy as well as to positive social transformation. As espoused in the Vision 2030 development blueprint, Kenya seeks rapid growth and will, therefore, require sound Labour Market Information System (LMIS) to facilitate informed policy formulation, monitoring and evaluation of initiatives aimed at addressing employment creation, unemployment, under-employment and other Labour issues. Pursuant to this goal, KNBS has over the years, undertaken various labour force surveys with the overall objective of producing and publishing comparable information on employment. These studies, complemented by national censuses, mainly aim at providing information to be used in the development of strategies that would lead to job creation.

### 1.2 Measurement of Labour indicators

The labour force framework used in this analysis classifies the population into three mutually exclusive and exhaustive categories:

- The employed,
- The unemployed and
- Those not in the labour force.

The employed and the unemployed categories together make up the labour force, or the currently active population. This gives the number of people comprising the labour force for a specified period. The inactive population covers those members of the population who are not available for work including full-time students, retired persons, homemakers and the incapacitated.
Figure 1.1a: Labour Force Framework

Figure 1.1b: Distribution of Population 5 years and Above ('000')


### 1.3 Situational analysis

As stated in vision 2030, Kenya's global competitiveness depends on the county's ability to create a human resource base with the requisite skills that match technological changes and needs of the industries. In order to put the country on the path to have these skills, it calls for collaborative efforts among stakeholders which means there should be strong linkages between training institutions, industries and other stakeholders in the labour market.

The 2009 Kenya Population and Housing Census (KPHC) revealed Kenya's work force to have reached 20.5 million people, representing 63.2 per cent of the total population aged 5 and above, females being the majority. Based on the 2009 KPHC, the labour force was expected to have reached 24.5 million in 2015 and to increase to 28.5 million by 2020. This implies that the economy needs to create more employment and income opportunities for the growing labour force.
At the Global arena the United Nations' Sustainable Development Goals (SDG) number 8 seeks to achieve full and productive, and decent work; higher economic productivity; protection of labour rights and promotion of safe and secure working environment for all workers. In light of this, the government has put in place measures aimed at ensuring maintenance of a sound national occupational safety and health system for protection of employees from accidents and diseases at work and therefore to directly increase their productivity. Also, a legal framework has been put in place to ensure fair remuneration and protection of workers' rights; and to enhance improvement of labour productivity in the country. This is viewed as being instrumental in improving the country's competitiveness as well as in setting the stage for sustainable economic growth and development.

### 1.4 General Trends in selected Labour Force Indicators

This section reviews the national-level trends in Labour Force Participation Rate (LFPR) based on previous surveys and censuses undertaken by KNBS. Table 1.1 shows that the number of people in the labour force has been increasing over time. However, the working age population has grown faster than the labour force. The inactive population increased from 2.5 million in 1989 to 4.7 million in 2009. The inactive population usually grows when there are few employment opportunities, or when potential workers drop out of the labour force, or when a growing number of people stay in school past the age of 15. The highest labour force participation rate recorded was 82.4 per cent as per the 1999 Population and Housing Census and dropped to 76.7 per cent in the 2009 Population and Housing Census.

Table 1.1: Trends in selected Labour Force Indicators

| Year | Population <br> 15-64 (Mn) | Economically <br> Active (15-64) (Mn) | Economically <br> Inactive (15- <br> 64)(Mn) | Labour Force <br> Participation <br> Rate (\%) |
| :--- | :---: | :---: | :---: | :---: |
| 1989 | 10.3 | 7.8 | 2.5 | 75.7 |
| 1999 | 15.3 | 12.4 | 2.9 | 82.4 |
| $2005 / 2006$ | 19.9 | 14.6 | 5.3 | 73.4 |
| 2009 | 20.5 | 15.8 | 4.7 | 76.7 |

### 1.5 Objectives of the 2015/16 KIHBS

The 2015/16 KIHBS had a broad objective of providing a wide range of indicators to assess progress made in improving living standards of the population at both the National and County levels. This is in addition to monitoring progress made towards implementation of the second Medium Term Plan (MTP II) as well as achievements of the Sustainable Development Goals (SDGs).
Specifically, the Survey was designed to generate data towards meeting multiple statistical production objectives, including:
a. Computation of updated labour force indicators;
b. Provide ancillary data collected using Computer Assisted Personal Interviews (CAPI) to test the scope of implementing a Continuous Household Survey Programme(CHSP) that include the quarterly labour force survey;
c. Computation of updated consumption baskets to rebase the Consumer Price Index (CPI);
d. Computation of updated poverty and inequality indicators at national and county levels;
e. Informing monetary, non-monetary and multi-dimensional indicators and socioeconomic profiles of living standards; and
f. Provide data to update the household sector and the agriculture and livestock input-output structure of the System of National Accounts (SNA).

### 1.6 Profile of the population

Table 1.2 presents a profile of Kenya's estimated population categorised by age cohorts and sex as per the $2015 / 16$ KIHBS. The total population was estimated at 45 million persons, out of which 49.4 per cent were males compared to 50.6 per cent females. For those aged 0-19, the population of males was higher than that of females. However, as from age 20, the proportion of female population was found to be significantly higher than that of the males, except for the 40-44 and 45-49 cohorts.

Table 1.2: Population Distribution by Age group and Sex

| Age Group | Total | Male | Per cent | Female | Per cent |
| :---: | ---: | ---: | ---: | ---: | ---: |
| $0-4$ | $6,081.0$ | $3,056.9$ | 50.3 | $3,024.1$ | 49.7 |
| $5-9$ | $6,538.7$ | $3,264.7$ | 49.9 | $3,274.0$ | 50.1 |
| $10-14$ | $6,016.8$ | $3,032.6$ | 50.4 | $2,984.2$ | 49.6 |
| $15-19$ | $5,015.8$ | $2,598.6$ | 51.8 | $2,417.2$ | 48.2 |
| $20-24$ | $4,069.4$ | $1,931.3$ | 47.5 | $2,138.1$ | 52.5 |
| $25-29$ | $3,666.8$ | $1,716.2$ | 46.8 | $1,950.6$ | 53.2 |
| $30-34$ | $3,062.7$ | $1,501.0$ | 49.0 | $1,561.8$ | 51.0 |
| $35-39$ | $2,503.1$ | $1,207.9$ | 48.3 | $1,295.2$ | 51.7 |
| $40-44$ | $2,006.4$ | $1,011.0$ | 50.4 | 995.4 | 49.6 |
| $45-49$ | $1,475.9$ | 761.0 | 51.6 | 714.9 | 48.4 |
| $50-54$ | $1,241.5$ | 597.9 | 48.2 | 643.6 | 51.8 |
| $55-59$ | $1,094.1$ | 504.7 | 46.1 | 589.4 | 53.9 |
| $60-64$ | 819.7 | 399.0 | 48.7 | 420.7 | 51.3 |
| $65-69$ | 615.4 | 289.4 | 47.0 | 326.0 | 53.0 |
| $70-74$ | 406.4 | 196.5 | 48.4 | 209.8 | 51.6 |
| $75-79$ | 293.0 | 133.0 | 45.4 | 160.0 | 54.6 |
| $80-84$ | 210.3 | 75.4 | 35.9 | 134.9 | 64.1 |
| $85-90$ | 116.5 | 52.3 | 44.9 | 64.1 | 55.0 |
| $91-94$ | 50.5 | 22.2 | 44.0 | 28.2 | 55.8 |
| $95+$ | 45.7 | 19.3 | 42.2 | 26.4 | 57.8 |
| Not Stated | 41.4 | 21.8 | 52.7 | 19.6 | 47.3 |
| Total | $\mathbf{4 5 , 3 7 1 . 1}$ | $\mathbf{2 2 , 3 9 2 . 6}$ | $\mathbf{4 9 . 4}$ | $\mathbf{2 2 , 9 7 8 . 5}$ | 50.6 |

Figure 1.2 shows that generally, Kenya has a young population as evidenced by the highest proportion of the population being in the lower population age cohorts. Thus, whereas the youngest age cohorts $0-4,5-9$ and $10-14$ contributed 13.4, 14.3 and 13.3 per cent, the oldest cohorts 85-90, 91-94 and 95+ contributed $0.3,0.1$ and 0.3 per cent, respectively, to the total population.

Figure 1.2: Percentage distribution of population by age cohorts


## CHAPTER 2

## Survey Design and Methodology

### 2.1 Overview

In the KNBS 2013-2017 Strategic Plan, the 2015/16 KIHBS was identified as one of the key activities to be implemented. The survey was the second Integrated Household Budget Survey to be undertaken in Kenya and the first such survey under the devolved system of government. It was designed to capture a wide range of socio-economic indicators, such as; demographic, education, Labour, health, household consumption, expenditure patterns and sources of household income.

### 2.2 Sample Design and Selection

The 2015/16 KIHBS was a household-based survey designed to provide estimates for various indicators at the national, county and rural-urban levels. The sample size was calculated independently for each county based on households from the 2009 census, resulting to a national sample of 24,000 households. This sample was further distributed to the urban and rural strata using power allocation method. The distribution of the sample is shown in Table 2.1.

Table 2.1: Sampling Allocation for 2015/16 KIHBS

| S/NO | County | Number of Clusters |  |  | Number of Households |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Rural | Urban | Total | Rural | Urban | Total |
| 1 | Mombasa.. | - | 52 | 52 | - | 520 | 520 |
| 2 | Kwale. | 32 | 20 | 52 | 320 | 200 | 520 |
| 3 | Kilifi. | 28 | 24 | 52 | 280 | 240 | 520 |
| 4 | Tana River. | 32 | 16 | 48 | 320 | 160 | 480 |
| 5 | Lamu. | 24 | 20 | 44 | 240 | 200 | 440 |
| 6 | Taita/Taveta.. | 32 | 16 | 48 | 320 | 160 | 480 |
| 7 | Garissa.. | 32 | 20 | 52 | 320 | 200 | 520 |
| 8 | Wajir.. | 28 | 20 | 48 | 280 | 200 | 480 |
| 9 | Mandera... | 32 | 16 | 48 | 320 | 160 | 480 |
| 10 | Marsabit.. | 28 | 16 | 44 | 280 | 160 | 440 |
| 11 | Isiolo. | 24 | 20 | 44 | 240 | 200 | 440 |
| 12 | Meru.. | 40 | 16 | 56 | 400 | 160 | 560 |
| 13 | Tharaka-Nithi. | 32 | 16 | 48 | 320 | 160 | 480 |
| 14 | Embu. | 32 | 16 | 48 | 320 | 160 | 480 |
| 15 | Kitui. | 36 | 16 | 52 | 360 | 160 | 520 |
| 16 | Machakos. | 24 | 28 | 52 | 240 | 280 | 520 |
| 17 | Makueni. | 36 | 16 | 52 | 360 | 160 | 520 |
| 18 | Nyandarua................ | 32 | 16 | 48 | 320 | 160 | 480 |
| 19 | Nyeri... | 32 | 20 | 52 | 320 | 200 | 520 |
| 20 | Kirinyaga................... | 32 | 20 | 52 | 320 | 200 | 520 |
| 21 | Murang'a.... | 36 | 16 | 52 | 360 | 160 | 520 |
| 22 | Kiambu.. | 24 | 34 | 58 | 240 | 340 | 580 |
| 23 | Turkana. | 32 | 16 | 48 | 320 | 160 | 480 |
| 24 | West Pokot. | 36 | 12 | 48 | 360 | 120 | 480 |
| 25 | Samburu.. | 28 | 16 | 44 | 280 | 160 | 440 |
| 26 | Trans Nzoia.. | 32 | 20 | 52 | 320 | 200 | 520 |
| 27 | UasinGishu. | 28 | 26 | 54 | 280 | 260 | 540 |
| 28 | ElgeyoMarakwet........ | 32 | 16 | 48 | 320 | 160 | 480 |
| 29 | Nandi. | 36 | 16 | 52 | 360 | 160 | 520 |
| 30 | Baringo...................... | 32 | 16 | 48 | 320 | 160 | 480 |
| 31 | Laikipia.. | 32 | 20 | 52 | 320 | 200 | 520 |
| 32 | Nakuru... | 28 | 30 | 58 | 280 | 300 | 580 |
| 33 | Narok. | 36 | 12 | 48 | 360 | 120 | 480 |
| 34 | Kajiado.. | 24 | 24 | 48 | 240 | 240 | 480 |
| 35 | Kericho. | 28 | 24 | 52 | 280 | 240 | 520 |
| 36 | Bomet. | 36 | 16 | 52 | 360 | 160 | 520 |
| 37 | Kakamega.. | 36 | 16 | 52 | 360 | 160 | 520 |
| 38 | Vihiga.. | 28 | 20 | 48 | 280 | 200 | 480 |
| 39 | Bungoma................... | 36 | 16 | 52 | 360 | 160 | 520 |
| 40 | Busia. | 36 | 16 | 52 | 360 | 160 | 520 |
| 41 | Siaya........................ | 32 | 20 | 52 | 320 | 200 | 520 |
| 42 | Kisumu.. | 24 | 30 | 54 | 240 | 300 | 540 |
| 43 | Homa Bay..... | 32 | 20 | 52 | 320 | 200 | 520 |
| 44 | Migori...... | 28 | 24 | 52 | 280 | 240 | 520 |
| 45 | Kisii.. | 36 | 20 | 56 | 360 | 200 | 560 |
| 46 | Nyamira....... | 36 | 16 | 52 | 360 | 160 | 520 |
| 47 | Nairobi City................ | - | 72 | 72 | - | 720 | 720 |
|  | Total | 1,412 | 988 | 2,400 | 14,120 | 9,880 | 24,000 |

The 2015/16 KIHBS sample was drawn from the fifth National Sample Survey and Evaluation Programme (NASSEP V) household sampling frame. This is the frame that the Bureau currently operates to conduct household-based surveys in Kenya. The frame consists of 5,360 clusters split into four equal sub-samples. The clusters in the frame were drawn from approximately 96,000 enumeration areas (EAs) of the 2009 KPHC. The frame is stratified into urban and rural areas within each of the 47 counties except Nairobi and Mombasa which are wholly urban, resulting in 92 sampling strata.

The sampling for the survey was done in three stages. In stage one, a total of 2,400 clusters (988 in urban and 1,412 in rural areas) were sampled from the NASSEP $V$ sampling frame. In stage two, 16 households were selected from each of the clusters. The third stage involved the sub-sampling of 10 households (from the 16 households) for KIHBS with the remaining 6 earmarked for the Continuous Household Survey Programme (CHSP). Further, five households from each cluster were randomly selected among the 10 for administration of diaries.

The 2015/16 KIHBS sampled households were covered over a period of 12 months, divided into four quarters. Each of the 2,400 clusters was randomly assigned into the quarters so as to generate nationally representative quarterly samples of approximately 600 clusters that could be analysed independently.

### 2.3 Data Weighting

The sampling weights W are calculated simply as the inverse of the product of selection probabilities. The probability (P) of selecting a $2015 / 16$ KIHBS household is the product of four factors, :

$$
P=\prod_{i=1}^{4} P_{i}
$$

Where;
$P_{1}=$ the probability of selecting the EA for the NASSEP $\vee$ 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 $2015 / 16$ KIHBS, among all the clusters in the NASSEP $\vee$ master sample; and
$P_{4}=$ the probability of selecting the household among all the households listed in the cluster.

Cluster weights were computed as the product of sample cluster design weights, household and cluster response adjustment factors as follows:

$$
W_{i j}=D_{i j} \frac{S_{i j}}{I_{i j}} \frac{c_{j}}{c_{j}}
$$

Where;
$W_{i j}=$ overall final cluster weight for cluster $i$ in stratum $j$;
Dij = sample cluster design weight obtained from inverse of cluster selection probabilities for cluster $i$ in stratum $j$;

Sij = number of listed households in cluster $i$ in stratum $j$;

Iij = number of responding households in cluster $i$ in stratum $j$;
$C \mathrm{j} \quad=$ number of clusters in stratum $j$; and
$C \mathrm{j}=$ number of clusters selected from stratum $j$.

## Map 1.1: Map of Kenya by County



### 2.4 Weight Adjustments

In the process of weighting, the sample required adjustments. This was necessitated by the survey data not being self-weighting. In addition, some of the sampled clusters were not covered while some households did not respond to the interviews and others could not be accessed due to various reasons. The adjusted weights were applied to the 2015/16 KIHBS data during analysis.

### 2.5 Survey Instruments

The survey used a set of eight questionnaires'. These are:
a. Household members' information questionnaire: - collected information on demographics, education, labour, health, fertility and mortality, child health and nutrition, ICT services and domestic tourism at individual level.
b. Household level information questionnaire: - collected information relating to housing, water, sanitation and energy use, agricultural holdings, activities and outputs, livestock, household economic enterprises, transfers, income, credit, and recent shocks to household welfare, food security, justice, credit and ICT at the household level.
c. Household consumption expenditure information questionnaire: - collected information relating to purchases and consumption of food, non-food and services in the household. The information obtained through this questionnaire included expenses incurred by households on food, house rent, health care, education, household goods, insurance among other things.
d. Household purchases diary: - used to keep a record of food items purchased by members of the household
e. Household consumption expenditure diary: - used to record food items consumed by the household members
f. Market questionnaire: - This questionnaire was used to collect prices of all goods and services available in the market to provide information required to standardize units of measurement of commodities and purchases.
g. Community questionnaire: - Was used to collect information about the community in which the sampled households reside. Such information included basic physical infrastructure, access to and quality of public services, economic activities, agriculture, community welfare, security and safety.
h. CHSP Questionnaire: - Used to pre-test the consumption and labour force modules for eventual use in the design of continuous household survey programme.

Comprehensive interview manuals were prepared to guide personnel during survey training and implementation.

### 2.6 Management of the Survey

The survey was implemented by KNBS in close collaboration with the World Bank through various structures. The process was spearheaded by a steering committee comprising KNBS Directors who provided policy direction during the implementation of the survey. The steering committee was supported by a technical committee who designed the survey instruments and methodology; and was responsible for coordination of data collection, processing and analysis. A secretariat comprising of a project manager and two technical managers was responsible for the day-today running of the survey.

[^0]
### 2.7 Pre-Test and Pilot of the Survey

A pre-test was first undertaken to test on the flow of the questions. This was followed by a pilot survey that was undertaken in six counties between April and May 2015 with the aim of comprehensively testing various aspects of the survey including data collection instruments, methodology and field logistics.

### 2.8 Recruitment and Training

All personnel involved in the $2015 / 16$ KIHBS survey 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 regionally balanced teams. A total of 323 survey personnel with the relevant qualifications were recruited. These included 258 field data collection personnel, 36 field reserves, 23 data entry personnel and 6 data entry reserves.

Three training phases (training of trainers, training of data collection personnel, and training of data entry and CAPI personnel) were undertaken prior to fieldwork. The trainees acquired in-depth knowledge of all the data collection instruments and manuals. The training also included practicals in non-KIHBS sample clusters in Nakuru county.

### 2.9 Field Logistics and Implementation

Field data collection for the 2015/16 KIHBS took place over a period of 12 months from September 2015 to August 2016 and it was organized into 24 cycles of 14 days each. Clusters were equally and randomly allocated to the four quarters of the survey period. The teams ensured that they completed data collection in the assigned clusters within the quarter.

The field data collection personnel were divided into 50 teams each comprising of a supervisor, 2 interviewers, a field data entry clerk, a field editor and a driver. In each cycle, a team covered 20 households for the KIHBS main questionnaire and 12 households for the CHSP questionnaire. Each interviewer in a team was allocated a cluster in each cycle.

### 2.10 Survey Response Rates

The survey achieved a response rate of 91.3 per cent, nationally. As shown in Table 2.2, from 23,852 households that were sampled for the survey, a total of 21,734 households were successfully interviewed. The response rate for rural households was higher (93.5\%) than that for urban households (87.8\%). Part of the non-response was due to non-coverage of 13 clusters spread across different counties that was occasioned by either insecurity or non-availability of households mainly due to movement of populations in nomadic areas.

Table 2.2: Response rates

| Result | Residence |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Urban | Rural |  |
| Households selected.............. | 9,870 | 13,982 | 23,852 |
| Households interviewed......... | 8,681 | 13,092 | 21,773 |
| Household response rate........ | $\mathbf{8 8}$ | $\mathbf{9 3 . 6}$ | $\mathbf{9 1 . 3}$ |

### 2.11 Data Processing

Data from PAPI questionnaires in the 2015/16 KIHBS was captured using the Census and Survey Processing System (CSPro) software. The data capture program had inbuilt consistency checks. A double data entry approach was adopted with first entry being undertaken in the field (in all the county offices by 50 keyers using Laptops in all 47 counties). Data transmission involved data uploaded to the cloud server after every session of data entry. The same data was downloaded daily from the cloud server to the local server located at the KNBS headquarters. A team of 22 keyers based at the headquarters conducted a second independent data entry as soon as the questionnaires were received from the field. The two sets of entered data were compared and the corrections effected.
To transmit the data, Internet connectivity was provided through 3G modems. Data backup was done using external hard disks and local servers at the headquarters. Power banks were used to recharge the tablets while generators in some remote located areas were also used to provide power for the laptops and charge tablets. Data security was achieved through several methods including data encryption, secure file transfer and passwords.

### 2.12 Limitations

- Survey data is usually faced with some administrative and logistical challenges. This gives rise to coverage and content errors, which vary in nature and magnitude. In the 2015/16 KIHBS, coverage errors resulted due to non-response of a part of the target population. Further, content errors pertained to misreporting by respondents or miscoding by interviewers. These errors cause biases and distortion in the estimates based on the survey data.
- The concepts of economic activity used in KIHBS survey are based on international UN/ILO definitions, and some may have been miss-understood by both the respondents and enumerators which may have introduced some errors.
- Some variables like economic activity and occupations require time for editing. These two variables have not been analysed in this report.
- The survey results exclude all workers who were living in non-conventional households and particularly the armed forces personnel.


## CHAPTER 3

## Survey Findings

## Introduction

This chapter highlights results of some key labour market indicators as reported during the 2015/16 KIHBS. These are mainly presented at the national level, rural-urban divide, by sex and age cohorts. More in-depth analysis on the presented and other labour market indicators will be undertaken and published in an analytical report. Values in tables may vary slightly because of rounding errors.

### 3.1 Total Dependency Ratio

The total dependency ratio indicator shows the burden which the productive part of the population shoulders to support the economically dependent. An increase in the indicator impacts negatively on financial and social welfare of the people. However, this indicator has the limitations that some persons classified as "dependent" could be producers while others characterised as "productive" could be economically dependent.

As shown in Table 3.1, total dependency ratio in the country decreased to 81.6 per cent in 2016 from 86.9 per cent recorded in the 2009 KPHC. This implies that on average, 82 persons aged below 15 years and above 64 years, depended on 100 persons of the working age population ( 15 to 64 years) in 2016 . During the same period, total dependency ratio in the rural areas decreased from 100.4 per cent to 96.7 per cent. Likewise, total dependency ratio in the urban areas decreased from 62.7 per cent in 2009 to 59.7 per cent in 2016.

Total dependency ratio decreased in all the areas except Nairobi and North Eastern regions. The later had the highest dependency ratio at 134.3 per cent in 2016 , while Nairobi had the lowest at 48.3 per cent. The highest decline in total dependency ratio was in the Eastern region (10.9 percentage points) was recorded over the period between 2009 and 2016.

Table 3.1: Total Dependency Ratio by Residence and Region

|  |  |  |  |  |  |  | 000' |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Age |  |  |  |  | Total Population <br> 2016 | TotalDependencyRatio |  |
|  | 0-14 | 65+ | <15 + 65+ | 15-64 | Not Stated |  | 2009 | $2016^{2}$ |
| Kenya......... | 18,636.5 | 1,737.7 | 20,374.2 | 24,955.5 | 41.4 | 45,371.1 | 86.9 | 81.6 |
| Rural............. | 12,934.9 | 1,377.0 | 14,311.9 | 14,796.1 | 18.6 | 29,126.6 | 100.4 | 96.7 |
| Urban......... | 5,701.6 | 360.7 | 6,062.3 | 10,159.5 | 22.8 | 16,244.6 | 62.7 | 59.7 |
| Region ${ }^{1}$ |  |  |  |  |  |  |  |  |
| Coast.............. | 1,694.4 | 125.7 | 1,820.1 | 2,358.0 | 17.0 | 4,195.1 | 83.9 | 77.2 |
| North Eastern.... | 867.3 | 50.4 | 917.7 | 683.4 | 0.8 | 1,601.9 | 116.5 | 134.3 |
| Eastern............ | 2,343.8 | 326.1 | 2,669.9 | 3,474.4 | 2.0 | 6,146.3 | 87.7 | 76.8 |
| Central............ | 1,704.3 | 301.3 | 2,005.6 | 3,032.0 | 8.2 | 5,045.8 | 69.8 | 66.1 |
| Rift valley.......... | 5,583.3 | 424.4 | 6,007.7 | 6,648.9 | 4.9 | 12,661.5 | 93.5 | 90.4 |
| Western.......... | 2,222.3 | 216.0 | 2,438.3 | 2,457.6 | - | 4,895.9 | 103.9 | 99.2 |
| Nyanza............. | 2,818.7 | 245.2 | 3,063.9 | 3,295.0 | 2.4 | 6,361.3 | 98.5 | 93.0 |
| Nairobi............. | 1,402.4 | 48.5 | 1,450.9 | 3,006.2 | 6.1 | 4,463.2 | 46.1 | 48.3 |

${ }^{\top}$ Regions are used here for comparison purposes with 2009 results.
${ }^{2}$ The Not stated are excluded from the computation of Total Dependency.

### 3.1.1 Total Dependency Ratio by Counties

There were wide spatial differences in total dependency ratios ranging from 48.3 per cent in Nairobi to 139.8 per cent in Wajir as shown in Table 3.2. Mandera, Wajir, Garissa, Samburu, Turkana, West Pokot, Marsabit, Homa Bay, Migori, Tana River, Narok, Bungoma, Busia Counties had dependency ratios above 100 per cent; while in addition to Nairobi, Mombasa, Kiambu, Nyeri, Machakos, Kirinyaga, Meru, Kajiando and Embu Counties had dependency ratios below 70 per cent.

Table 3.2: Total Dependency Ratio by Residence and County

|  | Age |  |  |  |  | Total Population | Total Dependency Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-14 | $65+$ | <15 + 65+ | 15-64 | Not Stated | 2016 | 2016 |
| Kenya........................ | 18,636.5 | 1,737.7 | 20,374.2 | 24,955.5 | 41.4 | 45,371.1 | 81.6 |
| Mombasa................. | 379.9 | 20.1 | 400.0 | 784.3 | 0.6 | 1,184.9 | 51.0 |
| Kwale....................... | 373.2 | 27.4 | 400.6 | 419.7 | - | 820.3 | 95.4 |
| Kilifi........................... | 610.3 | 42.6 | 652.9 | 730.7 | 16.4 | 1,400.0 | 89.4 |
| Tana River................. | 143.3 | 11.4 | 154.7 | 148.9 | - | 303.6 | 103.9 |
| Lamu......................... | 54.4 | 5.5 | 59.9 | 68.2 | - | 128.1 | 87.8 |
| Taita Taveta............. | 133.3 | 18.6 | 151.9 | 206.2 | - | 358.1 | 73.7 |
| Garissa..................... | 227.7 | 11.2 | 238.9 | 192.3 | 0.8 | 432.0 | 124.2 |
| Wajir......................... | 252.1 | 15.4 | 267.5 | 191.4 | - | 458.9 | 139.8 |
| Mandera.................. | 387.5 | 23.8 | 411.3 | 299.8 | - | 711.1 | 137.2 |
| Marsabit................... | 156.8 | 12.0 | 168.8 | 147.2 | - | 316.0 | 114.7 |
| Isiolo.......................... | 69.6 | 5.4 | 75.0 | 80.5 | - | 155.5 | 93.2 |
| Meru........................ | 532.7 | 67.6 | 600.3 | 870.1 | 0.4 | 1,470.8 | 69.0 |
| Tharaka Nithi............ | 148.2 | 24.6 | 172.8 | 223.2 | 0.1 | 396.1 | 77.4 |
| Embu....................... | 191.5 | 36.7 | 228.2 | 331.0 | 0.6 | 559.8 | 68.9 |
| Kitui......................... | 470.5 | 70.5 | 541.0 | 555.9 | 0.9 | 1,097.8 | 97.3 |
| Machakos................ | 400.7 | 61.5 | 462.2 | 729.1 | - | 1,191.3 | 63.4 |
| Makueni................... | 373.8 | 47.9 | 421.7 | 537.4 | - | 959.1 | 78.5 |
| Nyandarua............... | 266.0 | 37.7 | 303.7 | 381.1 | 1.6 | 686.4 | 79.7 |
| Nyeri......................... | 247.5 | 63.8 | 311.3 | 487.2 | - | 798.5 | 63.9 |
| Kirinyaga.................. | 201.7 | 43.6 | 245.3 | 361.0 | 1.7 | 608.0 | 68.0 |
| Muranga.................. | 382.4 | 90.4 | 472.8 | 611.4 | 0.7 | 1,084.9 | 77.3 |
| Kiambu..................... | 606.7 | 65.9 | 672.6 | 1,191.4 | 4.3 | 1,868.3 | 56.5 |
| Turkana.................... | 542.3 | 45.6 | 587.9 | 494.9 | 0.8 | 1,083.6 | 118.8 |
| West Pokot.............. | 330.3 | 17.4 | 347.7 | 301.6 | 0.1 | 649.4 | 115.3 |
| Samburu................... | 149.5 | 8.1 | 157.6 | 126.1 | - | 283.7 | 125.0 |
| Trans Nzoia............... | 450.3 | 37.7 | 488.0 | 549.7 | 0.4 | 1,038.1 | 88.8 |
| Uasin Gishu............... | 456.8 | 41.0 | 497.8 | 633.7 | 1.1 | 1,132.6 | 78.6 |
| Elgeyo Marakwet..... | 198.5 | 19.4 | 217.9 | 250.0 | 0.9 | 468.8 | 87.2 |
| Nandi....................... | 389.0 | 26.1 | 415.1 | 538.9 | - | 954.0 | 77.0 |
| Baringo..................... | 309.2 | 38.0 | 347.2 | 356.5 | - | 703.7 | 97.4 |
| Laikipia.................... | 210.7 | 18.2 | 228.9 | 277.2 | 1.1 | 507.2 | 82.6 |
| Nakuru...................... | 859.0 | 77.0 | 936.0 | 1,094.7 | 0.5 | 2,031.2 | 85.5 |
| Narok....................... | 538.7 | 24.0 | 562.7 | 515.0 | - | 1,077.7 | 109.3 |
| Kajiado..................... | 337.3 | 20.3 | 357.6 | 513.1 | - | 870.7 | 69.7 |
| Kericho..................... | 384.0 | 29.9 | 413.9 | 530.7 | - | 944.6 | 78.0 |
| Bomet...................... | 427.6 | 21.7 | 449.3 | 466.9 | - | 916.2 | 96.2 |
| Kakamega............... | 837.3 | 77.4 | 914.7 | 960.8 | - | 1,875.5 | 95.2 |
| Vihiga...................... | 259.8 | 44.6 | 304.4 | 322.3 | - | 626.7 | 94.4 |
| Bungoma................. | 741.2 | 50.7 | 791.9 | 761.5 | - | 1,553.4 | 104.0 |
| Busia......................... | 384.1 | 43.2 | 427.3 | 413.0 | - | 840.3 | 103.5 |
| Siaya........................ | 430.3 | 57.1 | 487.4 | 498.0 | - | 985.4 | 97.9 |
| Kisumu..................... | 477.2 | 34.9 | 512.1 | 617.8 | 2.4 | 1,132.3 | 82.9 |
| Homa Bay................ | 533.4 | 31.6 | 565.0 | 506.8 | - | 1,071.8 | 111.5 |
| Migori....................... | 524.0 | 44.1 | 568.1 | 558.2 | - | 1,126.3 | 101.8 |
| Kisii........................... | 566.1 | 51.5 | 617.6 | 728.9 | - | 1,346.5 | 84.7 |
| Nyamira................... | 287.8 | 26.1 | 313.9 | 385.3 | - | 699.2 | 81.5 |
| Nairobi...................... | 1,402.4 | 48.5 | 1,450.9 | 3,006.2 | 6.1 | 4,463.2 | 48.3 |

### 3.1.2 Child Dependency Ratio

As shown in Figure 3.1a, there were variations in child dependency ratios across regions. Normally, regions with high child dependency ratios reflect high fertility rates in contrast to regions with low child dependency ratio. Nationally, child dependency ratio stood at 74.7 per cent in 2016 compared to 80.4 per cent in 2009 . Rural areas had higher child dependency ratios at 87.4 per cent compared to 56.1 per cent in urban areas in 2016. North Eastern region had highest child dependency at 126.9 per cent in 2016 and 112.0 per cent in 2009 while Nairobi had the lowest child dependency in both years at 46.7 per cent and 44.5 per cent in 2016 and 2009, respectively.

Figure 3.1a: Child Dependency Ratio by Region, 2009 and 2016


### 3.1.3 Aged Dependency Ratio

An increase in the aged dependency ratio reflects an increase of the elderly population. Subsequently a high aged dependency ratio is an indication of additional pressures that social security and public health systems must withstand. Overall, aged dependency ratio in the country stood at 7.0 per cent in 2016 up from 6.5 per cent in 2009 as shown in Figure 3.1b. The ratio was higher in the rural areas at 9.3 per cent compared to 3.6 per cent in the urban areas in 2016 . Regionally the aged dependency ratio was highest in the central region at 9.9 per cent in 2016 which had increased from 8.6 per cent in 2009. Nairobi had the lowest aged dependency ratio was lowest at 1.6 per cent in 2016 the same level as in 2009..

Figure 3.1b: Aged Dependency Ratio by Region, 2009 and 2016


### 3.2 Employment to Population Ratio

This indicator is used to evaluate the ability of the economy to create jobs. A high ratio implies that a large proportion of the population in the working age is employed, which generally has positive effects to the Gross Domestic Product (GDP) per capita.

Table 3.3 shows the distribution of the employment to population ratio by age and residence. The survey revealed that the overall employment to population ratio in the country increased to 71.6 per cent in 2016 , from 69.3 per cent recorded in the 2009 KPHC . The results also show that the employment to population ratio of persons aged below 24 years had declined between 2009 and 2016. This could be attributed to the various reforms undertaken within the education sector that have improved school enrolment and retention, thereby increasing the economically inactive in these age cohorts. On the other hand, the ratio for all other age categories had increased within the same period. The highest increase in the ratio was recorded in the " $55-59$ " age cohort mainly attributable to extension of the retirement age from 55 to 60 years.
The employment to population ratio in rural areas increased to 73.2 per cent in 2016 from 70.7 per cent in 2009. Similarly, the ratio in the urban areas increased to 69.4 per cent in 2016 from 66.8 per cent in 2009. Overall, employment to population ratios in the rural areas were higher than those in the urban areas across all age cohorts.

Table 3.3: Distribution of Working Age Population (15-64) by Employment, 2009 and 2016
000'

| Age Group | Population | Employed | Employment Ratio 2016 | $\begin{gathered} \text { Employment Ratio } \\ 2009 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Total |  |  |  |  |
| 15-19 | 5,015.8 | 1,384.1 | 27.6 | 35.1 |
| 20-24 | 4,069.4 | 2,321.6 | 57.1 | 63.5 |
| 25-29 | 3,666.8 | 2,997.2 | 81.7 | 78.0 |
| 30-34 | 3,062.7 | 2,741.8 | 89.5 | 82.7 |
| 35-39 | 2,503.1 | 2,305.0 | 92.1 | 84.6 |
| 40-44 | 2,006.4 | 1,878.1 | 93.6 | 85.3 |
| 45-49 | 1,475.9 | 1,388.4 | 94.1 | 85.9 |
| 50-54 | 1,241.5 | 1,160.3 | 93.5 | 83.8 |
| 55-59 | 1,094.1 | 1,002.6 | 91.6 | 81.5 |
| 60-64 | 819.7 | 696.7 | 85.0 | 77.9 |
| Total | 24,955.5 | 17,875.7 | 71.6 | 69.3 |
| Rural |  |  |  |  |
| 15-19 | 3,491.3 | 1,105.9 | 31.7 | 38.7 |
| 20-24 | 2,120.2 | 1,330.3 | 62.7 | 67.7 |
| 25-29 | 1,807.1 | 1,517.7 | 84.0 | 80.2 |
| 30-34 | 1,570.5 | 1,446.2 | 92.1 | 83.5 |
| 35-39 | 1,435.5 | 1,340.2 | 93.4 | 84.9 |
| 40-44 | 1,235.9 | 1,169.6 | 94.6 | 85.3 |
| 45-49 | 925.3 | 876.6 | 94.7 | 86.1 |
| 50-54 | 807.4 | 761.0 | 94.3 | 84.5 |
| 55-59 | 782.7 | 729.0 | 93.1 | 83.2 |
| 60-64 | 620.1 | 549.5 | 88.6 | 80.2 |
| Total | 14,796.1 | 10,826.0 | 73.2 | 70.7 |
| Urban |  |  |  |  |
| 15-19 | 1,524.5 | 278.2 | 18.2 | 26.0 |
| 20-24 | 1,949.2 | 991.3 | 50.9 | 57.4 |
| 25-29 | 1,859.7 | 1,479.5 | 79.6 | 75.2 |
| 30-34 | 1,492.2 | 1,295.5 | 86.8 | 81.6 |
| 35-39 | 1,067.6 | 964.8 | 90.4 | 84.1 |
| 40-44 | 770.5 | 708.4 | 91.9 | 85.1 |
| 45-49 | 550.6 | 511.8 | 93.0 | 85.4 |
| 50-54 | 434.1 | 399.3 | 92.0 | 81.9 |
| 55-59 | 311.5 | 273.5 | 87.8 | 76.4 |
| 60-64 | 199.6 | 147.2 | 73.7 | 69.9 |
| Total | 10,159.5 | 7,049.6 | 69.4 | 66.8 |

### 3.3 Activity Status of the Population

In 2016 the population aged 5 years and above was 39.3 Million out of which 55.5 per cent were economically active.
This section presents an analysis of the survey population 5 years and above in terms of what one was doing during the reference period. The population is divided into either active or inactive. The active population consists of both the employed and the unemployed persons.

Figure 3.2 and Table 3.4a present the distribution of population 5 years and above
by age cohorts and activity status. In 2016, out of 39.3 Million Kenyans aged five years and above, 55.5 per cent were economically active. Notably, the active population between ages 5 and 44 shows an increasing trend with the age cohort " $40-44$ " reporting a maximum of 96.2 per cent. The subsequent age cohorts show a declining trend.

Analysis by residence shows that 53.4 per cent and 59.4 per cent of the population aged five years and above were economically active in rural and urban areas, respectively. Generally, there was a higher proportion of active persons across the age cohorts in the rural areas compared to urban areas.

Figure 3.2: Percentage of Active Population by Age Cohorts


Table 3.4a: Distribution of Population 5 Years and above by Activity Status

| Age Group | Total | Active Population | Inactive Population | \% of Active Population |
| :---: | :---: | :---: | :---: | :---: |
| 5-9 | 6,538.7 | 395.1 | 6,143.5 | 6.0 |
| 10-14 | 6,016.8 | 938.3 | 5,078.5 | 15.6 |
| 15-19 | 5,015.8 | 1,626.2 | 3,389.7 | 32.4 |
| 20-24 | 4,069.4 | 2,873.9 | 1,195.5 | 70.6 |
| 25-29 | 3,666.8 | 3,293.2 | 373.6 | 89.8 |
| 30-34 | 3,062.7 | 2,872.5 | 190.3 | 93.8 |
| 35-39 | 2,503.1 | 2,393.5 | 109.6 | 95.6 |
| 40-44 | 2,006.4 | 1,930.2 | 76.2 | 96.2 |
| 45-49 | 1,475.9 | 1,413.3 | 62.6 | 95.8 |
| 50-54 | 1,241.5 | 1,178.8 | 62.7 | 94.9 |
| 55-59 | 1,094.1 | 1,022.1 | 72.0 | 93.4 |
| 60-64 | 819.7 | 707.7 | 112.0 | 86.3 |
| $65+$ | 1,737.7 | 1,146.5 | 591.1 | 66.0 |
| Not Stated | 41.4 | 23.5 | 17.9 | 56.8 |
| Total | 39,290.1 | 21,814.9 | 17,475.2 | 55.5 |
| Rural |  |  |  |  |
| 5-9 | 4,590.9 | 342.1 | 4,248.9 | 7.5 |
| 10-14 | 4,353.5 | 817.4 | 3,536.0 | 18.8 |
| 15-19 | 3,491.3 | 1,213.1 | 2,278.2 | 34.7 |
| 20-24 | 2,120.2 | 1,463.2 | 657.0 | 69.0 |
| 25-29 | 1,807.1 | 1,604.7 | 202.4 | 88.8 |
| 30-34 | 1,570.5 | 1,488.4 | 82.1 | 94.8 |
| 35-39 | 1,435.5 | 1,372.7 | 62.9 | 95.6 |
| 40-44 | 1,235.9 | 1,190.9 | 45.0 | 96.4 |
| 45-49 | 925.3 | 888.0 | 37.3 | 96.0 |
| 50-54 | 807.4 | 771.9 | 35.5 | 95.6 |
| 55-59 | 782.7 | 739.5 | 43.1 | 94.5 |
| 60-64 | 620.1 | 556.1 | 64.0 | 89.7 |
| $65+$ | 1,377.0 | 955.9 | 421.0 | 69.4 |
| Not Stated | 18.6 | 9.6 | 9.0 | 51.6 |
| Total | 25,136.0 | 13,413.5 | 11,722.6 | 53.4 |
| Urban |  |  |  |  |
| 5-9 | 1,947.7 | 53.1 | 1,894.7 | 2.7 |
| 10-14 | 1,663.4 | 120.9 | 1,542.5 | 7.3 |
| 15-19 | 1,524.5 | 413.1 | 1,111.4 | 27.1 |
| 20-24 | 1,949.2 | 1,410.7 | 538.4 | 72.4 |
| 25-29 | 1,859.7 | 1,688.6 | 171.1 | 90.8 |
| 30-34 | 1,492.2 | 1,384.0 | 108.2 | 92.7 |
| 35-39 | 1,067.6 | 1,020.8 | 46.7 | 95.6 |
| 40-44 | 770.5 | 739.3 | 31.2 | 96.0 |
| 45-49 | 550.6 | 525.3 | 25.3 | 95.4 |
| 50-54 | 434.1 | 406.9 | 27.2 | 93.7 |
| 55-59 | 311.5 | 282.6 | 28.8 | 90.7 |
| 60-64 | 199.6 | 151.7 | 48.0 | 76.0 |
| $65+$ | 360.7 | 190.6 | 170.1 | 52.8 |
| Not Stated | 22.8 | 13.9 | 8.9 | 61.0 |
| Total | 14,154.1 | 8,401.4 | 5,752.6 | 59.4 |

Table 3.4b and Figure 3.3 further show analysis of activity status by broad age categories and residence. The proportion of persons in the broad age category " $5-14$ " who were active was 10.6 per cent. This represents a high proportion of working children who are otherwise supposed to be in school. The results also show that a higher proportion of children in rural areas were active compared to their urban counterparts. Further, the population aged 65 and above reported a high proportion of persons who were active, though this population is expected to be in retirement.

Table 3.4b: Distribution of Population Aged 5 and Above by Activity Status

|  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: |
| Age Group | Total | Active Population | Inactive Population | O of Active <br> Population |
| Total |  |  |  |  |
| $5-14$ | $12,555.5$ | $1,333.4$ | $11,222.1$ | 10.6 |
| $15-64$ | $24,955.5$ | $19,311.4$ | $5,644.1$ | 77.4 |
| $65+$ | $1,737.7$ | $1,146.5$ | 591.1 | 66.0 |
| Not Stated | 41.4 | 23.5 | 17.9 | 56.8 |
| Total | $\mathbf{3 9 , 2 9 0 . 1}$ | $\mathbf{2 1 , 8 1 4 . 9}$ | $\mathbf{1 7 , 4 7 5 . 2}$ | 55.5 |
| Rural |  |  |  |  |
| $5-14$ | $8,944.4$ | $1,159.5$ | $7,784.9$ | 13.0 |
| $15-64$ | $14,796.1$ | $11,288.4$ | $3,507.7$ | 76.3 |
| $65+$ | $1,377.0$ | 955.9 | 421.0 | 69.4 |
| Not Stated | 18.6 | 9.6 | 9.0 | 51.6 |
| Total | $\mathbf{2 5 , 1 3 6 . 0}$ | $\mathbf{1 3 , 4 1 3 . 5}$ | $\mathbf{1 1 , 7 2 2 . 6}$ | 53.4 |
| Urban |  | 173.9 |  |  |
| $5-14$ | $3,611.1$ | $8,023.0$ | $3,437.2$ | 4.8 |
| $15-64$ | $10,159.5$ | 190.6 | $2,136.4$ | 79.0 |
| 65 + | 360.7 | 13.9 | 170.1 | 52.8 |
| Not Stated | 22.8 | $\mathbf{8 , 4 0 1 . 4}$ | 8.9 | 61.0 |
| Total | $\mathbf{1 4 , 1 5 4 . 1}$ |  | $\mathbf{5 , 7 5 2 . 6}$ | 59.4 |

Figure 3.3: Percentage of Economically Active by Broad Age categories


### 3.4 Activity Status of Household Heads

Distribution of household heads by activity status and household sizes is shown in Table 3.5. Overall, 93.7 per cent of the household heads were active. Majority of the active ( 62.2 per cent) were from households with a maximum of four members, with those from households of size " $3-4$ " accounting for 31.5 per cent. Analysis by sex shows that, of the total active household heads, 69.1 per cent were male. Further, 95.7 per cent of the male household heads were active. In addition, 89.5 per cent of the female household heads were active.

Table 3.5: Distribution of Household Heads by Activity Status and Household Size

| 000' |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Household size | Active Population | \% | Inactive Population | \% | Total | Proportion of Active |
| Total |  |  |  |  |  |  |
| 1-2 | 3,283.0 | 30.7 | 320.9 | 44.8 | 3,603.9 | 91.1 |
| 3-4 | 3,367.0 | 31.5 | 163.4 | 22.8 | 3,530.4 | 95.4 |
| 5-6 | 2,473.1 | 23.1 | 127.9 | 17.9 | 2,601.0 | 95.1 |
| 7-8 | 1,069.3 | 10.0 | 63.3 | 8.8 | 1,132.6 | 94.4 |
| 9-10 | 377.3 | 3.5 | 28.3 | 3.9 | 405.5 | 93.0 |
| 11+ | 128.3 | 1.2 | 12.7 | 1.8 | 141.0 | 91.0 |
| Total | 10,698.0 | 100.0 | 716.5 | 100.0 | 11,414.5 | 93.7 |
| Male |  |  |  |  |  |  |
| 1-2 | 2,162.1 | 29.3 | 132.1 | 40.2 | 2,294.1 | 94.2 |
| 3-4 | 2,147.0 | 29.1 | 69.9 | 21.3 | 2,216.9 | 96.8 |
| 5-6 | 1,867.4 | 25.3 | 70.1 | 21.3 | 1,937.4 | 96.4 |
| 7-8 | 813.6 | 11.0 | 35.4 | 10.8 | 849.0 | 95.8 |
| 9-10 | 297.8 | 4.0 | 12.9 | 3.9 | 310.7 | 95.8 |
| 11+ | 99.5 | 1.3 | 8.0 | 2.4 | 107.5 | 92.6 |
| Total | 7,387.3 | 100.0 | 328.4 | 100.0 | 7,715.7 | 95.7 |
| Female |  |  |  |  |  |  |
| 1-2 | 1,120.9 | 33.9 | 188.9 | 48.7 | 1,309.8 | 85.6 |
| 3-4 | 1,220.0 | 36.9 | 93.5 | 24.1 | 1,313.5 | 92.9 |
| 5-6 | 605.7 | 18.3 | 57.9 | 14.9 | 663.5 | 91.3 |
| 7-8 | 255.8 | 7.7 | 27.9 | 7.2 | 283.6 | 90.2 |
| 9-10 | 79.5 | 2.4 | 15.4 | 4.0 | 94.9 | 83.8 |
| 11+ | 28.8 | 0.9 | 4.7 | 1.2 | 33.5 | 86.0 |
| Total | 3,310.7 | 100.0 | 388.1 | 100.0 | 3,698.8 | 89.5 |

### 3.5 Labour Force Participation Rate

The labour force participation rate is an indicator that determines the size and composition of a country's human resources. It is also used in making projections of the future supply of labour. Further, this indicator is used in the formulation of employment policies and training needs. In addition, the indicator is used in understanding the labour market behaviour of different categories of the population. As a measure to long term structural changes, increased labour force participation rates for females, indicates a fundamental change in social customs.
As shown in Table 3.6, the overall labour force participation rate was 77.4 per cent. The highest participation rate was in the age cohort " $40-44$ " at 96.2 per cent while the lowest was in the age cohort " $15-19$ " at 32.4 per cent. Analysis by sex shows that male participation rates were higher than those of female across all age cohorts.

Table 3.6: Participation Rates for Population (15-64) by Sex

| Age Group | Total (N) | Active Population | Participation Rate |
| :---: | :---: | :---: | :---: |
| 15-19 | 5,015.8 | 1,626.2 | 32.4 |
| 20-24 | 4,069.4 | 2,873.9 | 70.6 |
| 25-29 | 3,666.8 | 3,293.2 | 89.8 |
| 30-34 | 3,062.7 | 2,872.5 | 93.8 |
| 35-39 | 2,503.1 | 2,393.5 | 95.6 |
| 40-44 | 2,006.4 | 1,930.2 | 96.2 |
| 45-49 | 1,475.9 | 1,413.3 | 95.8 |
| 50-54 | 1,241.5 | 1,178.8 | 94.9 |
| 55-59 | 1,094.1 | 1,022.1 | 93.4 |
| 60-64 | 819.7 | 707.7 | 86.3 |
| Total | 24,955.5 | 19,311.4 | 77.4 |
| Male |  |  |  |
| 15-19 | 2,598.6 | 890.3 | 34.3 |
| 20-24 | 1,931.3 | 1,358.1 | 70.3 |
| 25-29 | 1,716.2 | 1,606.4 | 93.6 |
| 30-34 | 1,501.0 | 1,477.0 | 98.4 |
| 35-39 | 1,207.9 | 1,184.0 | 98.0 |
| 40-44 | 1,011.0 | 990.8 | 98.0 |
| 45-49 | 761.0 | 747.8 | 98.3 |
| 50-54 | 597.9 | 585.5 | 97.9 |
| 55-59 | 504.7 | 486.0 | 96.3 |
| 60-64 | 399.0 | 359.7 | 90.2 |
| Total | 12,228.5 | 9,685.7 | 79.2 |
| Female |  |  |  |
| 15-19 | 2,417.2 | 735.8 | 30.4 |
| 20-24 | 2,138.1 | 1,515.8 | 70.9 |
| 25-29 | 1,950.6 | 1,686.8 | 86.5 |
| 30-34 | 1,561.8 | 1,395.5 | 89.4 |
| 35-39 | 1,295.2 | 1,209.4 | 93.4 |
| 40-44 | 995.4 | 939.5 | 94.4 |
| 45-49 | 714.9 | 665.5 | 93.1 |
| 50-54 | 643.6 | 593.3 | 92.2 |
| 55-59 | 589.4 | 536.2 | 91.0 |
| 60-64 | 420.7 | 348.0 | 82.7 |
| Total | 12,727.0 | 9,625.8 | 75.6 |

Table 3.7 gives the distribution of the population by Activity status and broad age groups. Notable, about 2.1 million children aged 5 tol 7 were employed during the reference period out of whom 43.1 per cent were girls. Most of these children were in the rural areas. Of the 12.6 million persons aged " $18-34$ ", 69.2 per cent were employed while 21.7 per cent were inactive.

Table 3.7: Distribution of Population by Broad Age Groups and Activity Status

| Age Group | Employed | Unemployed | Inactive | Total |
| :---: | :---: | :---: | :---: | :---: |
| Total |  |  |  |  |
| '5-14 | 1,333.4 | - | 11,222.1 | 12,555.5 |
| 15-17 | 740.9 | 77.3 | 2,412.8 | 3,231.1 |
| 18-24 | 2,964.7 | 717.1 | 2,172.3 | 5,854.1 |
| 25-34 | 5,739.0 | 426.7 | 563.9 | 6,729.6 |
| 35-64 | 8,431.0 | 214.6 | 495.1 | 9,140.8 |
| 65+ | 1,146.5 | - | 591.1 | 1,737.7 |
| Not Stated | 23.5 | - | 17.9 | 41.4 |
| Total | 20,379.1 | 1,435.8 | 17,475.2 | 39,290.1 |
| Rural |  |  |  |  |
| '5-14 | 1,159.5 | - | 7,784.9 | 8,944.4 |
| 15-17 | 616.6 | 45.1 | 1,633.3 | 2,294.9 |
| 18-24 | 1,819.6 | 195.0 | 1,302.0 | 3,316.6 |
| 25-34 | 2,964.0 | 129.1 | 284.5 | 3,377.6 |
| 35-64 | 5,425.9 | 93.1 | 287.9 | 5,806.9 |
| 65+ | 955.9 | - | 421.0 | 1,377.0 |
| Not Stated | 9.6 | - | 9.0 | 18.6 |
| Total | 12,951.1 | 462.4 | 11,722.6 | 25,136.0 |
| Urban |  |  |  |  |
| '5-14 | 173.9 | - | 3,437.2 | 3,611.1 |
| 15-17 | 124.4 | 32.2 | 779.5 | 936.1 |
| 18-24 | 1,145.2 | 522.1 | 870.4 | 2,537.6 |
| 25-34 | 2,775.0 | 297.6 | 279.3 | 3,351.9 |
| 35-64 | 3,005.1 | 121.5 | 207.2 | 3,333.8 |
| 65+ | 190.6 | - | 170.1 | 360.7 |
| Not Stated | 13.9 | - | 8.9 | 22.8 |
| Total | 7,428.0 | 973.4 | 5,752.6 | 14,154.1 |
| Male |  |  |  |  |
| '5-14 | 759.1 | - | 5,538.2 | 6,297.3 |
| 15-17 | 420.4 | 37.7 | 1,215.3 | 1,673.4 |
| 18-24 | 1,523.3 | 267.0 | 1,066.2 | 2,856.4 |
| 25-34 | 2,957.3 | 126.1 | 133.7 | 3,217.1 |
| 35-64 | 4,275.0 | 78.9 | 127.6 | 4,481.5 |
| 65+ | 560.6 | - | 227.5 | 788.1 |
| Not Stated | 14.7 | - | 7.1 | 21.8 |
| Total | 10,510.4 | 509.7 | 8,315.6 | 19,335.7 |
| Female |  |  |  |  |
| '5-14 | 574.3 | - | 5,683.9 | 6,258.2 |
| 15-17 | 320.5 | 39.6 | 1,197.5 | 1,557.6 |
| 18-24 | 1,441.4 | 450.1 | 1,106.2 | 2,997.7 |
| 25-34 | 2,781.7 | 300.6 | 430.1 | 3,512.4 |
| 35-64 | 4,156.0 | 135.8 | 367.5 | 4,659.3 |
| 65+ | 585.9 | - | 363.7 | 949.6 |
| Not Stated | 8.9 | - | 10.8 | 19.6 |
| Total | 9,868.7 | 926.1 | 9,159.6 | 19,954.4 |

### 3.6 Hours Worked

The definition of employment covers work done at least for one hour during the reference week. It is therefore important to analyse employment data in conjunction with hours of work in order to distinguish the various intensities of employment. The hours of work indicator is used to determine time related under-employment and working patterns. In addition, it is used for monitoring working and living conditions as well as economic development. Hours worked have an impact on the health and wellbeing of workers as well as levels of productivity and labour costs. The 2015/16 KIHBS measured two concepts of work, namely "hours usually worked" and "hours actually worked". This section presents an analysis of the usual hours worked.
Table 3.8 presents a distribution of usual working hours by age cohorts and sex. The highest proportion of people (27.7 per cent) worked between " $40-48$ " hours in a week. However, the "15-19" age cohort had the highest proportion of 30.8 per cent working for less than 15 hours mainly attributable to schooling activities. Overall, persons working more than 58 hours accounted for 25.2 per cent of all workers.

The highest number of hours worked per week for both sexes was in the "40-48" hours bracket. In this category, 29.3 per cent of males worked compared to 26.0 per cent of females. However, the males who worked for less than 24 hours were 13.2 per cent compared to 22.8 per cent females.

Table 3.8: Percentage Distribution of Population (15-64) by Hours Worked and Sex

| Age | $\begin{gathered} \text { Total (N) } \\ \text { ('000') } \\ \hline \end{gathered}$ | Hours |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \bar{\pi} \\ & \stackrel{\pi}{\circ} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { N } \\ & \stackrel{n}{n} \end{aligned}$ | $\begin{aligned} & \text { Ǹ } \\ & \text { Ǹ } \end{aligned}$ | $\begin{aligned} & \text { +े } \\ & \text { ò } \end{aligned}$ | $\begin{aligned} & \text { M } \\ & \text { ஸे } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { + } \\ & \substack{\circ} \end{aligned}$ | $\begin{aligned} & \text { in } \\ & \text { Ó子 } \end{aligned}$ | $\begin{aligned} & \infty \\ & \text { ó } \\ & \text { గn } \end{aligned}$ | $\begin{aligned} & \text { ® } \\ & \text { + } \end{aligned}$ | $$ |  |  |
| 15-19 | 1,384.1 | 30.8 | 21.1 | 3.7 | 7.7 | 6.3 | 11.7 | 5.6 | 9.0 | 3.2 | 0.6 | 0.4 | 100 |
| 20-24 | 2,321.6 | 8.5 | 12.7 | 3.2 | 9.0 | 7.7 | 24.9 | 9.1 | 17.3 | 6.2 | 1.1 | 0.5 | 100 |
| 25-29 | 2,997.2 | 4.1 | 10.1 | 2.6 | 7.2 | 7.0 | 29.6 | 10.9 | 21.2 | 5.9 | 1.3 | 0.3 | 100 |
| 30-34 | 2,741.8 | 4.1 | 8.2 | 2.4 | 6.7 | 8.0 | 31.5 | 11.3 | 20.8 | 5.7 | 1.3 | 0.2 | 100 |
| 35-39 | 2,305.0 | 3.2 | 9.7 | 2.2 | 7.8 | 8.1 | 29.8 | 10.8 | 20.0 | 6.9 | 1.3 | 0.2 | 100 |
| 40-44 | 1,878.1 | 3.1 | 8.4 | 2.0 | 7.9 | 8.3 | 30.8 | 10.8 | 22.2 | 5.0 | 1.4 | 0.1 | 100 |
| 45-49 | 1,388.4 | 3.8 | 10.1 | 2.5 | 7.7 | 9.5 | 27.8 | 11.1 | 20.4 | 5.7 | 1.3 | 0.1 | 100 |
| 50-54 | 1,160.3 | 3.2 | 10.3 | 1.8 | 8.7 | 8.2 | 30.5 | 12.7 | 17.7 | 5.2 | 1.6 | 0.3 | 100 |
| 55-59 | 1,002.6 | 4.7 | 14.0 | 3.3 | 9.8 | 11.8 | 28.3 | 8.9 | 13.2 | 4.2 | 1.4 | 0.5 | 100 |
| 60-64 | 696.7 | 7.4 | 17.0 | 3.4 | 11.6 | 10.9 | 25.1 | 9.3 | 11.6 | 3.1 | 0.7 | 0.1 | 100 |
| Total | 17,875.7 | 6.6 | 11.3 | 2.6 | 8.0 | 8.2 | 27.7 | 10.2 | 18.5 | 5.5 | 1.2 | 0.3 | 100 |
| Males |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 784.5 | 30.5 | 19.9 | 3.2 | 8.0 | 6.7 | 12.8 | 6.8 | 8.8 | 2.9 | 0.2 | 0.3 | 100 |
| 20-24 | 1,159.3 | 6.7 | 9.0 | 2.9 | 8.0 | 7.1 | 25.4 | 9.9 | 21.5 | 7.7 | 1.6 | 0.2 | 100 |
| 25-29 | 1,520.3 | 2.4 | 6.1 | 1.8 | 4.1 | 5.8 | 31.8 | 12.1 | 25.7 | 8.5 | 1.7 | - | 100 |
| 30-34 | 1,437.0 | 3.1 | 5.0 | 1.8 | 4.4 | 6.4 | 32.4 | 13.4 | 24.6 | 7.2 | 1.7 | 0.1 | 100 |
| 35-39 | 1,158.8 | 1.6 | 5.9 | 1.5 | 5.2 | 6.4 | 32.0 | 12.1 | 24.4 | 9.0 | 1.7 | 0.2 | 100 |
| 40-44 | 965.4 | 2.2 | 4.2 | 1.0 | 5.9 | 6.0 | 32.7 | 12.6 | 26.4 | 6.7 | 2.3 | - | 100 |
| 45-49 | 739.3 | 3.2 | 5.5 | 1.8 | 5.2 | 7.0 | 30.1 | 12.8 | 24.5 | 7.9 | 1.9 | 0.2 | 100 |
| 50-54 | 576.7 | 2.5 | 7.0 | 1.3 | 6.2 | 6.3 | 31.5 | 14.8 | 20.9 | 7.8 | 1.5 | 0.3 | 100 |
| 55-59 | 480.1 | 2.8 | 9.3 | 3.2 | 7.2 | 9.7 | 31.2 | 9.0 | 17.7 | 6.7 | 2.6 | 0.6 | 100 |
| 60-64 | 354.8 | 5.7 | 11.4 | 3.8 | 9.8 | 10.3 | 29.6 | 9.5 | 14.6 | 4.3 | 1.1 | - | 100 |
| Total | 9,176.0 | 5.6 | 7.6 | 2.1 | 5.9 | 6.7 | 29.3 | 11.6 | 22.2 | 7.2 | 1.7 | 0.2 | 100 |
| Female |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 599.6 | 31.1 | 22.7 | 4.3 | 7.3 | 5.7 | 10.2 | 4.1 | 9.4 | 3.5 | 1.1 | 0.6 | 100 |
| 20-24 | 1,162.3 | 10.3 | 16.2 | 3.4 | 10.0 | 8.3 | 24.4 | 8.2 | 13.0 | 4.7 | 0.6 | 0.8 | 100 |
| 25-29 | 1,476.9 | 5.9 | 14.3 | 3.4 | 10.4 | 8.2 | 27.3 | 9.6 | 16.4 | 3.2 | 0.8 | 0.5 | 100 |
| 30-34 | 1,304.8 | 5.3 | 11.6 | 3.1 | 9.2 | 9.8 | 30.5 | 8.9 | 16.6 | 4.0 | 0.7 | 0.4 | 100 |
| 35-39 | 1,146.2 | 5.0 | 13.5 | 2.9 | 10.4 | 9.9 | 27.6 | 9.6 | 15.6 | 4.8 | 0.9 | 0.1 | 100 |
| 40-44 | 912.7 | 4.0 | 12.7 | 3.1 | 10.0 | 10.8 | 28.8 | 9.0 | 17.8 | 3.2 | 0.5 | 0.1 | 100 |
| 45-49 | 649.1 | 4.5 | 15.2 | 3.3 | 10.5 | 12.5 | 25.3 | 9.1 | 15.8 | 3.2 | 0.7 | 0.1 | 100 |
| 50-54 | 583.6 | 4.0 | 13.7 | 2.2 | 11.1 | 10.0 | 29.4 | 10.6 | 14.6 | 2.6 | 1.7 | 0.2 | 100 |
| 55-59 | 522.5 | 6.4 | 18.2 | 3.5 | 12.3 | 13.6 | 25.5 | 8.9 | 9.1 | 1.8 | 0.3 | 0.5 | 100 |
| 60-64 | 341.9 | 9.2 | 22.9 | 3.0 | 13.4 | 11.6 | 20.4 | 9.1 | 8.4 | 1.8 | 0.3 | 0.1 | 100 |
| Total | 8,699.6 | 7.7 | 15.1 | 3.2 | 10.2 | 9.7 | 26.0 | 8.8 | 14.6 | 3.6 | 0.8 | 0.4 | 100 |

### 3.7 Part Time Workers

This indicator focuses on individuals whose working hours total less than fulltime as a proportion of total employment. The working population aged 15-64 was categorised as either full time or part time workers. Persons working less than 35 hours per week were classified as part time workers.

Table 3.9, presents percentage distribution of part-time and full-time workers by
age cohorts. Overall, part time workers constituted 28.5 per cent of the 17.9 million working population in the labour force. In total, the working males were 9.2 million out of which 21.1 per cent were part time workers. Further, of the 8.7 million working females, part time workers accounted for 36.2 per cent.

Table 3.9: Percentage Distribution of Population ( $15-64$ ) by part-time and full time working status

| Age | $\begin{gathered} \hline \text { Total (N) } \\ (' 000 ') \\ \hline \end{gathered}$ | Part-time <br> (<35 hours in a week) | Fullime (>35 hours in a week) | Not Stated |
| :---: | :---: | :---: | :---: | :---: |
| 15-19 | 1,384.1 | 63.2 | 36.4 | 0.4 |
| 20-24 | 2,321.6 | 33.3 | 66.2 | 0.5 |
| 25-29 | 2,997.2 | 24.1 | 75.7 | 0.3 |
| 30-34 | 2,741.8 | 21.3 | 78.4 | 0.2 |
| 35-39 | 2,305.0 | 22.9 | 76.9 | 0.2 |
| 40-44 | 1,878.1 | 21.4 | 78.6 | 0.1 |
| 45-49 | 1,388.4 | 24.0 | 75.9 | 0.1 |
| 50-54 | 1,160.3 | 24.0 | 75.8 | 0.3 |
| 55-59 | 1,002.6 | 31.8 | 67.7 | 0.5 |
| 60-64 | 696.7 | 39.4 | 60.6 | 0.1 |
| Total | 17,875.7 | 28.5 | 71.3 | 0.3 |
| Male |  |  |  |  |
| 15-19 | 784.5 | 61.5 | 38.2 | 0.3 |
| 20-24 | 1,159.3 | 26.7 | 73.2 | 0.2 |
| 25-29 | 1,520.3 | 14.4 | 85.6 | 0.0 |
| 30-34 | 1,437.0 | 14.3 | 85.7 | 0.1 |
| 35-39 | 1,158.8 | 14.2 | 85.6 | 0.2 |
| 40-44 | 965.4 | 13.3 | 86.7 | 0.0 |
| 45-49 | 739.3 | 15.6 | 84.2 | 0.2 |
| 50-54 | 576.7 | 17.0 | 82.8 | 0.3 |
| 55-59 | 480.1 | 22.5 | 76.9 | 0.6 |
| 60-64 | 354.8 | 30.6 | 69.4 | 0.0 |
| Total | 9,176.0 | 21.1 | 78.7 | 0.2 |
| Female |  |  |  |  |
| 15-19 | 599.6 | 65.4 | 34.0 | 0.6 |
| 20-24 | 1,162.3 | 39.9 | 59.3 | 0.8 |
| 25-29 | 1,476.9 | 34.0 | 65.5 | 0.5 |
| 30-34 | 1,304.8 | 29.1 | 70.5 | 0.4 |
| 35-39 | 1,146.2 | 31.7 | 68.2 | 0.1 |
| 40-44 | 912.7 | 29.9 | 70.0 | 0.1 |
| 45-49 | 649.1 | 33.5 | 66.5 | 0.1 |
| 50-54 | 583.6 | 31.0 | 68.8 | 0.2 |
| 55-59 | 522.5 | 40.3 | 59.2 | 0.5 |
| 60-64 | 341.9 | 48.4 | 51.5 | 0.1 |
| Total | 8,699.6 | 36.2 | 63.4 | 0.4 |

Further analysis of part time workers by sex is presented in Figure 3.4. Females accounted for 61.9 per cent of all part time workers. In absolute terms, across all age cohorts except " $15-19$ ", there were more female part time workers than males. The highest difference in the number of part time workers between the two sexes was in the age category " 25 - 29".

Figure 3.4: Proportion of Part Time Workers Aged (15-64) by Sex


### 3.8 Educational Attainment - Highest Level Completed

One important aspect of the labour market performance and competitiveness is the skill level of the workforce. Education attainment information is one of the best indicators of the labour force skill levels. Information on education attainment is therefore important in determining the employability of the workers.

Table 3.10 shows the distribution of population five years and above by education and activity status. Overall, 51.4 per cent of the population reported primary level of education as the highest attained while 21.2 per cent had secondary level of education. Person with university level of education (undergraduate and postgraduate) combined accounted for 3.0 per cent of the population.
The results further indicate that of the economically active persons in the population, 48.1 per cent had primary level of education as the highest reached. The results also show that about 9.9 per cent of the active population had not completed any level of education.

The proportion of males and females that reported primary school level of education as their highest completed was the same ( 51.4 per cent). Only 4.7 per cent and 3.4 per cent of the economically active males and females, respectively, had university level of education as the highest reached. Focusing on the inactive population, 86.8 per cent had pre-primary, primary, post-primary, vocational or secondary level of education as the highest level reached. Similar high proportions were observed for both sexes.

Table 3.10: Distribution of Population aged 5 and above by Education and Activity Status, 2015 (level reached)


Figure 3.5 presents a comparison between the active and inactive population in terms of the highest level of education reached. Considering the population with preprimary level of education as the highest attained, 92.9 per cent were inactive. The
proportions of the active and inactive population for those who had attained primary level of education were almost the same. Of those who had attained university level of education, 26.2 per cent reported to be inactive.

Figure 3.5: Activity Status of Population aged 5+ by the Highest Level of Education Reached


Table 3.11 presents the distribution of the labour force by age, sex and educational attainment. Majority of the economically active population were in the " $25-29$ " age cohorts. The same age cohort accounted for most of the economically active males ( 16.6 per cent) and females ( 17.5 per cent). The youth " $15-34$ " accounted for 55.3 per cent of the labour force. In total, 77.7 per cent of the economically active were aged below 45 years. Notably, the proportion of females who had attained university level of education was 3.7 per cent compared to 5.3 per cent for males. Further, those who had post primary, vocational as the highest level reached were in the age group " $20-39$ ".
Table 3.11: Distribution of the Labour Force (15-64) by Highest Educational Level reached by Age-group and Sex

| Age | Pre-primary | Primary | Post-primary, Vocational | Secondary | College (Middle-level) | University | None | Other | Not Stated | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 16.2 | 10.8 | 6.6 | 9.0 | 0.7 | 1.5 | 6.3 | 22.9 | 5.9 | 8.4 |
| 20-24 | 8.9 | 11.6 | 19.4 | 21.6 | 13.3 | 29.6 | 7.0 | 16.6 | 4.2 | 14.9 |
| 25-29 | 15.0 | 14.9 | 18.5 | 18.7 | 24.9 | 38.9 | 10.3 | 19.5 | 14.5 | 17.1 |
| 30-34 | 18.5 | 15.6 | 15.2 | 12.4 | 20.5 | 38.8 | 11.8 | 20.9 | 9.4 | 14.9 |
| 35-39 | 11.9 | 13.7 | 12.9 | 11.0 | 13.8 | 23.0 | 9.4 | 13.7 | 15.2 | 12.4 |
| 40-44 | 11.5 | 10.3 | 9.9 | 9.4 | 9.8 | 26.8 | 11.2 | 6.5 | 13.6 | 10.0 |
| 45-49 | 0.4 | 8.1 | 7.1 | 6.4 | 6.1 | 16.0 | 8.7 | 20.3 | 7.9 | 7.3 |
| 50-54 | 6.8 | 6.0 | 7.2 | 5.8 | 5.2 | 13.7 | 9.0 | 37.1 | 8.4 | 6.1 |
| 55-59 | 7.7 | 5.1 | 2.2 | 4.1 | 3.7 | 8.7 | 14.4 | 21.0 | 13.3 | 5.3 |
| 60-64 | 3.0 | 4.1 | 1.1 | 1.7 | 2.1 | 3.0 | 12.0 | 21.6 | 7.7 | 3.7 |
| Total ('000') | 54.4 | 8,924.0 | 258.3 | 5,716.2 | 1,812.1 | 866.4 | 1,571.0 | 40.2 | 68.9 | 19,311.4 |
| Male |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 20.1 | 12.6 | 5.8 | 8.6 | 0.9 | 0.4 | 8.9 | 23.1 | 5.4 | 9.2 |
| 20-24 | 6.5 | 11.3 | 17.9 | 19.3 | 10.9 | 24.6 | 7.4 | 29.9 | 3.0 | 14.0 |
| 25-29 | 15.1 | 14.2 | 16.9 | 17.8 | 23.4 | 34.2 | 10.3 | 15.8 | 9.1 | 16.6 |
| 30-34 | 12.1 | 16.1 | 11.4 | 12.7 | 21.0 | 41.6 | 12.8 | 21.6 | 7.5 | 15.3 |
| 35-39 | 16.9 | 13.2 | 13.2 | 10.9 | 13.5 | 24.9 | 9.6 | 11.8 | 8.2 | 12.2 |
| 40-44 | 18.0 | 9.9 | 10.0 | 9.9 | 10.5 | 25.8 | 13.3 | 10.1 | 20.6 | 10.2 |
| 45-49 | 0.2 | 8.1 | 10.7 | 7.1 | 7.5 | 17.7 | 8.6 | 9.1 | 14.8 | 7.7 |
| 50-54 | 5.8 | 5.7 | 9.8 | 6.2 | 5.2 | 15.5 | 8.6 | 64.3 | 6.3 | 6.1 |
| 55-59 | 5.3 | 4.5 | 2.6 | 5.1 | 4.0 | 11.5 | 11.4 | 5.8 | 19.5 | 5.0 |
| 60-64 | 0.0 | 4.3 | 1.6 | 2.4 | 3.2 | 3.8 | 9.2 | 8.6 | 5.7 | 3.7 |
| Total ('000') | 16.1 | 4,358.4 | 149.3 | 3,052.4 | 963.3 | 509.6 | 586.0 | 20.2 | 30.4 | 9,685.7 |
|  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 14.6 | 9.0 | 7.6 | 9.5 | 0.5 | 3.2 | 4.8 | 23.3 | 6.2 | 7.6 |
| 20-24 | 9.9 | 11.8 | 21.5 | 24.1 | 16.0 | 36.9 | 6.8 | 7.1 | 5.2 | 15.8 |
| 25-29 | 14.9 | 15.5 | 20.7 | 19.7 | 26.5 | 47.3 | 10.3 | 23.9 | 18.8 | 17.5 |
| 30-34 | 21.2 | 15.3 | 20.4 | 12.1 | 19.9 | 33.8 | 11.1 | 20.0 | 10.9 | 14.5 |
| 35-39 | 9.8 | 14.1 | 12.4 | 11.0 | 14.2 | 20.2 | 9.4 | 16.0 | 20.8 | 12.6 |
| 40-44 | 8.8 | 10.6 | 9.8 | 8.8 | 9.0 | 29.1 | 9.9 | 2.2 | 8.0 | 9.8 |
| 45-49 | 0.4 | 8.0 | 2.3 | 5.6 | 4.5 | 13.1 | 8.7 | 28.9 | 2.5 | 6.9 |
| 50-54 | 7.2 | 6.3 | 3.6 | 5.3 | 5.2 | 10.9 | 9.2 | 23.5 | 10.1 | 6.2 |
| 55-59 | 8.8 | 5.6 | 1.5 | 3.0 | 3.4 | 4.0 | 16.1 | 27.2 | 8.4 | 5.6 |
| 60-64 | 4.3 | 3.8 | 0.4 | 0.9 | 0.8 | 1.6 | 13.6 | 27.9 | 9.2 | 3.6 |
| Total ('000') | 38.3 | 4,565.6 | 109.0 | 2,663.8 | 848.7 | 356.8 | 984.9 | 20.0 | 38.6 | 9,625.8 |

### 3.9 Working Patterns

Statistics on working patterns are important in determination of the labour time, a useful tool for measuring labour utilization. Depending on the hours worked, persons are either engaged as full-time, part-time ${ }^{2}$, casual or seasonal workers.
Table 3.12 shows that, out of the total employed persons aged " $15-64$ ", 63.2 per cent were full-time employees in 2016. Seasonal workers constituted 13.6 per cent while casual employees were 12.6 per cent. Majority of the fullime and casual workers were aged below 45 years. On the other hand, most of the part-time workers were aged below 40 while majority of seasonal workers were below 35 years. The self-reported part time workers accounted for 9.5 per cent of the employed population during the reference period.
Urban areas had a higher proportion of full-time employees at 71.8 per cent compared to 57.7 per cent in the rural areas. Similarly, urban areas had a higher proportion of casual employees at 14.1 per cent compared to rural areas at 11.7 per cent. About 85 per cent of all seasonal workers were in the rural areas.

[^1]Table 3.12: Working Patterns of Population (15-64) by Residence

| Age group | Full time | Part time | Seasonal | Casual worker | Other | Not stated | Total ('000') |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 63.2 | 9.5 | 13.6 | 12.6 | 0.2 | 0.7 | 100 |
| 15-19 | 3.9 | 18.5 | 18.9 | 5.7 | 59.0 | 14.4 | 1,384.1 |
| 20-24 | 11.7 | 16.6 | 14.0 | 15.2 | 19.0 | 19.5 | 2,321.6 |
| 25-29 | 17.2 | 15.6 | 13.3 | 19.3 | 7.6 | 19.4 | 2,997.2 |
| 30-34 | 16.3 | 13.1 | 11.0 | 17.5 | 2.3 | 11.8 | 2,741.8 |
| 35-39 | 13.6 | 10.5 | 9.8 | 14.9 | 1.2 | 8.9 | 2,305.0 |
| 40-44 | 11.3 | 8.0 | 8.9 | 11.0 | 3.6 | 3.2 | 1,878.1 |
| 45-49 | 8.6 | 5.8 | 6.6 | 6.6 | 1.7 | 7.8 | 1,388.4 |
| 50-54 | 7.4 | 4.5 | 5.4 | 4.7 | 0.0 | 4.6 | 1,160.3 |
| 55-59 | 6.0 | 4.4 | 7.0 | 2.9 | 4.5 | 7.7 | 1,002.6 |
| 60-64 | 4.1 | 3.1 | 5.1 | 2.2 | 1.1 | 2.6 | 696.7 |
| Total ('000') | 11,305.2 | 1,703.3 | 2,435.9 | 2,256.7 | 40.8 | 133.6 | 17,875.7 |
| Rural | 57.7 | 10.5 | 19.1 | 11.7 | 0.3 | 0.7 | 100.0 |
| 15-19 | 5.2 | 23.0 | 19.7 | 6.2 | 63.7 | 19.6 | 1,105.9 |
| 20-24 | 10.6 | 16.6 | 13.9 | 13.9 | 18.4 | 17.2 | 1,330.3 |
| 25-29 | 14.0 | 12.7 | 12.7 | 17.4 | 5.3 | 23.0 | 1,517.7 |
| 30-34 | 14.2 | 11.8 | 10.6 | 15.7 | 1.2 | 9.4 | 1,446.2 |
| 35-39 | 13.4 | 9.3 | 9.9 | 15.0 | 0.0 | 6.2 | 1,340.2 |
| 40-44 | 11.9 | 7.8 | 8.4 | 12.6 | 4.6 | 4.3 | 1,169.6 |
| 45-49 | 9.4 | 5.5 | 6.5 | 6.9 | 2.1 | 6.8 | 876.6 |
| 50-54 | 8.3 | 5.2 | 5.5 | 5.4 | 0.0 | 6.0 | 761.0 |
| 55-59 | 7.6 | 4.9 | 7.3 | 3.7 | 3.2 | 6.5 | 729.0 |
| 60-64 | 5.7 | 3.3 | 5.5 | 3.3 | 1.5 | 1.1 | 549.5 |
| Total ('000') | 6,243.6 | 1,141.9 | 2,065.8 | 1,264.5 | 31.8 | 78.5 | 10,826.1 |
| Urban | 71.8 | 8.0 | 5.2 | 14.1 | 0.1 | 0.8 | 100.0 |
| 15-19 | 2.3 | 9.3 | 14.4 | 5.2 | 42.4 | 7.2 | 278.2 |
| 20-24 | 13.1 | 16.5 | 14.7 | 16.8 | 21.0 | 22.8 | 991.3 |
| 25-29 | 21.2 | 21.5 | 16.7 | 21.7 | 15.7 | 14.3 | 1,479.5 |
| 30-34 | 18.8 | 15.8 | 12.8 | 19.9 | 6.1 | 15.1 | 1,295.5 |
| 35-39 | 13.9 | 13.0 | 9.1 | 14.9 | 5.5 | 12.8 | 964.8 |
| 40-44 | 10.5 | 8.3 | 11.1 | 8.9 | 0.0 | 1.7 | 708.4 |
| 45-49 | 7.5 | 6.5 | 7.4 | 6.3 | 0.0 | 9.2 | 511.8 |
| 50-54 | 6.4 | 3.2 | 5.1 | 3.8 | 0.0 | 2.7 | 399.3 |
| 55-59 | 4.1 | 3.5 | 5.7 | 1.9 | 9.2 | 9.5 | 273.5 |
| 60-64 | 2.2 | 2.5 | 3.0 | 0.8 | 0.0 | 4.8 | 147.2 |
| Total ('000') | 5,061.6 | 561.4 | 370.1 | 992.3 | 9.0 | 55.2 | 7,049.6 |

## Working Patterns by Sex

Information on working patterns by age cohorts and sex is highlighted in Table 3.13. Full-time workers accounted for 64.3 per cent of all male workers, followed by casual and seasonal workers at 16.1 per cent and 10.6 per cent, respectively. On the other hand, full time workers accounted for 62.1 per cent of all female workers, followed by seasonal workers and part time workers at 16.8 per cent and 10.8 per cent, respectively. Further analysis show females constituted 60.1 per cent of all seasonal workers. In addition, males accounted for 65.3 per cent of the casual workers.

Table 3.13: Working Patterns of Population (15-64) by Sex

| Age group | Full time | Part time | Seasonal | Casual worker | Other | Not Stated | Total (000') |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male | 64.3 | 8.3 | 10.6 | 16.1 | 0.2 | 0.5 | 100.0 |
| 15-19 | 3.8 | 24.0 | 25.7 | 7.1 | 60.7 | 20.5 | 784.5 |
| 20-24 | 11.2 | 17.0 | 13.8 | 15.3 | 17.7 | 10.2 | 1,159.3 |
| 25-29 | 16.9 | 14.3 | 10.8 | 20.6 | 3.2 | 16.8 | 1,520.3 |
| 30-34 | 16.7 | 12.5 | 10.4 | 17.3 | 2.1 | 4.0 | 1,437.0 |
| 35-39 | 13.4 | 8.2 | 8.4 | 14.6 | 1.6 | 14.2 | 1,158.8 |
| 40-44 | 11.3 | 7.3 | 9.0 | 10.4 | 7.6 | 1.8 | 965.4 |
| 45-49 | 9.1 | 5.4 | 6.4 | 6.1 | - | 16.0 | 739.3 |
| 50-54 | 7.4 | 4.3 | 4.4 | 4.3 | - | 4.9 | 576.7 |
| 55-59 | 5.9 | 3.6 | 6.4 | 2.6 | 7.2 | 9.9 | 480.1 |
| 60-64 | 4.4 | 3.4 | 4.7 | 1.8 | - | 1.8 | 354.8 |
| Total (000') | 5,903.9 | 764.1 | 971.6 | 1,473.0 | 19.5 | 44.0 | 9,176.1 |
| Female | 62.1 | 10.8 | 16.8 | 9.0 | 0.2 | 1.0 | 100.0 |
| 15-19 | 3.9 | 13.9 | 14.4 | 3.3 | 57.5 | 11.5 | 599.6 |
| 20-24 | 12.2 | 16.2 | 14.2 | 15.0 | 20.2 | 24.1 | 1,162.3 |
| 25-29 | 17.6 | 16.6 | 15.0 | 16.8 | 11.6 | 20.7 | 1,476.9 |
| 30-34 | 15.8 | 13.7 | 11.4 | 18.0 | 2.5 | 15.6 | 1,304.8 |
| 35-39 | 13.8 | 12.4 | 10.8 | 15.5 | 0.9 | 6.3 | 1,146.2 |
| 40-44 | 11.2 | 8.6 | 8.7 | 12.1 | - | 4.0 | 912.7 |
| 45-49 | 7.9 | 6.2 | 6.8 | 7.7 | 3.2 | 3.8 | 649.1 |
| 50-54 | 7.5 | 4.7 | 6.0 | 5.3 | - | 4.5 | 583.6 |
| 55-59 | 6.2 | 5.0 | 7.4 | 3.4 | 2.0 | 6.6 | 522.5 |
| 60-64 | 3.9 | 2.8 | 5.4 | 3.0 | 2.2 | 3.0 | 341.9 |
| Total (000') | 5,401.3 | 939.2 | 1,464.4 | 783.8 | 21.4 | 89.6 | 8,699.6 |

### 3.10 Time - Related Under-Employment

Time-related under-employment, also known as "visible" under-employment refers to the number of employed persons whose hours of work in the reference period are insufficient regarding a more desirable employment situation in which the person is willing and available to engage extra hours. This differs from the "invisible" underemployment, which is measured in terms of either income earned, productivity levels or the extent to which skills are underutilised. This report focuses on the "visible" underemployment and a 28 hour-threshold in a week was adopted.

The survey revealed that 3.7 million or 20.4 per cent of the employed persons in the working age population were under-employed, as shown in Table 3.14. The population in the age cohort " $15-19$ " had the highest under-employment rate at 55.4 per cent. This was followed by that of the age cohort " $60-64$ " at 27.8 per cent. Under-employment was higher in the rural areas at 26.6 per cent compared to the urban areas at 11.0 per cent. Across all age cohorts, the rural areas registered higher under-employment rates compared to urban areas.

Table 3.14: Distribution of Under-employed by Age (15-64) and residence

| Age group |  |  | Under-employed |
| :--- | :---: | :---: | :---: |
| Employed | Under- <br> employment rate, \% |  |  |
| Total |  |  |  |
| $15-19$ | 767.1 | $1,384.1$ | 55.4 |
| $20-24$ | 564.8 | $2,321.6$ | 24.3 |
| $25-29$ | 503.4 | $2,997.2$ | 16.8 |
| $30-34$ | 400.1 | $2,741.8$ | 14.6 |
| $35-39$ | 346.8 | $2,305.0$ | 15.0 |
| $40-44$ | 253.0 | $1,878.1$ | 13.5 |
| $45-49$ | 226.4 | $1,388.4$ | 16.3 |
| $50-54$ | 177.9 | $1,160.3$ | 15.3 |
| $55-59$ | 220.3 | $1,002.6$ | 22.0 |
| $60-64$ | 193.5 | 696.7 | 27.8 |
| Total | $3,653.1$ | $\mathbf{1 7 , 8 7 5 . 7}$ | 20.4 |
| Rural |  |  |  |
| $15-19$ | 668.4 | $1,105.9$ | 60.4 |
| $20-24$ | 438.5 | $1,330.3$ | 33.0 |
| $25-29$ | 384.3 | $1,517.7$ | 25.3 |
| $30-34$ | 283.6 | $1,446.2$ | 19.6 |
| $35-39$ | 243.4 | $1,340.2$ | 18.2 |
| $40-44$ | 193.1 | $1,169.6$ | 16.5 |
| $45-49$ | 173.2 | 876.6 | 19.8 |
| $50-54$ | 140.6 | 761.0 | 18.5 |
| $55-59$ | 192.3 | 729.0 | 26.4 |
| $60-64$ | 161.1 | 549.5 | 29.3 |
| Total | $\mathbf{2 , 8 7 8 . 4}$ | $\mathbf{1 0 , 8 2 6 . 0}$ | 26.6 |
| Urban |  |  |  |
| $15-19$ | 98.6 | 278.2 | 35.4 |
| $20-24$ | 126.2 | 991.3 | 12.7 |
| $25-29$ | 119.1 | $1,479.5$ | 8.1 |
| $30-34$ | 116.5 | $1,295.5$ | 9.0 |
| $35-39$ | 103.3 | 964.8 | 10.7 |
| $40-44$ | 59.9 | 708.4 | 8.5 |
| $45-49$ | 33.2 | 511.8 | 10.4 |
| $50-54$ | 38.3 | 399.3 | 9.3 |
| $55-59$ | 273.4 | 147.2 | 10.2 |
| $60-64$ | $7,049.6$ | 22.0 |  |
| Total |  |  | 11.0 |
|  |  |  |  |
|  |  |  |  |

## Under-employment by Age Group and Sex

The distribution of under-employed persons by age group and sex is provided in Table 3.15. Majority of the under-employed ( 61.8 per cent) were females. Most of the underemployed females were aged below 40 accounting for 68.5 per cent. On the other hand, majority ( 66.9 per cent) of the under-employed males were below 35 years.
Considering the under-employed males, 77.2 per cent were in the rural areas and about 60 per cent were aged below 30. On the other hand, 79.8 per cent of the under-employed females were in the rural areas, majority ( 67.4 per cent) being below 40 years. In the urban areas, majority of the under-employed for both male and female were aged below 40 at 72.7 per cent and 72.8 per cent, respectively.

Table 3.15: Proportion of Under-Employed (15-64) by Sex

| Age-group | Total |  | Rural |  | Urban |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Male | Female |
| 15-19 | 30.0 | 15.4 | 33.5 | 17.1 | 18.5 | 8.7 |
| 20-24 | 15.6 | 15.4 | 15.9 | 14.9 | 14.6 | 17.5 |
| 25-29 | 11.2 | 15.4 | 10.2 | 15.3 | 14.6 | 15.9 |
| 30-34 | 10.1 | 11.5 | 9.5 | 10.1 | 12.1 | 17.1 |
| 35-39 | 7.5 | 10.8 | 5.9 | 10.0 | 12.9 | 13.6 |
| 40-44 | 5.1 | 8.0 | 4.8 | 7.8 | 6.1 | 8.8 |
| 45-49 | 5.5 | 6.6 | 5.1 | 6.6 | 7.1 | 6.8 |
| 50-54 | 4.4 | 5.1 | 4.0 | 5.4 | 5.9 | 4.1 |
| 55-59 | 5.3 | 6.5 | 5.7 | 7.3 | 4.0 | 3.3 |
| 60-64 | 5.3 | 5.3 | 5.6 | 5.6 | 4.2 | 4.2 |
|  | 1,394.6 | 2,258.5 | 1,076.7 | 1,801.8 | 317.9 | 456.7 |
|  |  |  |  | 8.4 |  |  |

## Under-employment by time worked and sex

Distribution of the under-employed by sex and broad groups of hours worked during the reference period is presented in Table 3.16. Majority (Over 50 per cent) of the under-employed worked for between 18 and 25 hours. Notable, 7.0 per cent of the under employed worked for less than 6 hours per week.

Table 3.16: Distribution of Under-Employed Persons (15-64) by Hours Worked Residence and Sex.

| Working hours | Male | Female | Under-employed |  |
| :---: | :---: | :---: | :---: | :---: |
| Total | \% | \% |  | \% |
| less than 6 hours | 9.2 | 5.7 | 256.3 | 7.0 |
| 6-9 | 10.6 | 7.7 | 321.2 | 8.8 |
| 10-13 | 12.4 | 12.7 | 457.8 | 12.5 |
| 14-17 | 9.9 | 9.3 | 348.2 | 9.5 |
| 18-21 | 24.4 | 27.0 | 949.4 | 26.0 |
| 22-25 | 24.5 | 29.6 | 1,009.1 | 27.6 |
| 26-28 | 9.1 | 8.2 | 311.1 | 8.5 |
| Total | 1,394.6 | 2,258.5 | 3,653.1 | 100 |
| Rural |  |  |  |  |
| less than 6 hours | 8.9 | 5.5 | 193.5 | 6.7 |
| 6-9 | 10.0 | 6.4 | 222.6 | 7.7 |
| 10-13 | 12.6 | 12.2 | 354.5 | 12.3 |
| 14-17 | 9.5 | 9.2 | 267.6 | 9.3 |
| 18-21 | 25.2 | 28.5 | 784.6 | 27.3 |
| 22-25 | 24.9 | 30.5 | 817.6 | 28.4 |
| 26-28 | 9.0 | 7.8 | 238.2 | 8.3 |
| Total | 1,076.7 | 1,801.8 | 2,878.5 | 100 |
| Urban |  |  |  |  |
| less than 6 hours | 10.4 | 6.5 | 62.8 | 8.1 |
| 6-9 | 12.6 | 12.8 | 98.7 | 12.7 |
| 10-13 | 11.6 | 14.6 | 103.2 | 13.3 |
| 14-17 | 11.6 | 9.6 | 80.7 | 10.4 |
| 18-21 | 21.9 | 20.8 | 164.8 | 21.3 |
| 22-25 | 22.9 | 26.0 | 191.5 | 24.7 |
| 26-28 | 9.2 | 9.6 | 72.9 | 9.4 |
| Total | 317.9 | 456.7 | 774.6 | 100 |

### 3.11 Labour Underutilization

Labour underutilisation refers to the mismatch between supply and demand of labour. This gives an indication of the unmet need of employment among the population. Measures of underutilization identify groups among the employed and persons outside the labour force who share similarities with the unemployed. The focus is on issues of insufficient labour absorption.
Labour underutilisation has three main components;

- Time-related under-employed which focuses on the employed, but with insufficient working time and wanting and available to work more hours
- Unemployed which as mentioned earlier focuses on the Not employed, but "currently available supply of labour" and seeking and available to work and
- potential labour force which is the Not employed population, but "potential supply of labour", seeking, but not available to work and Not seeking, but available and wanting to work.

Four set of indicators, for under-utilisation are recommended. In this section only two measures are discussed.

### 3.11.1 Unemployment rate - Labour Underutilisation 1(LU1)

The unemployment rate is one of the measures of unutilized labour supply. It is widely used as an overall indicator of the current performance of a country's economy. Further, unemployment rates by specific groups, defined by age, sex, occupation or industry, are useful in identifying groups of workers and sectors most vulnerable to joblessness. The measure reflects the proportion of the labour force that does not have a job but is available and actively looking for work. However, this excludes discouraged jobseekers who are considered economically inactive.
As indicated in Table 3.17 the survey results under the "strict" definition (not working, available and looking for work) show an overall 7.4 per cent unemployment rate. Majority of the unemployed ( 85 per cent) were aged below 35 . The largest unemployment rate was recorded in the age cohort " $20-24$ " at 19.2 per cent. Majority of the unemployed for both Male and female were in the same age cohort. Female constituted 64.5 per cent of the unemployed.

Table 3.17: Distribution of Labour Force ( $15-64$ ) by Sex
000'

| Level | Total | Employed |  |  | Unemployed |  |  | Unemployment Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female | Total | Male | Female | Total |  |
| 15-19 | 1,626.2 | 784.5 | 599.6 | 1,384.1 | 105.9 | 136.2 | 242.1 | 14.9 |
| 20-24 | 2,873.9 | 1,159.3 | 1,162.3 | 2,321.6 | 198.8 | 353.5 | 552.3 | 19.2 |
| 25-29 | 3,293.2 | 1,520.3 | 1,476.9 | 2,997.2 | 86.1 | 209.9 | 296.0 | 9.0 |
| 30-34 | 2,872.5 | 1,437.0 | 1,304.8 | 2,741.8 | 40.0 | 90.7 | 130.7 | 4.6 |
| 35-39 | 2,393.5 | 1,158.8 | 1,146.2 | 2,305.0 | 25.2 | 63.3 | 88.5 | 3.7 |
| 40-44 | 1,930.2 | 965.4 | 912.7 | 1,878.1 | 25.4 | 26.8 | 52.2 | 2.7 |
| 45-49 | 1,413.3 | 739.3 | 649.1 | 1,388.4 | 8.5 | 16.4 | 24.9 | 1.8 |
| 50-54 | 1,178.8 | 576.7 | 583.6 | 1,160.3 | 8.8 | 9.6 | 18.5 | 1.6 |
| 55-59 | 1,022.1 | 480.1 | 522.5 | 1,002.6 | 5.9 | 13.7 | 19.6 | 1.9 |
| 60-64 | 707.7 | 354.8 | 341.9 | 696.7 | 5.0 | 6.1 | 11.0 | 1.6 |
| Total | 19,311.4 | 9,176.2 | 8,699.6 | 17,875.7 | 509.6 | 926.2 | 1,435.8 | 7.4 |

## Education Status of the Unemployed

Details on education status for the unemployed population are presented in Table 3.18. As indicated in the table, 35.1 per cent of the unemployed population had a secondary level of education. A further 30.2 per cent of the unemployed had a primary level of education as the highest reached. Notable also is that 9.1 per cent of the unemployed had reached university level of education.

Of the unemployed males 37.7 per cent and 27.4 per cent had secondary and primary level of education as the highest reached, respectively. Considering the unemployed whose highest level reached was middle level college, female constituted 67.8 per cent.

Table 3.18: Distribution of Unemployed Population (15-64) by Education and Sex

| Education Level | Male | \% | Female | \% | Total | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pre-primary.. | 1.6 | 0.3 | 5.2 | 0.6 | 6.8 | 0.5 |
| Primary.. | 139.9 | 27.4 | 294.0 | 31.7 | 433.9 | 30.2 |
| Post-primary, Vocational..... | 4.7 | 0.9 | 6.6 | 0.7 | 11.3 | 0.8 |
| Secondary.. | 192.0 | 37.7 | 312.5 | 33.7 | 504.5 | 35.1 |
| College (Middle-level). | 51.3 | 10.1 | 107.8 | 11.6 | 159.1 | 11.1 |
| Univ ersity Undergraduate...... | 63.4 | 12.4 | 67.6 | 7.3 | 131.0 | 9.1 |
| Univ ersity Postgraduate......... | - | - | 0.9 | 0.1 | 0.9 | 0.1 |
| Madrasa/Duksi..................... | 3.2 | 0.6 | 4.1 | 0.4 | 7.3 | 0.5 |
| Other. | - | - | 0.2 | - | 0.2 | 0.0 |
| None. | 48.9 | 9.6 | 125.5 | 13.6 | 174.4 | 12.1 |
| Not Stated............................ | 4.7 | 0.9 | 1.8 | 0.2 | 6.5 | 0.5 |
| Total | 509.7 | 100 | 926.1 | 100 | 1,435.8 | 100 |

### 3.11.2 Combined rate of time related under-employment and unemployment (LU2)

In this section, we compute the combined rate of time-related under-employment and unemployment. This rate is computed as:

Labour Underutilisation (LU2) $=\frac{\text { time_related underemployed+unemployed }}{\text { labour force }} \times 100$
As indicated in Table 3.19, LU2 is calculated as 26.4 per cent. The highest rates of underutilization are observed in the youth age groups 15-29 and in the age category 55-64.

Table 3.19: Combined Rate of Time-Related Under-Employment and Unemployment (LU2) for the Population (15-64)

| Age Group | Employed | Unemployed | Under - <br> employed | Labour <br> Force | Total <br> Unemployed <br> +Under- <br> employed | LU2 rate |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| $15-19$ | $1,384.1$ | 242.1 | 767.1 | $1,626.2$ | $1,009.2$ | 62.1 |
| $20-24$ | $2,321.6$ | 552.3 | 564.8 | $2,873.9$ | $1,117.1$ | 38.9 |
| $25-29$ | $2,997.2$ | 296.0 | 503.4 | $3,293.2$ | 799.4 | 24.3 |
| $30-34$ | $2,741.8$ | 130.7 | 400.1 | $2,872.5$ | 53.8 | 18.5 |
| $35-39$ | $2,30.0$ | 88.5 | 346.8 | $2,393.5$ | 435.3 | 18.2 |
| $40-44$ | $1,878.1$ | 52.2 | 253.0 | $1,930.2$ | 305.2 | 15.8 |
| $45-49$ | $1,388.4$ | 24.9 | 226.4 | $1,413.3$ | 251.3 | 17.8 |
| $50-54$ | $1,160.3$ | 18.5 | 177.9 | $1,178.8$ | 196.4 | 16.7 |
| $55-59$ | $1,002.6$ | 19.6 | 220.3 | $1,022.1$ | 239.9 | 23.5 |
| $60-64$ | 696.7 | 11.0 | 193.5 | 707.7 | 204.5 | 28.9 |
| Total | $\mathbf{1 7 , 8 7 5 . 7}$ | $\mathbf{1 , 4 3 5 . 8}$ | $\mathbf{3 , 6 5 3 . 1}$ | $\mathbf{1 9 , 3 1 1 . 4}$ | $\mathbf{5 , 0 8 8 . 9}$ | $\mathbf{2 6 . 4}$ |

### 3.12 Economically Inactive Population

The economically inactive population comprise of all persons who were neither "employed" nor "unemployed" during the "last seven days" reference period. The age group " $25-54$ " is considered the "prime age" band representing of the interviewed individuals who are expected to be in the labour force. Understanding the reasons why they are not in the labour force is of essence.
Table 3.20 and Figure 3.6 present the inactive population " $15-64$ " by reasons of inactivity. The main two reasons of inactivity were school attendance and family responsibilities accounting for 73.8 per cent and 13.1 per cent, respectively. Considering the "prime age", family responsibility and sickness/ injury were the two main reasons for inactivity.

Figure 3.6: Proportion of Inactive Population (15-64) by Main Reason for Inactivity

Table 3.20: Economically Inactive Population (15-64) by Reasons for Inactivity

| Reason for Inactivity | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | 50-54 | 55-59 | 60-64 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No jobs av ailable in the area.. | 0.8 | 1.0 | 0.7 | 1.1 | 1.0 | 0.6 | 1.8 | 0.4 | 0.6 | 0.0 | 0.5 |
| Unable to work (persons with disability)........ | 0.4 | 2.6 | 1.5 | 2.9 | 8.5 | 4.1 | 6.8 | 11.9 | 6.4 | 0.0 | 1.0 |
| Unable to find work requiring his/her skills............ | 0.3 | 0.5 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 1.0 | 0.0 | 0.2 |
| Housewife/family responsibilities..... | 14.9 | 40.8 | 63.8 | 55.3 | 46.6 | 47.4 | 44.3 | 34.1 | 22.4 | 0.0 | 13.1 |
| Lost hope of finding any kind of work. | 0.0 | 0.2 | 0.2 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Child care problems.... | 1.6 | 3.5 | 2.6 | 1.6 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 |
| Employers think too old/too young to work..... | 0.0 | 0.1 | 0.7 | 0.2 | 0.6 | 1.4 | 4.2 | 6.0 | 14.3 | 0.0 | 0.8 |
| Student / pupil.... | 73.0 | 34.9 | 10.7 | 4.6 | 2.2 | 0.2 | 0.0 | 0.0 | 0.7 | 0.0 | 73.8 |
| Awaiting the season for work. | 0.1 | 0.4 | 0.0 | 0.0 | 1.0 | 0.0 | 0.6 | 0.0 | 0.3 | 0.0 | 0.1 |
| Waiting to be recalled to former job.... | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Have already found a job which will start later.. | 0.0 | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Transport.. | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Pregnancy.... | 1.6 | 3.8 | 2.0 | 4.4 | 0.0 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.9 |
| Sickness/injury..... | 1.8 | 4.7 | 7.0 | 15.5 | 29.6 | 30.3 | 23.0 | 37.7 | 24.6 | 0.0 | 3.5 |
| Don't need w ork... | 0.9 | 0.5 | 0.6 | 0.2 | 0.8 | 2.7 | 10.1 | 2.2 | 5.9 | 0.0 | 0.9 |
| Business closed.. | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| In retirement. | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 0.6 | 3.9 | 18.7 | 0.0 | 0.4 |
| Waiting to attend an interview..................... | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Other (specify)... | 1.7 | 2.0 | 0.6 | 3.7 | 4.0 | 1.2 | 0.7 | 1.1 | 1.0 | 0.0 | 1.4 |
| Not Stated.. | 2.8 | 4.8 | 8.1 | 9.8 | 4.6 | 9.5 | 8.0 | 1.1 | 4.1 | 0.0 | 2.4 |
| Total (000') | 3,389.7 | ,195.5 | 373.6 | 190.3 | 109.6 | 76.2 | 62.6 | 62.7 | 72.0 | 112.0 | 5,644.1 |

## CHAPTER 4

## Recommendations

The Vision 2030 goal for the Labour and Employment sector is to create a globally competitive and adaptive human resource base that can meet the demand of a rapidly industrializing economy. The sector is therefore critical in achieving the aspiration of the Vision and there is need to put more effort to improve the quality of the labour force so that the country can achieve the vision's targets. Timely and accurate information on the labour force such as employment, unemployment and under-employment is neccessary in order to provide an indication on the available and unused resources for planning purposes.

This report has provided updated statistics on some of the indicators of the labour market. A summary of these findings are subsequently presented.

### 4.1 Recommendations

- Further analysis to compliment the indicators contained in this basic report should be undertaken. The proposed further analysis could be on thematic areas covering: engagement in economic activities; multiple jobs; earnings; literacy; formality and informality; persons not in the labour force and occupations.
- Labour force surveys should be carried out more frequently (Preferably on a quarterly basis) to ensure that labour related indicators are always kept up to date. These periodic reports should provide key indicators with details of up to the county levels.
- Future labour force surveys should be designed to take into consideration the emerging recommendations on labour statistics measurement.
- To portray the whole picture of under-employment in Kenya there is need for analysis to be done using income levels and occupations.
- On the key labour market indicated on education attainment and illiteracy, only the education attainment has been considered in this report. This is due to inadequacy in illiteracy information, it is therefore recommended that future studies should have comprehensive information on this area. Further, the skills aspect was not adequately covered in the KIHBS survey, its therefore recommended that a study that monitors the skills level and utilization be undertaken.
- To cover the whole aspect of the labour force, special studies should be undertaken targeting population living in non-conventional households


## Appendices

## Appendix 1 - Concepts and Definitions

This part deals with some of the labour statistics concepts and definitions used during the 2015/16 KIHBS.

Economic activity: involves the production, distribution and consumption of goods and services at all levels (market and non-market) within a society.

Work: The concept of work covers all persons undertaking economic activities either for pay, profit or family gain. This concept was however modified during the $19^{\text {th }}$ conference of labour statisticians to exclude family gain.
Employment: Refers to the performance of work as defined above. This term is used to measure the number of persons employed, including persons at work during a short reference period, and persons temporarily absent from work but holding a job. There are two types of employment:

Persons at work: those who, during the reference period performed some work (i.e. at least one hour) for wage or salary, in cash or in kind; and

Persons with a job but not at work: individuals who have already worked in their present job, were temporary not at work during the reference period (due to illness, leave or training, adverse weather conditions) and had a formal attachment to their job.

Economically Active: These are persons who furnish the labour market with labour for the production of economic goods and services as defined under the production frontiers of the United Nations System of National Accounts (SNA). The economically active population consists of the employed and the unemployed persons.

Inactive Population: The economically inactive population also known as persons, not in the labour force, covers those members of the population who were not available for work. This category includes full-time students, infirm/incapacitated, retired or those who did not need work due to unspecified reasons.
Usually Active Population: Comprises all persons above a specified age whose main activity status, as determined regarding some weeks or days during a relatively long specified reference period (such as the preceding 12 months or the previous calendar year), was employed or unemployed.

Employed: Includes those persons who reported that they did some work during the reference period or they held a job even if they were not doing any work at the time. It also includes persons who were on leave or had a business to return to.

Unemployed: Unemployed include persons aged 15-64 who during the reference period were without work but were currently available for work, and were actively seeking work in the last four weeks preceding the survey date. However, if currently available for work, persons without work who had made arrangements to take up paid employment or to undertake self-employment activity at a date after the reference period were also considered as unemployed.
Labour force: consists of all persons in the working age population who are either employed or unemployed. Previously, it was referred to as the 'currently active population'.

Labour Force Participation Rate (LFPR): The LFPR is a measure of the extent of a country's working-age population who are in the labour force. It is an indicator of the level of the labour market activity and is computed as a ratio of the labour force to the working age population.
The Working-Age Population (WAP): includes all persons in the population above a specified age threshold used for statistical purposes to define the economically active population. A threshold of 15 years and above is commonly used. It is defined by a lower age threshold (and in some countries, includes an upper age limit). The lower age limit may not coincide with the minimum legal working age established in the country.
Household: Is defined as: -
i. Person or a group of people living in the same compound (fenced or unfenced);
ii. Answerable to the same head; and
iii. Sharing a common source of food and/or income as a single unit in the sense that they have a common housekeeping arrangement (That is share or are supported by a common budget).

Respondent: Any responsible member of the household who provides information to the enumerator.

Reference Period: Since employment and unemployment are viewed as stock concepts (measurement at a particular point in time), the corresponding statistics, refer to a precise instant in time. The referencing to a particular reference period in time period.

Working patterns: Depending on their daily or weekly working hours, persons may work either on full-time or part-time basis.

Full-time Workers: Persons who work for at least three quarter (75\%) of the regular or customary working period measured in hours, days or weeks, are considered full-time workers, except when on leave or otherwise officially away.

Part-time workers: Employees who voluntarily work fewer hours than is normal for the establishment, or division within it. The term includes only those part-time employees who are permanent employees; thus, a person hired for three months part time is separately counted as a casual worker.
Casual workers: These are persons whose terms of engagement provide for payment at the end of each day and who are not engaged for a period longer than 90 days. They have no formal employment contract with the employer and their services may be terminated without notice. Casual employees are generally engaged for manual work.

Regular Workers: Regular workers refer to working owners/operators, fully paid employees, unpaid family members, and apprentices. For paid employees, regular workers are those (unlike casual workers) with stable contracts for whom the employing organisation is responsible for payment of relevant taxes and social security contributions
and where the contractual relationship is subject to prevailing labour regulations. For self-employed persons, regular workers are those who work in their enterprises on a continuous basis.

Job: A job is defined as a set of tasks and duties, which are carried out by or can be assigned to, one person. Two jobs are similar if they require the performance of similar sets of tasks that is if they involve the same type of work.

Occupation: is defined as a set of tasks and duties characterised by a high degree of similarity.

Paid Employees: These are persons working for a public or private employer and receive remuneration in wages, salaries, commission, tips, piece-rates or pay in kind.
Time-related under-employment: indicates a partial lack of work for employed persons. Comprises all persons in employment who satisfy the following three criteria during the reference period:
i. "Willing to work additional hours", that is, wanted another job (or jobs) in addition to their current job (or jobs) to increase their total hours of work; to replace any of their current jobs with another job (or jobs) with increased hours of work; to increase the hours of work in any of their current jobs; or a combination of the above.
ii. "Available to work additional hours" those that are ready within a specified subsequent period, to work additional hours, given opportunities for additional work.
iii. "worked less than a threshold relating to working time", that is, persons whose "hours actually worked" in all jobs during the reference period in all jobs were below a certain threshold of hours worked.

Total dependency ratio: This is an indicator of the economic burden the productive portion of the population must bear. It is computed as a ratio of the population considered to be "dependent" (aged below 15 and above 64 years) to the working age population ( 15 to 64 years).
Child dependency ratio: This is the proportion of the population aged 0-14 to the working age population ( 15 to 64 years).
Aged dependency ratio: This is the proportion of the population aged 65 and above to the working age population ( 15 to 64 years).

Employment to population ratio: This is the proportion of a country's working age population that is employed. It indicates the job opportunities that are available to the persons in the economically active age groups in an economy. A high employment to population ratio indicates that a large proportion of the population is employed, while a low ratio means that large share of the population is not directly involved in market-related economic activities.
$\mathbf{L U}_{2}$ : Combined rate of time related under-employment and unemployment.

## Appendix 2 - KIHBS Sample Design

## Sample Frame

Administratively, Kenya is divided into 47 Counties. In turn, each County is in turn subdivided into Sub-Counties. Before the enactment of the current constitution in 2010, the counties and sub-counties had not been created. Instead, the country was divided into provinces which were further divided into districts which are equivalent to the current sub-counties. Each districtwas divided into divisions, each division into locations and each location into sub-locations. In addition to these administrative units, each sub-location was subdivided into census enumeration areas (EAs), i.e. small geographic units with clearly defined boundaries. A total of 96,251 EAs were developed during the 2009 Census cartographic mapping. This information was used in 2010 to design a master sample known as the fifth National Sample Survey and Evaluation Programme (NASSEP V) with a total of 5,360 selected EAs, making the frame that was used for the 2015/16 KIHBS.

The NASSEP V master frame was designed in a multi-tied structure with four sub-samples (C1, C2, C3 and C4), each consisting of 1,340 EAs that can serve as independent frames. The frame used the counties as the first level stratification and further stratified by rural and urban areas, making a total of 92 strata with Nairobi City and Mombasa counties having only urban areas. The sampling of EAs into the frame was done independently within each stratum. Each sampled EA was developed into a cluster through listing and mapping process that standardised them into one measure of a size having an average of 100 households (between 50 households and 149 households). The frame was gradually developed in phases from the year 2012 to 2015.

The C3 and C4 sub-samples were primarily used in the 2015/16 KIHBS. In situations where a stratum did not have sufficient clusters from the two sub-samples, the other sub-samples were included.

## Sampling

The survey sample was selected in two stages. Stage one involved selection of clusters, while the second stage involved selection of households. The sampling was done using the Complex Module of the SPSS software.

## Sampling of PSUs

The selection of 2,400 clusters for the survey was made using the Equal Probability Selection Method (EPSEM). The clusters were selected systematically from NASSEP V frame independently within each stratum. The process involved ordering the clusters by county, then by urban/rural, and finally by geographic location. The resulting sample retained properties of PPS as used in the creation of the frame.

## Sampling of Households and Respondents

This survey provided an opportunity to test the use of CAPI in preparation for the proposed Kenya Continuous Household Survey Programme (KCHSP). The CAPI needed a sample of 6 households from each cluster.

All the developed clusters had the information necessary for sampling of households. A few sampled clusters that had not been developedwere subsequently developed during the period of the survey. Among the already developed clusters, the ones that were more than one year since the last listing/updating were updated gradually
based on the quarters of the survey.
Using the total number of households from each sampled cluster available from the NASSEP V, a uniform sample of 16 households per cluster was selected using systematic sampling method. This procedure of selecting the sample households with a random start was done using the following criteria:

Let L be the total number of households listed in the cluster;
let Random be a random number between ( 0,1 );
let n be the number of households selected in the cluster;
let $I=L / n$ be the sampling interval.
(1) The first selected sample household is $k$ ( $k$ is the serial number of the household in the listing) if and only if:

$$
(k-1) / L<\text { Random } \leq k / L
$$

(2) The subsequently selected households are those having serial numbers:

$$
k+(j-1) * 1, \text { (rounded to integers) }
$$

for $\mathrm{j}=2,3, \ldots \mathrm{n}$;
Random numbers were different and independent from cluster to cluster.

Once the 16 households were sampled, a further sub-sampling was done systematically to select the ten households in the survey and the remaining ones for CAPI. Also, half of the survey households were meant for the administration of Diary Questionnaires and, therefore, a further systematic sampling was done to separate the households.
This information was availed to the teams in advance before they commenced data collection. The survey did not provide for substitution of sampled households, and there was strictly no replacement of the preselected households.
Table 1 ：Survey Response Rates by Residence and County

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|  | Number of Sampled | Completed | Partially complete (incomplete) | No household member at home or no competent respondent at home at time of visit | Entire household absent for extended period of time | Postponed | Refused | Dwelling vacant or structure not a dwelling | Dwelling destroyed | Dwelling not found | Other |  | Household Response Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Households | (C) | (PC) | (HP) | (HA) | (P) | (R) | (DV) | (DD) | (DNF) | (0) | Total | (HRR)' |
| Turkana.......... | 470 | 87.9 | - | 0.2 | 6.8 | - | 0.2 | 3.6 | 0.9 | - | 0.4 | 100 | 99.5 |
| West Pokot......... | 479 | 91 | - | 0.2 | 6.3 | - | 0.2 | 1.9 | - | - | 0.4 | 100 | 99.5 |
| Samburu....... | 440 | 95.9 | - | - | 0.7 | - | - | 1.8 | 1.6 | - | - | 100 | 100 |
| Trans Nzoia........ | 520 | 93.5 | - | 0.2 | 1.3 | - | 0.8 | 3.1 | 0.4 | - | 0.8 | 100 | 99 |
| Uasin Gishu......... | 540 | 90.4 | 0.4 | 0.7 | 4.4 | - | 0.7 | 2.2 | 0.4 | - | 0.7 | 100 | 98 |
| Elgeyo-Marakwet | 475 | 92.2 | 0.6 | - | 6.3 | - | - | 0.4 | 0.2 | 0.2 | - | 100 | 99.3 |
| Nandi............... | 520 | 93.3 | 0.2 | - | 3.7 | - | 0.2 | 2.3 | - | - | 0.4 | 100 | 99.6 |
| Baringo... | 480 | 91.3 | - | - | 3.8 | - | 0.2 | 4.6 | 0.2 | - | - | 100 | 99.8 |
| Laikipia........... | 510 | 91.2 | 0.4 | - | 3.7 | - | 0.6 | 3.1 | 0.2 | - | 0.8 | 100 | 98.9 |
| Nakuru....... | 570 | 86.1 | 0.5 | 2.5 | 4.4 | - | 0.4 | 2.6 | - | - | 3.5 | 100 | 96.3 |
| Narok......... | 480 | 94.4 | 1.3 | 0.2 | 2.3 | - | 0.4 | 1.3 | 0.2 | - | - | 100 | 98.1 |
| Kajiado.. | 480 | 81.9 | - | 1.9 | 5.8 | - | 3.1 | 6.5 | 0.2 | 0.4 | 0.2 | 100 | 94.2 |
| Kericho............... | 520 | 91 | 0.2 | 0.6 | 2.3 | - | 1 | 3.5 | 0.2 | 0.6 | 0.8 | 100 | 98.1 |
| Bomet............ | 520 | 93.5 | - | 0.6 | 3.5 | - | - | 1.9 | 0.4 | - | 0.2 | 100 | 99.4 |
| Kakamega.......... | 520 | 95.2 | - | 0.4 | 2.1 | - | 0.6 | 0.8 | 0.4 | 0.2 | 0.4 | 100 | 99 |
| Vihiga................. | 480 | 95.4 | - | 0.2 | 1.7 | 0.2 | 0.2 | 0.8 | - | - | 1.5 | 100 | 99.3 |
| Bungoma............ | 520 | 93.3 | 0.4 | - | 2.3 | - | - | 3.5 | 0.2 | - | 0.4 | 100 | 99.6 |
| Busia................. | 520 | 91 | 0.4 | 1.2 | 4.6 | - | 0.6 | 0.4 | 0.6 | - | 1.3 | 100 | 97.7 |
| Siaya.................. | 520 | 93.5 | - | 0.4 | 3.5 | - | - | 2.1 | 0.4 | - | 0.2 | 100 | 99.6 |
| Kisumu........... | 540 | 93 | 0.2 | 1.3 | 3.9 | - | 0.4 | 1.3 | - | - | - | 100 | 98 |
| Homa Bay............ | 520 | 91.2 | 0.4 | - | 6 | - | 0.4 | 0.6 | - | - | 1.5 | 100 | 99.2 |
| Migori................. | 520 | 92.1 | 0.4 | - | 2.7 | - | 0.4 | 2.7 | 0.4 | 0.2 | 1.2 | 100 | 99.2 |
| Kisii... | 560 | 95.2 | 0.2 | 0.5 | 2 | - | 0.2 | 1.4 | 0.4 | 0.2 | - | 100 | 99.1 |
| Nyamira..... | 520 | 93.8 | 0.4 | 1 | 2.7 | - | 0.2 | 0.8 | - | - | 1.2 | 100 | 98.4 |
| Nairobi City......... | 720 | 76 | 1.9 | - | 9.7 | - | 2.6 | 4.7 | 0.6 | 0.1 | 4.3 | 100 | 94.3 |

## Appendix 3 - Survey Personnel NAME

Zachary Mwangi
Mary Wanyonyi
Margaret Nyakang'o
James Gatungu
Macdonald Obudho
Collins Omondi
Cleophas Kiio
Paul Samoei
Njoroge Nyoike
Samuel Kipruto
Pasquel Gichohi
Silas Mulwa
Paul Waweru
Rajab Mbaruku
John Y Makau
Stephen Ngugi
John G Mburu
Mutua Kakinyi
Simon Gaitho
Evans Munene
Michael Musyoka
James Munguti
Andrew Imbwaga
Godfrey Otieno
Samuel Ogola
Isaac K Ndegwa
Robert Nderitu
Patrick Mwaniki
John Bore
Benjamin Avusevwa
Benjamin Muchiri
Hiram Mbatia
Paul Nderitu
Josiah Kaara
Maurice Kamau
Benson Karugu
Newton Amugune
Vivian Nyarunda
Francis Mwandembo
Canable Oganga
Sarah Omache

## POSITION

National Coordinator Deputy National Coordinator Regional Coordinator Regional Coordinator Regional Coordinator Regional Coordinator Regional Coordinator Project Manager Logistic Manager Data Manager Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer Coordinator/Trainer
Appendix 4-Questionnaires

| B01 | B02 | B03 | B04 |  | 305 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|c\|} \hline L \\ \hline \\ \hline \\ N \\ E \\ \\ N \\ N \\ U \\ M \\ B \\ E \\ R \end{array}$ | NAME <br> MAKE A COMPLETE LIST OF ALL INDIVIDUALS WHO USUALLY LIVE AND EAT THEIR MEALS TOGETHER IN THIS HOUSEHOLD, STARTING WITH THE HEAD OF HOUSEHOLD. <br> (CONFIRM THAT HOUSEHOLD HEAD HERE IS SAME AS HOUSEHOLD HEAD LISTED ON PAGE 1.) | What is [NAME]'s relationship to the household head? | Sex of [NAME]? <br> MALE... 1 FEMALE. 2 | How old is [NAME]? <br> IF 60 MONTHS OR OLDER, GIVE YEARS ONLY. <br> IF LESS THAN 60 MONTHS IN AGE, GIVE YEARS AND MONTHS. <br> 95 YEARS AND OVER. 95 AGE IS NOT KNOWN... 98 NOT STATED. $\qquad$ 99 |  |
|  |  |  |  | Years | Months |
| 01 |  | 1__\|............................. | 1 | I_I | 1 |
| 02 |  | \|__|_|........................... | 1 1 | L__\| | I_I_I |
| 03 |  | I__\|........................... | - 1 | L___\| | I__\| 1 |
| 04 |  | \|__|_|............................ | L 1 | L__\| | I_I |
| 05 |  |  | 1 1 | L___\| | \|_I_1 |
| 06 |  | \| |.............................. | 1 | L___\| | +_\| 1 |
| 07 |  | I__\|............................ | 1 | L___\| | I__\| |
| 08 |  |  | 1 1 | L___\| | I_I_I |
| 09 |  | I__\|............................. | 1 | I__I_I | \|__|_1 |
| 10 |  | \|__|_1........................... | 1 1 | L___\| | I_I_1 |
| 11 |  | \| | | . . . . . ...................... | L 1 | L___\| | I_I_1 |
| 12 |  | \|___|............................ | 1 1 | L__\| | +_\| |


SECTION C: EDUCATION
TO BE ASKED FOR ALL PERS





SECTION D : LABOUR



|  | PART A2: CONTN... | PART A3: IDENTIFICATION OF PRIMARY AND SECONDARY JOB |  |  |  | PART B: UNEMPLOYED AND PERSONS NOT IN THE LABOURFORCE |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B01 | D07 | D08 | D09 | D10 |  | D11 |  |  | D12a | D12b |
| $\begin{array}{\|l\|} \hline L \\ \hline \\ \text { I } \\ N \\ E \\ \text { } \\ N \\ U \\ M \\ B \\ E \\ R \\ \hline \end{array}$ | After how long will [NAME] return to work? <br> LESS THAN 1 MONTH. $\qquad$ 1 MONTH TO LESS <br> 3 MONTHS AND ABOVE $\qquad$ 1 THAN 3 MONTHS....... 2 <br> NOT SURE WHEN TO RETURN. $\qquad$ NOT RETURNING. 3 4 $\qquad$ (IF '4 or 5' » Part B-D11) | How many economic activities did [NAME] engage in the last 7 days? <br> [FOR THOSE WHO HELD A JOB, GIVE NUMBER OF USUAL INCOME EARNING ACTIVITIES] | How many hours does [NAME] usually work per week in all these activities? | What is the status of secondary activity in <br> PAID EMPLOYEE PAID EMPLOYEE ( WORKING EMPLO OWN-ACCOUNT W MEMBERS OF PRO COOPERATIVES* CONTRIBUTING FA APPRENTICE. VOLUNTEER........ OTHER (SPECIFY) <br> * THESE ARE MEM PRODUCER COOP SELL THEIR HOUS PRODUCTION THR COOPERATIVES, COPERATIVE EMP (» Part C - D15) | 's primary and of time? <br> E HH (HH). $\qquad$ $\qquad$ RS' $\qquad$ $\qquad$ $\qquad$ $\qquad$ OF <br> VES WHO <br> THE <br> T S $\qquad$ $\qquad$ 01 02 03 04 | In the past 4 weeks what actions has [NAME] taken to look for any kind of work or start any kind of business/income generating activity? RANK <br> THE 3 MAIN ONES <br> REGISTERED OR WAITED AT EMPLOYMENT AGENCY............... A REGISTERED A DISPUTE. <br> PLACED OR ANSWERED JOB ADVERTISEMENTS. <br> ENQUIRED AT WORKPLACES, FARMS, FACTORIES OR CALLED ON OTHER POSSIBLE EMPLOYERS <br> SOUGHT ASSISTANCE FROM RELATIVES OR FRIENDS. <br> WAITED AT THE STREET SIDE OR OTHER PLACE WHERE CASUAL WORKERS ARE FOUND. <br> CONTACTED SCHOOL OR UNIVERSITY EMPLOYMENT CENTER. <br> APPLIED FOR PERMIT TO START BUSINESS. <br> APPLIED FOR A LOAN FROM A BANK. <br> SOUGHT FINANCIAL ASSISTANCE FROM FRIENDS OR FAMILY MEMBERS <br> SOUGHT A LOAN FROM A CHURCH OR MOSQUE.............................K PURCHASED LAND, A BUILDING, OR EQUIPMENT. <br> LOOKED AT JOB ADVERTISEMENTS OTHER ACTIVE (SPECIFY) OTHER PASSIVE (SPECIFY). NONE $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ |  |  | What was [NAME]'s main status a year ago? <br> EMPLOYED (WORKING FOR <br> PAY OR PROFIT). <br> UNEMPLOYED (SEEKING <br> EMPLOYMENT) <br> FULL TIME STUDENT/ <br> PUPIL. $\qquad$ HOUSEWIFE/FAMILY <br> RESPONSIBILITIES. <br> RETIRED/INCOME <br> OTHER (SPECIFY). $\qquad$ $\qquad$ $\qquad$ $\qquad$ 1 $\qquad$ | How long has [NAME] been looking for a job or trying to start a business? <br> [GIVE <br> DURATION <br> IN MONTHS <br> FROM <br> WHEN <br> SEARCH <br> BEGAN] |
|  |  |  | Hours Per Week | PRIMARY | SECONDARY | First | Second | Third |  | Months |
| 01 | I_I | I_I | L_I_I_I | L_I_I | I__ |  |  |  | I__I | I _ |
| 02 | I_I | I_I | L_I_I__\| | L_I_I | I_I_I | I_I | $\underline{\square}$ | I_I | I_I | 1 |
| 03 | I_I | I_I | L_I_I_\| | L_I_I | I_I_I | -1 | L_I | - | -1 | I_I_\| |
| 04 | I_I | I_I | L_I_I_\| | - I__\| | I_I_I | I_I | L_I | I__I | I__I | 1 |
| 05 | I_I | I_I | L_I_I_\| | L_I_I | L_I_I | - | - | I_I | - | , |
| 06 | I_I | I_I | L_I_I_I | I_I_I | I__I_I | I_I | $\square$ | I__I | I_I | 1 |
| 07 | I_I | L_I | L_I_I_I | I_I_I | I_I_I | I_I | I_I | I_I | I_I | 1 |
| 08 | I_I | L_I | L_I_I_I | L_I__\| | I_I_I | I_I | 1 | L_I | L_I | L_L - |
| 09 | I_I | L_I | L_I_\|_1 | - 1 | I_I_I | -1 | - | +_1 | I_I | L_I |
| 10 | I_I | L_I | L_I_I_I | L_I__\| | I_I_I |  |  |  |  |  |
| 11 | I_I | L_I | L_I_I_I | I_I__\| | I_I_I | I_I | I_I | I_I | I_I | L_I_I |
| 12 | I_I | L_I | L_I_I_I | L_I_I | L_I_I |  | I_I | I_I | I_I | - |






| $\begin{array}{\|c\|} \hline L \\ \text { I } \\ \text { N } \\ \mathrm{E} \\ \\ \mathrm{~N} \\ \mathrm{U} \\ \mathrm{M} \\ \mathrm{~B} \\ \mathrm{E} \\ \mathrm{R} \end{array}$ | How much does [NAME] usually receive in Total Allowances that were not included in the salary [NAME] just reported last one month? <br> estimate cash value of ANY IN-KIND PAYMENTS RECEIVED | Is [NAME] a member of a trade / labour union or a similar employee association? <br> YES. <br> NO. $\qquad$ $\qquad$ 1 2 | Does [NAM following be <br> YES. <br> NO...... <br> DK $\qquad$ | E]'s employ nefits? <br> .1 <br> 2 <br> 8 | er contribute/p <br> C <br> Paid leave or payment for leave not taken | D $\square$ Medical <br> benefits <br> from <br> employer | Is [NAME] employed on the basis of ... <br> A WRITTEN CONTRACT... 1 VERBAL AGREEMENT..... 2 IMPLIED CONTRACT..... 3 NO CONTRACT. $\qquad$ | In which County/Country does [NAME] work? <br> SEE CODES PROVIDED IN THE MANUAL |  | What mode of transport does [NAME] usually use to and from work? <br> WALK <br> BICYCLE/MOTOR BIKE(BODA BODA). OWN BICYCLE. OWN MOTOR BIKE. <br> TUK-TUK <br> MATATU <br> BUS $\qquad$ $\qquad$ $\qquad$ $\qquad$ COMMUTER TRAIN. <br> EMPLOYER PROVIDED <br> PRIVATE VEHICLE OTHER (SPECIFY). <br> NOT APPLICABLE <br> (IF N/A » D35) <br> (IF '1' or '3' or '9' » D34) $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ | D33 On average how much does [NAME] pay for transport to work $?$ (ONE WAY) KSH | Approximately how far in KM is [NAME]'s workplace? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 01 |  | I__I | 1 | I_I | L-1 | L |  |  | - I_-\| | - | - | 1 |
| 02 | \|__|_|__|_|_|_|_| | I_I | I_I | I_I | $\square$ | L_I | I_1 |  | $\square$ | , | 1-1 | - 1 |
| 03 |  | I_I | I__I | I__I | L_1 | L_I | I__1 |  | 1 | - | I I | 1 |
| 04 | I__\|_1_| | - | 1 | I-1 | 1 | 1 | I_I |  | I_1-1 | - I_-1 | 1 | - |
| 05 | I_I_I_I_I_I_I | I_I | 1 | I_I | - | L_I | I_I |  | - 1 __ | I__I_I | 1 | 1 |
| 06 | - I_I_I_I | I_I | I_I | I_I | $\square$ | L_I | I-1 |  | - _ - \| _ | | 1 | - 1 -__\| | - 11 |
| 07 |  | I_I | I__I | I__I | L_I | L | I_I |  | - | I_I_I | - | - 1 |
| 08 |  | I_I | I__I | I__I | L_1 | L_I | I__I |  | L_I_I_1 | I_I | - 1 | 1 |
| 09 | \|__|_|_|_|_|_|_| | I__I | I__I | I__I | L_I | L_I | I__I |  | I_-_1 | I__ | 1 | 1_1_1 |
| 10 |  | I_I | 1 | I_I | 1 | 1 | I_I |  | L_I_-_\| | 1 | I__I_I_I | II |
| 11 | \|__| | | | | | | | | | I_I | I_I | I_I | $\square$ | - | I-1 |  | 1 | - | -1 | I_IC\| |
| 12 | \|_1_|_|_|_| | I_I | I_I | I_I | L | L | $\underline{1}$ |  | L_L_-\| | +_1_\| | - 1 | L__ |



\begin{tabular}{|c|c|c|}
\hline \& PART D: SECONDARY JOB \& <br>
\hline B01 \& D43 \& D44 <br>
\hline \multirow[t]{7}{*}{L
I
N
E

N
$U$
$M$
B
E
R} \& \multirow[t]{7}{*}{What was the total income last month from the second job/ activity?} \& \multirow[t]{5}{*}{How long have you been on this second job/ activity?} <br>
\hline \& \& <br>
\hline \& \& <br>
\hline \& \& <br>
\hline \& \& <br>
\hline \& \& (IN MONTHS) <br>
\hline \& \& <br>
\hline
\end{tabular}

| D45 | PART E: DOMESTIC SERVANTS |
| :--- | :--- |
| ASK HOUSEHOLD <br> HEAD......How many <br> domestic servants <br> does the household <br> employ? | How much were their total salaries last month? |
|  |  |




## Kenya National Bureau of Statistics

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[^0]:    1 The 2015/16 questionnaires, interviewer manuals and other technical documentation can be freely and publicly accessed via: http://statistics.knbs.or.ke/nada/index.php/catalog/88.

[^1]:    2 Note that, part-time workers discussed in this section are the "self-reported part-time workers". This differs from section 3.7 where part-time worker referred to those whose working hours fall below a threshold of 35 hours per week.

