



ECONOMIC SURVEY 2018

Economic Survey 2018

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About KNBS

The Kenya National Bureau of Statistics (KNBS) is the principal agency of the Government for collecting, analysing and disseminating statistical data, and the custodian of official statistical information. The Bureau is also responsible for the co-ordination of the National Statistical System (NSS) in the country.

The functions of KNBS as defined in the Statistics Act 2006 are:

- Planning, authorising, coordinating and supervising all official statistical programmes undertaken within the NSS;
- Establishing standards and promoting the use of best practices and methods in the production and dissemination of statistical information across the NSS;
- Collecting, compiling, analysing, abstracting and disseminating statistical information on the matters specified in the First Schedule of the Statistics Act, 2006;
- Conducting the Population and Housing Census every ten years, and such other censuses and surveys as the Board may determine; and
- Maintaining a comprehensive and reliable national socio-economic database.

KNBS has an elaborate infrastructure for data collection across the country. This includes, a County Statistical Office in each of the 47 counties as data collection centre, two sampling frames for implementation of censuses and surveys and various databases for socio-economic statistical information.

The Bureau collects various statistical information on monthly, quarterly, semi-annually and annual basis. Ad hoc surveys and studies are also carried out to gather information on specific indicators. Some of the statistical products of the Bureau include, Consumer Price Index (CPI), Leading Economic Indicators report, Quarterly Gross Domestic Product (GDP) release, Quarterly Producer Price Index (PPI), Quarterly Balance of Payment release, Annual Economic Survey report, Annual Statistical Abstract and County Statistical Abstract. The Bureau also provides information to local and international organisations including the IMF, UN, COMESA, ILO and EAC; and other data users. The Bureau maintains various platforms through which its products and statistical information are disseminated.

The Bureau provides information for monitoring the country's development agenda as well as internationally agreed indicators such Sustainable Development Goals (SDGs).

In undertaking its mandate, the Bureau is guided by the following Vision, Mission and Core Values.

Vision

To be a centre of excellence in production and management of quality Statistics.

Mission Statement

To develop, provide and promote quality statistical information for evidence-based decision making.

Core Values

- **Professionalism:** Strictly abide by professional considerations on the methods, standards and procedures for statistical production.
- **Confidentiality:** Guarantee confidentiality of data providers as provided in the Statistics Act 2006
- **Collaboration:** Collaborate with stakeholders to enhance the quality of statistical information
- **Teamwork:** Embrace teamwork as the hallmark of our success
- **Customer focus:** Commitment to meet the needs of our customers and to always focus on customer satisfaction.
- **Accountability and Transparency:** Conduct business and lend services to stakeholders in a transparent and accountable manner.
- **Efficiency and effectiveness:** Promote high productivity, competence and usefulness of resources at the National and County level.
- **Innovation and Creativity:** Committed to innovation, invention, creativity and resourcefulness in service delivery.

Data Quality

The Economic Survey report is an annual publication prepared by the Kenya National Bureau of Statistics that provides socio-economic information covering a five-year period. Statistics presented in Economic Survey reports are produced in line with internationally sound and scientific methods that are anchored on the fundamental principles of producing official statistics.

Data Sources

The statistics published in the Economic Survey reports are based on a wide variety of sources including own surveys and censuses, studies carried out by other institutions and administrative data collected by Ministries, Departments and Agencies; County Governments; and establishments. The sources of data are always recognized.

Accuracy and Reliability

All censuses and surveys conducted by the Bureau are based on international standards and methods. Sampling and non-sampling errors that may occur in a census or survey are always disclosed. Data from administrative sources are subject to international best practices on statistics and are verified and validated through sectoral Technical Working Groups.

Periodicity

The Economic Survey report is an annual publication. However, the data may also be presented on quarterly and monthly basis for the review period.

Consistency

The Bureau maintains a compendium of statistical definitions. The Bureau has endeavoured to provide the same format of statistical tables as in previous years to enable consistency and trend comparison over time.

Accessibility

KNBS reports are disseminated by various platforms. The platform include the KNBS website: www.knbs.or.ke, publications, press releases and social media. More information is also available from both the headquarter and the county offices.

Timeliness

The report is produced annually, at most 150 days after the end of the review year. Quarterly information is released at most 90 days after the review quarter.

List of Acronyms and Abbreviations

ADF	African Development Fund
ADNOC	Abu Dhabi National Oil Corporation
AfDB	African Development Bank
AG	Attorney General
AGOA	African Growth and Opportunity Act
AIA	Appropriation In Aid
AIDS	Acquired Immuno-Deficiency Syndrome
API	American Petroleum Institute
ATM	Automatic teller machine
AYII	Area Yield Index Insurance
BASAs	Bilateral Air Services Agreements
BH	Boreholes
BoP	Balance of Payments
CAK	Communications Authority of Kenya
CBA	Collective Bargaining Agreement
CBD	Coffee Berry Disease
CBD	Central Business District
CBK	Central Bank of Kenya
CBR	Central Bank Rate
CFS	Container Freight Station
CIP	Census of Industrial Production
CMA	Capital Markets Authority
COFOG	Classification of Functions of Government
COICOP	Classification of Individual Consumption by Purpose
COMESA	Common Market for Eastern and Southern Africa
CPC V2	Central Product Classification Version
CPI	Consumer Price Index
CRA	Commission on Revenue Allocation
CRB	Credit Reference Bureau
DANIDA	Danish International Development Agency
DTSs	Deposit Taking Savings and Credit Co-operatives
DWT	Deadweight Tons
E&PWSD	Elderly and Persons with Severe Disability
EAC	East African Community
EACC	Ethics and Anti-Corruption Commission
ECDE	Early Childhood Development Education
EEC	European Economic Commission
EFA	Education For All
EGSS	Environmental Goods and Services
EIA	Environmental Impact Assessment
EPC	Export Promotion Council
EPEA	Environmental Protection Expenditure Accounts
EPP	Emergency Power Producers
EPZ	Export Processing Zone
EPZA	Export Processing Zone Authority
ERC	Energy Regulatory Commission
Esops	Employee Share Ownership plans
ETF	Exchange Traded Funds

EU	European Union
FAA	Federal American Administration
FBS	Food Balance Sheet
FDI	Foreign Direct Investment
FGT	Foster, Greer and Thorbecke
FIC	Full Immunization Coverage
FIS	Foreign Investment Survey
FOB	Free on Board
FY	Financial Year
GDC	Geothermal Development Company
GDP	Gross Domestic Product
GER	Gross Enrolment Rate
GFCF	Gross Fixed Capital Formation
GFS	Government Finance Statistics
GNI	Gross National Income
GoK	Government of Kenya
GVA	Gross Value Added
GWh	GigaWatt Hours
HELB	Higher Education Loans Board
HISP	Health Insurance Subsidy Program
HIV	Human Immunodeficiency Virus
IASA	Inter Air Security Association
IBRD	International Bank for Reconstruction & Development
ICDC	Industrial and Commercial Development Corporation
ICT	Information, Communication and Technology
ID	Identity Card
IDA	International Development Association
IDB	Industrial Development Bank
IDR	Import Dependancy Ratio
IEBC	Independent Elections and Boundaries Commission
IFMIS	Integrated Financial Management Information System
IFS	International Financial Services
ILO	International Labour Organisation
ILRI	International Livestock Research Institute
IMF	International Monetary Fund
IOCs	International Oil Companies
IPP	Independent Power Producers
ISIC REV 4	International Standard of Industrial Classification Revision 4
ISPs	Internet Service Providers
ISS	Intergrated Survey of Services
IT	Information Technology
JICA	Japan International Co-operation Agency
JKIA	Jomo Kenyatta International Airport
KAPU	Kenya Airports Police Unit
KARI	Kenya Agricultural Research Institute
KCB	Kenya Commercial Bank
KCPE	Kenya Certificate of Primary Education
KCSE	Kenya Certificate of Secondary Education
KenGen	Kenya Electricity Generating Company
KeNHA	Kenya National Highways Authority
KenInvest	Kenya Investment Authority

KeRRA	Kenya Rural Roads Authority
KESSP	Kenya Education Sector Support Programme
KETRACO	Kenya Electricity Transmission Company
KFS	Kenya Forest Service
KG	Kilogram
KIE	Kenya Industrial Estates
KIHBS	Kenya Integrated Household Budget Survey
KLIP	Kenya Livestock Insurance Project
KMTC	Kenya Medical Training College
KNBS	Kenya National Bureau of Statistics
KOSF	Kipevu Oil Storage Facility
KPC	Kenya Pipeline Corporation
KPHC	Kenya Population and Housing Census
KPLC	Kenya Power and Lighting Company
KPS	Kenya Police Service
KRA	Kenya Revenue Authority
KRB	Kenya Roads Board
KSh	Kenya Shillings
KURA	Kenya Urban Roads Authority
KV	Kilo Volt
KW	Kilo watt
KWh	Kilo Watt Hour
KWS	Kenya Wildlife Service
LAPSSET	Lamu Port Southern Sudan-Ethiopia Transport Corridor
LATF	Local Authority Transfer Fund
LFS	Labour Force Survey
LPG	Liquefied Petroleum Gas
LTM	Long Term Mean
M1	Narrow Money Supply
M2	Broad Money Supply (Money supplied by CBK, Commercial banks &
M3	Broad Money Supply (M2 plus Foreign Currency Holdings by Residents)
MAM	March April May long rains
MCA	Members of County Assembly
MDGs	Millennium Development Goals
MIA	Moi International Airport
MM	Milimitres
MNOs	Mobile Network Operators
MNPs	Mobile Numbers Posted
MPC	Monetary Policy Committee
MTEF	Medium Term Expenditure Framework
MTP	Medium Term Plan
MTP III	Third Medium Term Plan
MVNO	Mobile Virtual Network Operator
MW	Mega Watt
n.e.c	Not elsewhere classified
NAMATA	Nairobi Metropolitan Area Transport Authority
NAS	National Accounts Statistics
NBFI	Non-Bank Financial Institutions
NCC	Nairobi City Council
NCDF	National Constituency Development Fund
NCPB	National Cereals and Produce Board

NCRP	Nairobi Commuter Rail Project
NEMA	National Environment Management Authority
NFA	Net Foreign Assets
NFE	Non Formal Education
NHC	National Housing Corporation
NHIF	National Hospital Insurance Fund
NIB	National Irrigation Board
NICD	Nairobi Inland Container Depot
NOCK	National Oil Corporation of Kenya
NOFBI	National Optic Fibre Backbone Infrastructure
NPC	National Police Service
NSE	Nairobi Securities Exchange
NSSF	National Social Security Fund
NTSA	National Transport and Safety Authority
NWCPC	National Water Corporation and Pipeline Corporation
NYS	National Youth Service
ODPP	Office of the Director of Public Prosecution
OECD	Organization of Economic Cooperation and Development
OMO	Open Market Operations
OND	October-November-December short rains
OPEC	Organization of Petroleum Exporting Countries
OVC	Orphans and Vulnerable Children
PAYE	Pay As You Earn
PCK	Postal Corporation of Kenya
PCR	Pupil Completion Rate
PPI	Producer Price Index
PPP	Public Private Participation
PPPs	Public Private Partnerships
PSG	Product Sharing Contracts
PSTR	Primary to Secondary Transition Rate
PSUT	Physical Supply and Use Tables
PSVs	Public Service Vehicles
PTP	Proficiency Tests Pass
PTR	Pupil Teacher Ratio
RBA	Retirement Benefits Authority
REP	Rural Electrification Programme
RVR	Rift Valley Railways
SACCO	Savings and Credit Cooperative Societies
SADC	Southern African Development Community
SAGA	Semi Autonomous Government Agency
SDGs	Sustainable Development Goals
SEEA	System of Environmental Economic Accounting
SEZ	Special Economic Zones
SGR	Standard Gauge Railway
SITC	Standard International Trade Classification
SME	Small and Medium Enterprises
SMS	Short Messaging Service
SNA	System of National Accounts
SOEs	State Owned Enterprises
SSA	Sub-Saharan Africa
SSR	Self Sufficiency Ratio

SUT	Supply and Use Tables
TEAMS	The East Africa Marine System
TEUs	Twenty-Foot Equivalent Units
TIVET	Technical Industrial and Vocational Educational Training
TJ	Tera Joules
TLB	Transport Licensing Board
TOT	Total Rainfall
TSA	Tourism Satellite Account
TSC	Teachers Service Commission
UAE	United Arab Emirates
UK	United Kingdom
UNCTAD	United Nations Conference on Trade and Development
UNFCC	United Nations Framework on Climate Change
UNSC	United Nations Statistical Commission
US /USA	United States of America
USD	United States Dollar
VAT	Value Added Tax
VCT	Voluntary Counseling and Testing
VoIP	Voice over Internet Protocol
WEF	Women Enterprise Fund
WHO	World Health Organization
WPPs	Water Purification Points
WRA	Water Resource Authority
WTO	World Trade Organization

Summary and Outlook

International Scene

The global economy expanded by 3.6 per cent in 2017 compared to a growth of 3.1 per cent in 2016. The United States of America registered a growth of 2.2 per cent in 2017 compared to a growth of 1.5 per cent in 2016, largely due to increase in household income that supported private consumption and investments. The growth in United Kingdom decelerated to 1.5 percent in 2017 due to a weaker aggregate demand and uncertainty surrounding the Brexit negotiations. In China, real Growth Domestic Product (GDP) was boosted by fiscal support and recovery in exports to grow by 6.8 per cent in 2017 compared to 6.7 per cent in 2016. Real GDP in Sub Saharan Africa expanded by 2.6 per cent in 2017, mainly due to higher commodity prices and favourable external environment.

Global inflation rose to 3.1 per cent in 2017 from 2.8 per cent in 2016, partly attributable to increase in oil prices. World trade grew by 4.8 per cent in 2017 compared to 2.6 per cent in 2016 as result of recovery in global manufacturing occasioned by increased investments. Global unemployment rate stood at 5.6 per cent in 2017.

Domestic Economy

Kenya's economy is estimated to have expanded by 4.9 per cent in 2017 compared to a revised growth of 5.9 per cent in 2016. The slowdown in the performance of the economy was partly attributable to uncertainty associated with a prolonged electioneering period coupled with adverse effects of weather conditions.

Generally, key macroeconomic indicators largely remained stable and therefore supportive of growth in 2017. Interest rates declined due to the impact of their capping that became effective in September 2016. In the money market, the Kenyan Shilling strengthened against most of the major trading currencies but weakened against the Euro and the US Dollar in 2017. The current account deficit widened in the year under review on account of significant growth of imports against a slower growth of exports. There was a moderate build up in inflationary pressures mainly due to significant increase in oil and food prices during the year under review. Consequently, inflation rate rose from 6.3 per cent in 2016 to 8.0 per cent in 2017.

Performance across the various sectors of the economy varied widely, with Accommodation and Food services; Information and Communication Technology; Education; Wholesale and Retail trade; and Public Administration registering accelerated growths in 2017 compared to 2016. On the other hand, growths in Manufacturing; Agriculture, Forestry and Fishing; and Financial and Insurance decelerated significantly over the same period and therefore dampened the overall growth in 2017.

Employment, Earnings and Consumer Prices

A total of 897.8 thousand new jobs were created in 2017 with 787.8 thousand new jobs created in the informal sector. Employment in the informal sector accounted for 83.4 per cent of total employment in the period under review. The number of persons engaged, excluding those in rural small scale agriculture and pastoralist activities, rose by 5.6 per cent from 16.0 million persons in 2016 to 16.9 million persons in 2017. Wage employment in the modern sector increased from 2,553.5 thousand persons in 2016 to 2,656.6 thousand persons in 2017. The total number of self-employed and unpaid family workers within the modern sector rose from 132.5 thousand persons in 2016 to 139.4 thousand persons in 2017. Annual nominal

average earnings per person in the modern sector increased from KSh 645,035.2 in 2016 to KSh 684,097.0 in 2017. However, annual real average earnings per person decreased from KSh 379,968.9 to KSh 369,004.3 over the same period. Inflation as measured by Consumer Price Index increased from 6.3 per cent in 2016 to 8.0 per cent in 2017.

Money, Banking and Finance

During 2017, the Central Bank continued to pursue accommodative monetary policy aimed at increasing credit uptake by the private sector to stimulate economic growth. The Central Bank Rate (CBR) was retained at 10.0 per cent to continue anchoring inflation expectations in 2017. The maximum lending rate is capped at no more than 4.0 per cent above the CBR. Average interest rates on deposits increased to 8.22 per cent in December 2017 from 7.33 per cent in December 2016. Commercial banks' average lending interest rates on loans and advances remained stable at 13.64 per cent in December 2017. The 91-day Treasury bill rate fell from 8.44 per cent in December 2016 to 8.01 per cent in December 2017.

Extended broad money supply (M3) grew by 8.9 per cent in December 2017 to KSh 3,010.9 billion from KSh 2,764.5 billion in 2016. Overall liquidity, which is the broadest definition of money supply, grew by 10.1 per cent to KSh 4,085.1 billion during the review period. Total domestic credit grew by 7.9 per cent in 2017 with credit to the private sector expanding by 2.4 per cent.

The Nairobi Securities Exchange 20-Share index rose to 3,712 points in December 2017 from 3,186 points in December 2016, with market capitalization rising to KSh 2,522 billion in December 2017. In the insurance sector, gross premium income for general business increased by 2.5 per cent to KSh 124.7 billion in 2017. Total Assets in life business grew by 15.8 per cent to 353.6 billion in 2017. Retirement benefit assets grew to KSh 963.1 billion in June 2017 from KSh 831.8 billion in June 2016.

Public Finance

National Government outlay for 2017/18 is expected to increase by 21.7 per cent to KSh 2,777.8 billion from KSh 2,283.0 billion in 2016/17. Recurrent expenditure is estimated at KSh 2,107.2 billion in 2017/18, while development expenditure is budgeted at KSh 670.6 billion. Total revenue collections by the National Government, inclusive of grants is expected to be KSh 1,710.2 billion, of which KSh 1,466.2 billion is expected to be generated from tax revenue.

Total stock of public debt as at end of June 2017 stood at KSh 3,971.4 billion, of which external debt position was KSh 2,294.2 billion, accounting for 57.8 per cent. Public debt servicing in 2017/18 is expected to amount to KSh 623.1 billion.

County governments budgeted to spend KSh 395.9 billion in 2017/18 against total expected receipts amounting to KSh 401.6 billion. National government current transfers to county governments, inclusive of conditional grants, is estimated to increase by 14.4 per cent to KSh 345.7 billion during the review period.

International Trade and Balance of Payments

Total value of exports increased by 2.8 per cent to KSh 594.1 billion in 2017. The major foreign exchange earners were: tea; horticulture; articles of apparel and clothing accessories; coffee and titanium ores and concentrates, collectively accounting for 64.8 per cent of total domestic export earnings, during the review period. Africa remained the leading destination of Kenya's

exports; accounting for 37.7 per cent of total exports in 2017, with East African Community (EAC) accounting for more than half of total exports to Africa. Exports to Europe accounted for 24.7 per cent of total exports in 2017, with the bulk of exports destined to European Union (EU) countries.

The import bill grew by 20.5 per cent to KSh 1,725.6 billion in 2017. The main drivers of the import bill were: industrial machinery; petroleum products; road motor vehicles; iron and steel; animal and vegetable fats and oils; and sugar. Asia accounted for 64.2 per cent of total imports in 2017, continuing its dominance as the leading source of Kenya's imports. The ratio of exports to imports deteriorated from 40.4 per cent in 2016 to 34.4 per cent in 2017. Trade weighted exchange rate index deteriorated from 114.8 in 2016 to 116.5 in 2017, a reflection of the depreciation of the Kenyan Shilling against the currencies of the major trading partners. The current account widened by 38.3 per cent to KSh 518.9 billion in 2017, reflecting a 6.7 per cent of GDP. Net inflows of international trade in services increased by 11.4 per cent to a surplus of KSh 160.9 billion in 2017, supported by increased foreign travel receipts. Net financial inflows increased by 13.4 per cent to a surplus of KSh 476.1 billion in 2017, on account of increase in short term capital inflows. These developments resulted in an overall balance of payments deficit of KSh 16.9 billion in 2017 from a surplus of KSh 13.1 billion recorded in 2016.

Agriculture Sector Review

The agriculture sector recorded mixed performance in 2017 which led to a decelerated growth of 1.6 per cent compared to 5.1 per cent growth in 2016. Drought coupled with pests such as the fall army worms and diseases led to the overall decline in agricultural production in 2017. Despite reduced production of major crops during the period under review, better prices were realized for the marketed agricultural output. Consequently, the value of marketed production increased by 8.2 per cent from KSh 413.2 billion in 2016 to KSh 446.9 billion in 2017. Maize production declined from 37.8 million bags in 2016 to 35.4 million bags in 2017. Similarly, sugarcane production declined from 7.2 million tonnes in 2016 to 4.8 million tonnes in 2017. The recorded declines in production of maize and sugarcane resulted in huge imports of maize and sugar to bridge the deficit. Wheat production declined by 23.1 per cent from 214.7 thousand tonnes in 2016 to 165.2 thousand tonnes in 2017. Tea production declined by 7.0 per cent to 439.8 thousand tonnes in 2017 while marketed coffee dropped by 15.1 per cent to 33.7 thousand tonnes in the year under review. The volume of fresh horticultural exports increased from 261.2 thousand tonnes in 2016 to 304.1 thousand tonnes in 2017. The quantity of marketed milk declined by 17.4 per cent from 648.2 million litres in 2016 to 535.7 million litres in 2017.

Environment and Natural Resources

In 2017, the Environment and Natural Resources sector registered mixed performance in indicators. The total expenditure by national government on water and related services is expected to decline by 19.1 per cent from KSh 43.9 billion in the year 2016/17 to KSh 35.5 billion in 2017/18. The value of fish landed, which has been on the decline for the last three consecutive years, dropped further by 6.1 per cent to KSh 23.0 billion in 2017.

Total area covered by forests increased marginally from 4,190.0 thousand hectares in 2016 to 4,229.4 thousand hectares in 2017. Sale of timber from Government forests declined from 1,037.3 thousand true cubic metres in 2016 to 881.6 thousand true cubic metres in 2017. The total value of mineral output increased by 2.0 per cent to KSh 23.8 billion in 2017. Most parts of the country experienced reduced rainfall and rising temperatures during the review period.

Energy Sector

The energy sector witnessed increased international crude oil prices in 2017 following supply cuts by top producers under Organization of Petroleum Exporting Countries (OPEC). The average Murban crude oil prices rose to an average of US Dollars 54.91 per barrel in 2017 up from an average of US Dollars 44.18 per barrel in 2016. Total volume of petroleum products imported into the country increased from 5,990.0 thousand tonnes in 2016 to 6,347.7 thousand tonnes in 2017. However, domestic exports of petroleum products declined by 2.3 per cent to 32.4 thousand tonnes over the same period. During the review period, the total import bill of petroleum products increased by 34.2 per cent to KSh 265.3 billion while the total value of petroleum products exported, including re-exports, declined by 19.1 per cent to KSh 36.1 billion in 2017.

Total installed and effective electricity capacity was 2,339.9 MW and 2,264.4 MW, respectively, in 2017. Total electricity generation expanded by 3.0 per cent to 10,359.9 GWh in 2017. However, the hydro generated power registered a significant drop of 29.9 per cent to 2,776.8 GWh while thermal and geothermal generated power expanded by 72.3 and 6.1 per cent, respectively, in 2017. The number of customers connected under the rural electrification program expanded by 30.6 per cent from 972,018 in 2016/17 to 1,269,510 in 2015/16.

Manufacturing Sector

The manufacturing sector real value added rose by 0.2 per cent in 2017 compared to a growth of 2.7 per cent in 2016. Output volume of the sector however, declined by 1.1 per cent mainly on account of reduced production of food products, beverages and tobacco, leather and related products, rubber and plastics and non-metallic minerals sub sectors. The sector's formal employment rose to 303.3 thousand persons in 2017 and accounted for 11.4 per cent of the total formal employment. The number of local employees engaged by EPZ enterprises increased to 54,622 persons in 2017 from 52,947 persons in 2016. Loans advanced to the sector rose to KSh 311.8 billion in 2017 from KSh 275.8 billion in 2016.

The Producer Price Index (PPI), which measures inflation of products as they leave the factories, increased by 4.6 per cent in 2017 mainly due to increase in prices of manufactured food products, electricity and manufactured basic metals.

Building and Construction

The Building and construction sector grew by 8.6 per cent in 2017 compared to 9.8 per cent registered in 2016. The total expenditure by National Government on roads is expected to increase from KSh 173.7 billion in 2016/17 to KSh 198.4 billion in 2017/18. Development expenditure on roads is expected to increase by 19.2 per cent from KSh 113.2 billion in 2016/17 to KSh 134.9 billion in 2017/18. Funds for repair and maintenance of roads are expected to increase from KSh 60.5 billion in 2016/17 to KSh 63.5 billion in 2017/18. Loans and advances from commercial banks to building and construction sector increased to KSh 109.9 billion in 2017 from KSh 104.8 billion in 2016, a 4.9 per cent increase. Following the completion of Phase I of the Standard Gauge Railway project in May 2017, the construction work for Phase 2 which runs from Nairobi to Naivasha started in September 2017.

The Tourism Sector

The Tourism sector recorded improvements despite a prolonged electioneering period and negative travel advisories issued by some countries in 2017. Tourism earnings increased by 20.3 per cent from KSh 99.7 billion in 2016 to KSh 119.9 billion in 2017. The number of international visitor arrivals increased by 8.1 per cent to 1,448.8 thousand in 2017. The

number of hotel bed-nights occupancy increased by 11.3 per cent from 6,448.5 thousand in 2016 to 7,174.2 thousand in 2017. The number of international conferences contracted by 15.9 per cent from 227 in 2016 to 191 in 2017 while local conferences increased by 2.4 per cent from 3,755 to 3,844 over the same period. Visitors to national parks and game reserves rose by 2.6 per cent to 2,345.2 thousand in 2017. However, visitors to museums, snake parks and historical sites decreased by 15.3 per cent to 782.0 thousand in 2017 from 923.1 thousand in 2016.

Transport and Storage

The value of transport and storage sector output expanded by 8.8 per cent from KSh 1,025.8 billion in 2016 to KSh 1,115.7 billion in 2017. During the same period, the value of output from road transport increased by 5.7 per cent to KSh 702.1 billion, accounting for 62.9 per cent of the total output in the sector. Output from air transport sub-sector increased by 14.9 per cent to KSh 183.1 billion while that of services incidental to transport increased by 28.3 per cent to KSh 107.8 billion in the review period. On the other hand, output from the railway transport sub-sector declined by 8.8 per cent from KSh 5.7 billion in 2016 to KSh 5.2 billion in 2017.

Total cargo throughput handled at the Mombasa Port increased by 10.6 per cent to 30.3 million tonnes in 2017. The total number of vessels that docked at the Port increased by 10.0 per cent from 1,607 in 2016 to 1,767 in 2017. At the same time, total import traffic handled grew by 10.8 per cent to 25.6 million tonnes, while export traffic handled expanded by 2.7 per cent to 3.8 million tonnes in 2017. The volume of white petroleum products transported through pipeline rose by 10.8 per cent from 5,557.9 thousand cubic metres in 2016 to 6,155.7 thousand cubic metres in 2017.

The number of passengers travelling by air increased by 3.5 per cent to 10.1 million in 2017. During the review period, the number of domestic and international passengers were 3,991.2 thousand and 6,121.3 thousand respectively. The number of reported road traffic accidents declined by 15.9 per cent to 4,452 in 2017. Similarly, the number of reported casualties from the accidents decreased by 14.8 per cent to 11,215 in 2017.

Information and Communication Technology

The value of Information and Communication Technology (ICT) output increased by 10.9 per cent from KSh 311.1 billion in 2016 to KSh 345.1 billion in 2017. The number of domestic Short Messaging Services (SMSs) increased by 41.8 per cent to 65.7 billion in 2017. Total domestic telephone calls traffic increased from 42.2 billion minutes in 2016 to 44.1 billion minutes in 2017. The international telephone calls traffic declined from 1,196.5 million minutes in 2016 to 1,056.7 million minutes in 2017. Mobile subscriptions penetration rate per 100 inhabitants increased from 85.9 in 2016 to 91.9 in 2017. Prepaid subscriptions per 100 inhabitants increased to 88.9 in 2017 from 82.8 in 2016. Mobile commerce transactions grew by 85.5 per cent from KSh 1.8 trillion in 2016 to KSh 3.2 trillion in 2017. Total mobile money transfers increased by 8.4 per cent from KSh 3,356 billion in 2016 to KSh 3,638 billion in 2017.

Education and Training

The National Government total allocation to the Ministry of Education, which includes that to the Teachers Service Commission (TSC) is expected to grow by 31.6 per cent from KSh 315.6 billion in 2016/17 to KSh 415.3 billion in 2017/18. During the review period, total recurrent expenditure is expected to increase by 30.7 per cent to KSh 385.2 billion in 2017/18, while

development expenditure is expected to grow by 43.9 per cent to KSh 30.0 billion in 2017/18.

The total number of educational institutions increased by 5.1 per cent to 90,587 in 2017 with the number of registered Technical Vocational and Education Training (TVET) institutions increasing substantially by 50.9 per cent to 1,962 in the same period. Total enrolment in pre-primary schools rose by 2.9 per cent to 3,293.8 thousand, while that of primary schools increased from 10.3 million in 2016 to 10.4 million in 2017. Enrolment in secondary schools grew by 4.1 per cent to 2,830.8 thousand in 2017. The number of teacher trainees' enrolment went up marginally from 41,707 in 2016 to 42,131 in 2017, while total enrolment in TVET institutions increased by 35.8 per cent to 275,139 in 2017. University student enrolment is expected to decline by 7.7 per cent to 520,893 in 2017/18.

The number of KCPE candidates increased by 4.3 per cent to 993,718 in 2017, while the number of KCSE candidates grew by 6.9 per cent to 610,501 in 2017. The number of candidates who scored a minimum university entry score of C+ (plus) and above decreased by 21.2 per cent to 70,073 in 2017 from 88,929 in 2016. The total number of students in public and private universities and TVET institutions loan applicants increased by 23.5 per cent to 252,928 in 2016/17. During the same period, the total number of loan beneficiaries increased by 24.2 per cent to 244,626. The amount of loans awarded increased by 25.0 per cent from KSh 7.6 billion in 2015/16 to KSh 9.5 billion in 2016/17.

Health and Vital Statistics

Total expenditure on the health services by National Government is expected to increase by 15.9 per cent to KSh 65.6 billion in 2017/18. Total recurrent expenditure is expected to remain at KSh 29.8 billion while development expenditure is expected to grow by 33.6 per cent to KSh 35.8 billion.

Pneumonia, Malaria and Cancer continued to be the leading causes of registered death. Diseases of the respiratory system followed by Malaria continued to be the leading cause of morbidity. The national Full Immunization Coverage for children below one year decreased to 63.0 per cent in 2017 from 69.0 per cent in 2016. During the review period, the number of registered medical personnel increased by 9.0 per cent to 160,749. The National Hospital Insurance Fund (NHIF) membership grew by 11.1 per cent to 6.8 million in 2016/17. Contributions to NHIF increased from KSh 31,995.7 million to 34,978.2 million during the review period.

Governance, Peace and Security

The total number crimes reported to the Police increased by 1.3 per cent to 77,992 in 2017. Stealing, breakings and offences relating to dangerous drugs were more prevalent in 2017 and accounted for 14.9, 7.9 and 7.1 per cent respectively of all crimes reported to the Police. The total number of persons reported to have committed criminal offenses decreased by 2.7 per cent to 73,013 in 2017 with 18.6 per cent being reported to have committed assault while 15.1 and 8.1 per cent were reported to have committed stealing and creating disturbance, respectively. Corruption reports investigated by Ethics and Anti-Corruption Commission and forwarded to the Office of the Director of Public Prosecution (ODPP) decreased 14.4 per cent to 143 in 2017, of which the ODPP approved 89 reports for prosecution. Cases filed in Law Courts declined by 23.6 per cent to 344,180 in 2017, while those disposed of increased by 63.0 per cent to 313,075 in the same period. Daily average prison population grew marginally by 0.2 per cent to 51,021 prisoners in 2017. The number of persons registered as voters increased by 23.3 per cent from 15.9 million in 2016 to 19.6 million in 2017.

Social protection fund allocation to the elderly is expected to increase by 8.6 per cent to KSh 7.9 billion in 2017/18 while the allocation for orphans and vulnerable children (OVCs) is expected to increase by 5.4 per cent to KSh 8.5 billion in 2017/18. Direct cash disbursements to the elderly are expected to increase by 9.5 per cent to KSh 7.3 billion while that of OVCs is expected to increase by 11.5 per cent to KSh 7.9 billion over the same period.

Outlook

The global economic recovery experienced in 2017 is expected to continue more strongly in 2018. The recovery is likely to be broad based with growth in most developed and emerging market economies projected to accelerate in 2018. Similarly, growth of Sub-Saharan Africa is expected to improve significantly over the same period. The expectations are against expected favourable global financial conditions, strong world trade and improved business confidence. However, rising international oil prices could hamper economic growth in the non-oil producing countries in particular the developing economies. Moreover, there still exist some risks in the global financial systems that could negatively impact on developed and emerging market economies if they materialize.

In Kenya, the expected political stability and favourable macroeconomic environment are likely to be conducive for acceleration in growth in 2018. The on-going investments in infrastructure, improved business confidence, and strong private consumption are likely to support growth in 2018. Weather forecast points to a possibility of sufficient and well spread long rains in 2018 which is likely to be a major boost for activities in agriculture and electricity and water supply sectors. This will in turn be favourable for the manufacturing sector. However, rising oil prices and slow credit uptake by the private sector are likely to dampen growth in 2018.

Inflation is expected to ease in 2018 supported by lower food prices due to improved agricultural output. The expected strong world trade is likely to increase Kenya's export and therefore supportive of growth. Other macroeconomic indicators are projected to remain stable and supportive of growth in 2018. Overall, factors favourable to growth are likely to more than offset impacts of those against and result to a better economic growth in 2018 compared to that of 2017.

Table Zero

Table 0: Key Economic and Social Indicators, 2013-2017

1	DESCRIPTION	Unit	2013	2014	2015	2016	2017*	
2	Population	(Million)	41.8	43.0	44.2	45.4	46.6	
3	Growth of GDP at Constant Prices	(Per cent)	5.9	5.4	5.7	5.9	4.9	
4	GDP at Market Prices :	(KSh Bn)	4,745.1	5,402.6	6,284.2	7,194.1	7,749.4	
5	Total value of petroleum products	(KSh Mn)	291,622.6	335,671.3	226,125.7	197,590.7	265,253.6	
6	Trade balance	(KSh Mn)	-911,029.2	-1,081,085.3	-996,511.7	-853,678.0	-1,131,494.1	
7	Money Supply (M3)	(KSh Bn)	1,996.2	2,330.0	2,658.2	2,764.5	3,010.9	
8	Total domestic credit	(KSh Bn)	1,978.5	2,312.2	2,793.9	2,973.2	3,198.3	
9	Balance of Payments (current account balance)	(KSh Mn)	-417,019.6	-560,761.1	-421,082.1	-375,295.9	-518,943.6	
10	Coffee-marketed production	('000 tonnes)	38.4	42.5	32.2	39.7	33.7	
11	Tea-marketed production	('000 tonnes)	432.4	445.1	399.2	473.0	439.9	
12	Fresh Horticultural Produce exports	('000 tonnes)	213.8	220.2	238.7	261.1	304.1	
13	Maize-marketed production	('000 tonnes)	316.4	289.4	295.3	265.8	239.2	
14	Wheat-marketed production	('000 tonnes)	184.9	218.0	227.3	215.9	156.9	
15	Sugar-cane production	('000 tonnes)	6,673.7	6,409.9	7,164.8	7,151.7	4,751.6	
16	Milk sold centrally	(Mn litres)	523.0	540.0	615.9	648.2	535.7	
17	Manufacturing output	(KSh Bn)	1,737.7	1,820.4	1,977.2	2,120.7	2,204.8	
18	Construction output	(KSh Bn)	582.9	683.4	804.2	823.9	1,031.5	
19	Cement Consumption	('000 tonnes)	4,266.5	5,196.7	5,708.8	6,310.1	5,788.9	
20	Petroleum Consumption	('000 tonnes)	3,707.9	3,937.9	4,738.5	5,044.3	5,170.6	
21	Electricity consumption	(GWh)	6,928.1	7,768.6	7,826.4	8,053.2	8,410.1	
22	Tourism earnings	(KSh Mn)	93,970.0	87,080.0	84,600.0	99,690.0	119,900.0	
23	New registration of motor vehicles and cycles... ..	(Number)	222,178.0	318,057.0	247,181.0	213,715.0	282,672.0	
24	Rail freight	('000 tonnes)	1,444.0	1,509.0	1,542.0	1,380.0	1,147.0	
25	Air passengers handled	('000) No.	8,231.6	8,882.0	8,993.2	9,791.9	10,112.5	
26	Mobile Subscriptions	('000) No.	31,309.0	33,632.6	37,716.0	38,982.0	42,815.1	
27	Total mobile money transfer	KSh Bn	1,902.0	2,372.0	2,816.0	3,356.0	3,638.0	
28	Wage employment	('000) No.	2,283.1	2,370.2	2,478.0	2,553.5	2,656.6	
29	Education-primary enrolment	('000) No.	9,857.6	9,951.0	10,090.8	10,279.7	10,403.7	
30	Education-secondary enrolment	('000) No.	2,104.3	2,331.7	2,559.0	2,720.6	2,830.8	
31	Education-University enrolment	('000) No.	361.4	443.8	510.7	564.5	520.9	
32	Education-other post secondary enrolment (TIVET+TTC)	('000) No.	148.0	147.8	153.3	202.6	275.1	
33	Registered doctors and dentists	(Number)	9,727.0	10,239.0	10,699.0	11,525.0	12,127.0	
34	GDP Per capita (Current):	(KSh)	113,539.1	125,756.5	142,315.9	158,575.5	166,314.4	
35	GDP Per capita (Constant):	(KSh)	87,260.9	89,430.3	91,988.6	94,788.5	96,799.8	
36	Recurrent Revenue and Grants	(KSh Bn)	1,001.4	1,141.2	1,265.4	1,429.6	1,710.2	
37	Total National Government Expenditure	(KSh Bn)	1,533.0	1,953.5	2,047.4	2,283.0	2,777.8	
38	Net lending/borrowing (% of GDP) at Current Market Prices	(Per cent)	-6.5	-9.9	-8.0	-8.5	-8.4	
39	External Debt Service Charge as % of GDP	(Per cent)	1.0	1.8	1.8	1.1	1.4	
40	External Debt Service as % of Exports of Goods & Services	(Per cent)	4.8	9.9	10.8	7.8	9.9	
							2013-2017 Annual % rate of change	
INDEX NUMBERS								
41	Export volumes: (2009=100)		104.0	109.9	105.0	111.6	109.6	1.3
42	Import volumes: (2009=100)		106.7	113.9	102.5	100.6	109.3	0.6
43	Terms of trade		81.1	73.1	76.0	78.5	75.0	-1.9
44	NSE 20 Share: (1966=100)		4,927.0	5,113.0	4,040.0	3,186.0	3,712.0	-6.8
45	Consumer Price Index: (Feb 2009=100)		140.1	149.7	159.6	169.7	183.2	6.9
46	Real wages: (June 2009=100)		90.9	91.2	93.8	93.9	91.2	0.1
47	Agriculture terms of trade: (2001=100)		46.6	49.3	50.2	49.3	48.7	1.1

* Provisional



INTERNATIONAL SCENE

International Scene

Chapter 01

Overview The global economy recorded a broad-based recovery in 2017 to register the highest growth in post 2008 global financial crisis period. World real GDP is estimated to have expanded by 3.6 per cent in 2017 compared to 3.1 per cent in 2016. The improved performance was mainly supported by a rebound in private and public investments; growth in international trade partly as a result of favourable financing costs; rising profits; improved business and consumer confidence, and waning effects of the fall in oil and commodity prices during 2014 - 2016. This was particularly due to large capital spending and a robust external demand emanating from increased household incomes and business investments in the United States of America and the euro area.

1.2. Most advanced economies recorded accelerated growths due to supportive macroeconomic environment, improved labour markets and accommodative financial conditions. Similarly, improved growths were notable in most of the emerging market economies particularly in China where there was strong infrastructure investment. Economies in Sub-Saharan Africa grew by 2.6 per cent in 2017, a significant increase from 1.4 per cent growth registered in 2016. The growth was largely attributable to favourable commodity prices, improved global financing conditions, and reduced inflationary pressures.

1.3. The world trade improved significantly in 2017 compared to 2016 mainly attributable to recovery in global manufacturing that emanated from increased capital spending. The international trade is estimated to have increased by 4.8 per cent in 2017 compared to 2.6 per cent growth in 2016. Key drivers of the improved performance in global trade were a growing external demand in Europe, increased trade in electronics in Asia, and a shift in the composition of global demand towards investment.

1.4. During the year under review, global inflation rose to 3.1 per cent from 2.8 per cent in 2016 largely occasioned by rise in oil prices. The increase in oil prices was mainly on account of reduced supply by leading oil producers following a decision of the Organization of Petroleum Exporting Countries (OPEC) to limit oil production against a strong demand growth in 2017. Restrained production due to continued geopolitical tensions in the Middle East as well as a modest increase in non-OPEC oil production also contributed to the rise in oil prices. After a significant rise in 2016, global unemployment stabilized at an estimated rate of 5.6 per cent in 2017, corresponding to 192.7 million unemployed persons. This represented an increase in the number of unemployed people by 2.6 million compared to 2016.

Regional Economic Analysis Organization for Economic Co-operation and Development

1.5. Table 1.1 presents the macroeconomic performance of economies in the Organization for Economic Co-operation and Development (OECD). Real GDP for OECD member countries improved from 1.8 per cent in 2016 to 2.4 per cent in 2017. This growth was largely a reflection of increased economic activity in the euro area and overall growth in international trade that supplied significant external demand for the member countries, prompting increased private consumption and investment.

1.6. Overall inflation rose to 1.9 per cent in 2017 from 1.5 per cent in 2016 against the target of 2.0 per cent set for OECD member countries. The significant increase in consumer prices was mostly associated with improved labour markets and increased household incomes that prevailed in majority of the member economies. Unemployment rate in the OECD economic bloc dropped from 6.3 per cent in 2016 to 5.8 per cent in 2017. In most member countries, lower unemployment rates were supported by increased share of part-time jobs, rising participation of the female labour force and growing employment in low-paying service sector. The current account balance as a percentage of GDP increased marginally from 0.2 per cent in 2016 to 0.3 per cent in 2017.

Euro Area

1.7. The Euro Area recorded a broad-based recovery from a 3-year suppressed growth mainly occasioned by the 2014 -16 fall in global oil prices. In 2017, the area registered a real GDP growth of 2.4 per cent compared to 1.8 per cent in 2016. The accelerated growth reflected revitalized private consumption and investment, and improved external demand as a result of the ongoing recovery in global output and trade.

1.8. During the review period, labour market registered marked improvement as reflected by a considerable growth in job creation that exceeded the levels recorded before the 2008 global financial crisis. Unemployment rate was estimated at 9.1 per cent in 2017 compared to 10.0 per cent in 2016, while Inflation rate rose to 1.1 per cent from 0.8 per cent over the same period.

United States of America

1.9. Economic performance of the United States accelerated to 2.2 per cent in 2017 from 1.5 per cent in 2016. This was largely due to improved household incomes that boosted private consumption and business investment as well as a weakening of the dollar. The increased production in the energy sector, supported by stable oil prices, also boosted the economic growth.

1.10. Labour force participation in the United States increased notably during the period under review. Consequently, unemployment rate dropped from 4.9 per cent in 2016 to 4.4 per cent in 2017. During the review period, inflation rate rose to 1.8 per cent from 1.3 per cent in 2016. The process of managing inflation towards the 2.0 per cent target rate was supported by a further strengthening of the labour market and a growth in household incomes despite the removal of accommodative monetary policy by the Federal Reserve.

United Kingdom

1.11. The real GDP decelerated in the year under review to post a growth rate of 1.5 per cent compared to 1.8 per cent in 2016. The slowed growth was attributed to weaker aggregate demand and uncertainty surrounding the Brexit negotiations. The current account deficit as a percentage of GDP improved from 5.9 per cent in 2016 to 4.7 per cent in 2017. The improvement was as a result of an increase in exports of goods and weakening domestic demand for imports mainly due to depreciation of the Pound Sterling. Inflation rate rose marginally from 2.0 per cent in 2016 to 2.1 per cent in 2017. The unemployment rate dropped to 4.4 per cent in 2017 from 4.9 per cent in 2016. The decline partly attributed to expansion in self-employment as the demand for a flexible labour market and participation of the older workers grew.

Japan

1.12. In 2017, Japan's real GDP expanded by 1.5 per cent compared to 1.0 per cent in 2016. The expansion was largely supported by increased domestic investment buoyed by a long regime

of low interest rates and a rebound in international trade that started in mid-2016. Growing labour shortages continued to tighten labour market conditions with unemployment rate declining to 2.8 per cent in 2017 from 3.1 per cent in 2016. Consequently, the economy made notable gains in employment that boosted growth in private consumption to the highest level since the 2014 consumption tax hike.

1.13. Monetary policy remained unchanged as the Bank of Japan continued to calibrate bond purchases as part of its efforts to push inflation towards the 2.0 per cent set target. However, the country experienced a deflation of 0.3 per cent in 2017 compared to an inflation of 0.3 per cent in 2016.

Germany

1.14. Real GDP in Germany expanded by 2.5 per cent in 2017 compared to 1.9 per cent in 2016. This growth was mainly driven by increased external demand emanating from vibrant activities in the euro area that helped to boost exports and private investment. The improved level of economic activity was also supported by a notable growth in the construction sector that resulted from an increased housing demand. The increase in demand for housing was occasioned by higher disposable incomes and low interest rates that prevailed in 2017 and provision of housing for immigrants. Unemployment rate dropped to 3.7 per cent in 2017 from 4.2 per cent in 2016, partly due to increased investment across sectors.

Table 1.1: Key Economic Indicators and Projections for Selected OECD Countries, 2015 - 2019

	2015	2016 ⁺	2017*	2018 ¹	2019 ¹
World Real GDP Growth**	3.3	3.1	3.6	3.7	3.6
World Trade Growth²	2.7	2.6	4.8	4.1	4.0
Real GDP Growth	Percentage Change				
United States of America.....	2.9	1.5	2.2	2.5	2.1
United Kingdom.....	2.3	1.8	1.5	1.2	1.1
Japan.....	1.1	1.0	1.5	1.2	1.0
Germany.....	1.5	1.9	2.5	2.3	1.9
Euro Area.....	1.5	1.8	2.4	2.1	1.9
Total OECD.....	2.4	1.8	2.4	2.4	2.1
Inflation (GDP Deflator)	Percentage Change				
United States of America.....	1.1	1.3	1.8	2.1	2.2
United Kingdom.....	0.5	2.0	2.1	1.9	2.0
Japan.....	2.1	0.3	-0.3	0.2	1.0
Germany.....	2.0	1.3	1.5	1.6	1.8
Euro Area.....	1.4	0.8	1.1	1.5	1.7
Total OECD.....	1.5	1.5	1.9	2.1	2.3
Current Account Balance as % of GDP					
United States of America.....	-2.4	-2.4	-2.4	-2.6	-2.8
United Kingdom.....	-5.2	-5.9	-4.7	-4.4	-3.5
Japan.....	3.1	3.7	3.9	3.9	4.1
Germany.....	8.6	8.3	7.9	8.0	7.9
Euro Area.....	3.7	3.6	3.4	3.4	3.4
Total OECD.....	0.2	0.2	0.3	0.2	0.2
Unemployment Rate	Percentage Change				
United States of America.....	5.3	4.9	4.4	3.9	3.7
United Kingdom.....	5.4	4.9	4.4	4.4	4.6
Japan.....	3.4	3.1	2.8	2.8	2.8
Germany.....	4.6	4.2	3.7	3.5	3.4
Euro Area.....	10.9	10.0	9.1	8.5	8.0
Total OECD.....	6.8	6.3	5.8	5.5	5.3

Source: OECD Economic Outlook No.102

* Provisional

** World Economic outlook January 2018

⁺ Revised

¹ Projections

² Refer to arithmetic average of world merchandise import and export volumes.

Assumptions Underlying Projections

The cut-off date for information used in the projection is 28th November 2017.

The projections assume unchanged exchange rates from those prevailing on 25th October 2017.

Brazil, Russia, India, Indonesia, China and South Africa

1.15. Emerging economies comprising of Brazil, Russia, India, Indonesia, China and South Africa (BRIICS) posted an average real GDP growth of 3.7 per cent in 2017 compared to a growth of 2.5 per cent in 2016 as shown in Table 1.2. The improved growth was buoyed by recovery in the economic performances of Brazil and Russia that had contracted in 2016. The Brazilian economy was estimated to have expanded by 0.7 per cent in 2017 compared to a contraction of 3.6 per cent in 2016. The rebound was supported by a recovery in domestic demand attributed to easing of monetary conditions. Russia's real GDP grew by 1.8 per cent in 2017 compared to a contraction of 0.2 per cent in 2016. The growth was bolstered by improved oil prices, fiscal stimulus and banking sector support.

1.16. In China, real GDP grew by 6.8 per cent in 2017 compared to a growth of 6.7 per cent in 2016. The growth was attributed to fiscal support and recovery of exports. Inflation rate in China eased to 1.8 per cent in 2017 from 2.0 per cent in 2016 on account of weak food prices. The Indian economy recorded a decelerated real GDP growth of 6.7 per cent during the year under review compared to a growth of 7.1 per cent in 2016. The deceleration in growth was partly attributed to roll out of goods and services tax aimed at shifting firms from informal to formal sector, and disruption from currency exchange initiative. Inflation rate eased to 3.8 per cent in 2017 on account of lower food prices. In South Africa, good rainfall received during the review period led to improved performance of the agriculture sector resulting in improvement in real GDP growth of 0.9 per cent in 2017 from 0.3 per cent in 2016.

Association of South Eastern Asia Nations

1.17. The real GDP of the five member Association of South Eastern Asia Nations (ASEAN-5) grew by 5.2 per cent in 2017 from 4.9 per cent in 2016. The growth was underpinned by strong global demand that supported exports from the region. The current account surplus as a percentage of GDP narrowed to 1.6 per cent in the year under review compared to 2.1 per cent in 2016. The economic growth of Philippines slowed to 6.6 per cent in 2017 from 6.9 per cent in 2016. Indonesia's economy expanded by 5.2 per cent in 2017 compared to a growth of 5.0 per cent in 2016 supported by a strong external demand and expansionary fiscal policy. The real GDP of Malaysia grew by 5.4 per cent in 2017 compared to a growth of 4.2 per cent in 2016 attributable to increased domestic and external demand. Strong private consumption of goods and services in Thailand resulted in a real GDP growth of 3.7 per cent in 2017 compared to 3.2 per cent in 2016.

Sub-Saharan Africa

1.18. Real GDP growth in Sub-Saharan Africa grew by 2.6 per cent in 2017 compared to 1.4 per cent in 2016. The growth was driven by increased oil and agricultural production in Nigeria and diminishing effect of drought in Eastern and Southern Africa, coupled with favourable external environment. Inflationary pressures dropped to 11.0 per cent in 2017 from 11.3 per cent in 2016 on account of low food prices. The current account deficit as a percentage of GDP for the region narrowed to 3.4 per cent during the review period from 4.2 per cent in 2016. The improvement in the current account balances in Sub-Saharan Africa was partly attributed to increased oil production in Angola and Nigeria.

Table 1.2: Real GDP Growth, Inflation and Current Account Balances for Selected Regions and Countries, 2015-2018

	Real GDP Growth Rates				Inflation				Current Account Balance (Per cent of GDP)			
	2015	2016 ⁺	2017*	2018 ¹	2015	2016 ⁺	2017*	2018 ¹	2015	2016 ⁺	2017*	2018 ¹
BRICS	2.4	2.5	3.7	3.9	7.0	5.4	3.8	4.1	-0.5	-0.6	-0.5	-0.7
Brazil...	-3.8	-3.6	0.7	1.5	9.0	8.7	3.7	4.0	-3.3	-1.3	-1.4	-1.8
Russia...	-2.8	-0.2	1.8	1.7	15.5	7.0	4.2	3.9	5.0	2.0	2.8	3.2
India...	8.0	7.1	6.7	7.4	4.9	4.5	3.8	4.9	-1.1	-0.7	-1.4	-1.5
Indonesia...	4.9	5.0	5.2	5.3	6.4	3.5	4.0	3.9	-2.0	-1.8	-1.7	-1.8
China...	6.9	6.7	6.8	6.6	1.4	2.0	1.8	2.4	2.7	1.7	1.4	1.2
South Africa...	1.3	0.3	0.9	0.9	4.6	6.3	5.4	5.3	-4.4	-3.3	-2.9	-3.3
Sub-Saharan Africa	3.4	1.4	2.6	3.4	7.0	11.3	11.0	9.5	-6.1	-4.2	-3.4	-3.6
EAC-5	6.1	5.4	5.4	5.9	5.7	5.7	6.7	5.5	-8.0	-5.8	-6.2	-7.2
Kenya...	5.7	5.9	4.9	5.5	6.6	6.3	8.0	5.2	-6.8	-5.2	-7.0	-7.0
Tanzania...	7.0	7.0	6.5	6.8	5.6	5.2	5.4	5.0	-8.5	-5.6	-5.6	-6.5
Uganda...	5.7	2.3	4.4	5.2	5.4	5.5	5.8	5.6	-7.1	-4.3	-5.6	-7.2
Rwanda...	8.9	5.9	6.2	6.8	2.5	5.7	7.1	6.0	-13.4	-14.4	-10.2	-11.2
Burundi...	-4.0	-1.0	0.0	0.1	5.6	5.5	18.0	20.2	-17.7	-13.1	-12.4	-11.8
SADC	2.7	1.5	2.2	2.5	5.5	10.4	10.3	9.0	-6.4	-4.4	-4.1	-4.5
WAEMU	6.2	6.3	6.4	6.4	2.7	1.3	1.0	1.3	-5.7	-5.3	-6.2	-5.7
CEMAC	1.9	-0.6	0.3	2.1	2.7	1.3	1.0	1.3	-12.2	-13.9	-6.5	-4.0
ASEAN-5	4.9	4.9	5.2	5.2	3.3	2.4	3.3	3.1	1.5	2.1	1.6	1.1
Indonesia...	4.9	5.0	5.2	5.3	6.4	3.5	4.0	3.9	-2.0	-1.8	-1.7	-1.8
Malaysia...	5.0	4.2	5.4	4.8	2.1	2.1	3.8	2.9	3.0	2.4	2.4	2.2
Philippines...	6.1	6.9	6.6	6.7	1.4	1.8	3.1	3.0	2.5	0.2	-0.1	-0.3
Thailand...	2.9	3.2	3.7	3.5	-0.9	0.2	0.6	1.0	8.1	11.5	10.1	8.1
Vietnam...	6.7	6.2	6.3	6.3	0.6	2.7	4.4	4.0	-0.1	4.1	1.3	1.4
Maghreb	2.8	2.2	5.4	3.8	4.7	5.4	5.4	5.4	-14.4	-12.1	-8.5	-5.6
Algeria...	3.7	3.3	1.5	0.8	4.8	6.4	5.5	4.4	-16.5	-16.5	-13.0	-10.8
Libya...	-10.3	-3.0	55.1	31.2	9.8	27.1	32.8	32.1	-52.6	-22.4	1.8	9.8
Mauritania...	0.9	1.7	3.8	3.0	0.5	1.5	2.1	3.7	-19.7	-14.9	-14.2	-9.6
Morocco...	4.6	1.2	4.8	3.0	1.5	1.6	0.9	1.6	-2.1	-4.4	-4.0	-2.9
Tunisia...	1.1	1.0	2.3	3.0	4.9	3.7	4.5	4.4	-8.9	-9.0	-8.7	-8.4
Mashreq²	3.9	3.9	3.8	4.2	9.1	8.7	20.7	18.7	-6.3	-7.8	-8.2	-6.4
Egypt...	4.4	4.3	4.1	4.5	11.0	10.2	23.5	21.3	-3.6	-6.0	-5.9	-3.8
Jordan...	2.4	2.0	2.3	2.5	-0.9	-0.8	3.3	1.5	-9.1	-9.3	-8.4	-8.3
Lebanon...	0.8	1.0	1.5	2.0	-3.7	-0.8	3.1	2.5	-18.7	-18.6	-18.0	-16.8

Source: World Economic Outlook, October 2017 and Regional Economic Outlook - Various Issues except Kenya

* Provisional

⁺ Revised

¹ Projections

² Excludes Syria due to unavailability of data

Southern African Development Community (SADC) includes; Angola, Botswana, Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, United Republic of Tanzania, Zambia and Zimbabwe.

West African Economic and Monetary Union (WAEMU) includes; Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal, and Togo.

Economic and Monetary Union of Central Africa (CEMAC) and includes; Cameroon, Chad, Central African Republic, Equatorial Guinea, Gabon, and Republic of Congo

East African Community

1.19. During the year under review, real GDP in the five member East Africa Community (EAC-5) remained unchanged at 5.4 per cent. The real GDP of Rwanda and Tanzania are estimated to have recorded the fastest growth of 6.2 and 6.5 per cent, respectively, in 2017. The community's current account deficit as a percentage of GDP widened to 6.2 per cent in 2017 from 5.8 in 2016, while inflation rate surged to 6.7 per cent in 2017 from 5.7 per cent in 2016, on account of rising food and oil prices.

Southern African Development Community

1.20. Economies in the Southern African Development Community (SADC) grew at 2.2 per cent in 2017 compared to 1.5 per cent in 2016. The growth was anchored on favourable weather conditions that supported agricultural production. The bloc's inflation rate stood at 10.3 per cent in 2017 from 10.4 per cent in 2016, while the current account deficit as a percentage of GDP improved to 4.1 per cent from 4.4 per cent over the same period.

Maghreb

1.21. The real GDP of Maghreb countries grew by 5.4 per cent in 2017 compared to 2.2 per cent in 2016. The growth was mainly attributed to a rebound in Libya's economy which grew by 55.1 per cent in 2017 compared to a contraction of 3.0 per cent in 2016. The growth in Libya was mainly driven by increased oil production. In Morocco, strong recovery in agriculture production resulted in real GDP growth of 4.8 per cent in 2017. Tunisia's economy expanded by 2.3 per cent in 2017 compared to a growth of 1.0 per cent in 2016 buoyed by recovery in the agriculture and manufacturing sectors. The Maghreb's bloc current account deficit narrowed to 8.5 per cent in 2017 from 12.1 per cent in 2016 mainly due to improvement in net exports. Receipt from oil exports improved Libya's current account balance from a deficit of 22.4 per cent in 2016 to a surplus of 1.8 per cent in 2017.

Mashreq

1.22. The Mashreq recorded a decelerated growth of 3.8 per cent in 2017 compared to a growth of 3.9 per cent in 2016. This was mainly due to a deceleration of Egypt's growth to 4.1 per cent in 2017 compared to a growth of 4.3 per cent in 2016. In Jordan, strong mining sector and increase in export of goods and services supported expansion in economic activities resulting to a growth of 2.3 per cent in 2017 from 2.0 per cent in 2016. Higher food prices coupled with the effects of currency float in Egypt, led to a surge in inflation rate to 23.5 per cent in 2017 from 10.2 per cent in 2016. The Mashreq's bloc current account deficit widened as a percentage of GDP to 8.2 per cent in 2017 from 7.8 per cent in 2016. In Egypt, floating of exchange rate, lifting of foreign currency exchange and implementation of measures to attract foreign direct investors resulted in marginal improvement of current account deficit as a percentage of GDP to 5.9 per cent in 2017.

WAEMU

1.23. In the metals-exporting economies in the West African Economic and Monetary Union (WAEMU), economic growth was broadly stable supported by uptake in mining output and rising metal prices. Growth was however, slowed in some member countries due to lower cocoa prices. Real GDP is estimated to have grown by 6.4 per cent during the period under review compared to 6.3 per cent in 2016. Strong growth in imports resulted in widening of current account deficit as percentage of GDP from 5.3 per cent in 2016 to 6.2 per cent in 2017. During the period under review, inflation was estimated at 1.0 per cent compared to 1.3 per cent recorded in 2016.

CEMAC

1.24. Among the economies in Central African Economic and Monetary Community (CEMAC), real GDP grew by 0.3 per cent in 2017 compared to a decline of 0.6 per cent in 2016. The improvement in growth was mainly due to improvement in global oil prices. Current account deficit as percentage of GDP narrowed to 6.5 per cent in 2017 compared to 13.9 per cent in 2016. This is attributable to sluggish growth in imports that improved terms of trade. In 2017, inflation eased to 1.0 per cent from 1.3 per cent in 2016 following increased oil prices that lowered exchange rate pressures.

Outlook 1.25. On the global perspective, real GDP growth is projected to grow by 3.7 per cent in 2018. This will be supported by resilient growth in advanced economies as well as the effect of tax reforms in the United States of America. The reduction of corporate taxes and allowance of full investment expenditure coupled with fiscal stimulus in United States of America are projected to increase economic growth by 2.5 per cent in 2018.

1.26. In the OECD, real GDP is projected to grow by 2.4 per cent in 2018 while growth in the Euro Area is projected to slow down to 2.1 per cent over the same period. Real GDP growth in the emerging economies of Brazil, Russia, India, and China is projected to grow by 3.9 per cent in 2018. Growth in India is expected to grow to 7.4 per cent in 2018 supported by strong private consumption. Deceleration in credit growth is projected to slow down economic growth in China to 6.6 per cent in 2018.

1.27. Real GDP growth in Sub-Saharan Africa is projected to rise to 3.4 per cent in 2018 on account of strong domestic demand. Recovery of oil production coupled with improvement in the supply of electricity is expected to propel Nigeria's economy to grow by 2.5 per cent in 2018. In EAC countries, real GDP is projected at 5.4 per cent in 2018.

1.28. Real GDP growth in ASEAN~5 countries is projected to expand by 5.2 per cent in 2018. In Maghreb, real GDP growth is expected to slow down to 3.8 per cent in 2018. Real GDP in the Mashreq is projected to grow by 4.2 per cent in 2018 as external demand grows and business and consumer confidence are expected to be boosted by reforms.

B

DOMESTIC ECONOMY

Economic Performance

Chapter 02

Overview Provisional estimates of Gross Domestic Product (GDP) showed that Kenya's economy expanded by 4.9 per cent in 2017 compared to a revised growth of 5.9 per cent in 2016. The slowdown in the performance of the economy was partly attributable to uncertainty associated with a prolonged electioneering period coupled with effects of adverse weather conditions. A widespread drought experienced during the fourth quarter of 2016 and somewhat suppressed long rains in 2017, negatively impacted on crop production and rearing of animals as well as generation of hydro-electric power. A slowdown in credit uptake to the private sector also contributed to the deceleration in growth during the period under review.

2.2. Performance across the various sectors of the economy varied widely, with Accommodation and Food services; Information and Communication Technology; Education; Wholesale and Retail trade; and Public Administration registering accelerated growths in 2017 compared to 2016. On the other hand, growths in Manufacturing; Agriculture, Forestry and Fishing; and Financial and Insurance decelerated significantly over the same period and therefore dampened the overall growth in 2017.

2.3. Generally, key macroeconomic indicators largely remained stable and therefore supportive of growth in 2017. Weighted interest rates on commercial banks loans and advances declined to 13.64 per cent in December 2017 from 13.69 per cent in December 2016. The Central Bank Rate (CBR) was maintained at 10.00 per cent throughout the year. In the money market, the Kenyan Shilling strengthened against most of the major trading currencies but weakened against the Euro and the US Dollar in 2017. There was a moderate buildup in inflationary pressures mainly due to significant increase in oil and food prices during the year under review. Consequently, inflation rose from 6.3 per cent in 2016 to 8.0 per cent in 2017 thereby overshooting the Central Bank's upper limit of 7.5 per cent.

2.4. The current account deficit widened from KSh 375.3 billion in 2016 to a deficit of KSh 518.9 billion in 2017 on account of significant growth of imports against a slow growth of exports. The Nairobi Securities Exchange (NSE) 20-Share index rose to 3,712 points in December 2017 from 3,186 points in December 2016.

2.5. Domestic prices of petroleum products rose significantly in 2017 in response to a 24.6 per cent rise in the international oil prices. In particular, wholesale prices of motor gasoline premium and light diesel increased by 9.7 per cent and 8.7 per cent, respectively, in 2017. The increase in oil prices was mainly on account of reduced global supply against a strong demand growth during the year under review.

Sectoral Agriculture, Forestry and Fishing

Analysis 2.6. Agriculture, Forestry and Fishing sector posted a decelerated growth of 1.6 per cent in 2017 compared to a revised growth of 4.7 per cent in 2016. The period under review was characterised by depressed long rains and early cessation of short rains. Consequently, the unfavourable weather conditions considerably suppressed production of key crops and adversely affected production in the livestock sub-sector.

2.7. Scarcity of key food crops and in particular maize and some vegetables was experienced in 2017 as evidenced by significant increases in their respective prices. The poor performance of the sector was exacerbated by marked decline in production of tea and coffee by 7.0 per cent and 11.5 per cent, respectively. Similarly, activity of sugarcane farming and growing of sisal were notably lower than the 2016 levels, further curtailing potential growth in the sector. In the dairy sub-sector, the quantity of milk delivered to processors declined from 648.2 million litres in 2016 to 535.7 million litres in 2017.

2.8. However, despite the general underperformance of the sector, production of food crops such as potatoes, beans and some cereals posted relatively improved performance and somehow mitigated the impact of the decline in the production of the other crops, thereby anchoring the growth in 2017. Similarly, growth in the sector was supported by notable increases in production of cut flowers, fruits and vegetables whose exports grew by 19.7, 16.8 and 10.7, per cent, respectively, in 2017. This translated to a significant increase in the value of export of horticultural produce from KSh 101.5 billion in 2016 to KSh 115.3 billion in 2017.

Manufacturing

2.9. The manufacturing sector posted a marginal growth of 0.2 per cent in 2017 compared to a revised growth of 2.7 per cent in 2016. The slowed growth was partly attributable to uncertainties related to the 2017 general elections, high cost of inputs and stiff competition from cheap imports. Generally, most activities in the sector recorded significant decline leading to the slowdown experienced in 2017. The volume of food products manufactured declined by 10.8 per cent in 2017 compared to 1.9 per cent growth in 2016.

2.10. The sector's performance in 2017 was negatively affected by reduced activity in agro-processing that emanated from constrained domestic supply of agricultural raw materials. This was particularly so in the processing of tea and coffee that recorded significant decline during the period under review. Nevertheless, there was improved performance in some activities that somewhat supported growth during the period under review. In the food sub-sector, notable growths were realised in the manufacture of grain mill products (8.3%), bakery products (8.1%) and animal feeds (8.6%). Similarly, some activities in the manufacture of non-food products recorded marginal gains during the review period though their proportionate contribution to the sector was significantly low. The quantities of apparels, basic metals, and paper and paper products manufactured in 2017 grew by 5.6, 4.0 and 4.2 per cent, respectively.

Transportation and Storage

2.11. Transportation and storage sector remained vibrant during the review period despite its growth slowing to 7.3 per cent in 2017 compared to a 7.8 per cent growth in 2016. The slower growth was mainly on account of underperformance in land transportation, particularly that of freight. Performance of land freight dropped from 5.9 per cent in 2016 to 1.9 per cent in 2017 mainly due to depressed volumes of transportation of freight through road and railway. During the period under review, the number of newly registered lorries/trucks, pick-ups and heavy vans commonly used to transport goods declined by 22.5 per cent. The suppressed

performance of land freight was reflected by a 9.4 per cent decline in consumption of light diesel in 2017. In addition, a significant rise in prices of petroleum products during the review period also dampened the sector's growth. The average price of gas oil increased from KSh 77.83 in 2016 to KSh 89.03 in 2017 while that of motor gasoline rose by 11.1 per cent.

2.12. On the other hand, performance in other sub-sectors was comparatively better in 2017. Total port throughput grew by 10.6 per cent in 2017 while the number of ships that docked at the port of Mombasa increased from 1,607 in 2016 to 1,767 in 2017. Similarly, the volume of petroleum products transported through pipeline increased by 10.8 per cent in 2017 compared to a 9.7 per cent growth recorded in 2016.

Information and Communication

2.13 The Information and Communication sector expanded by 11.0 per cent in 2017 compared to 9.7 per cent in 2016. The exemplary performance was mainly supported by expansion in the digital economy through mobile telephony, e-commerce, online training, tax administration, among others. Growth in the sector was principally driven by improved performance in the telecommunications sub-sector, which rose by 12.7 per cent in 2017. The enhanced performance in the telecommunications activity was mainly on account of a notable increase in the volume of call traffic from 42.2 billion minutes in 2016 to 44.1 billion minutes in 2017. Similarly, the number of Short Message Service (SMS) rose significantly to stand at 65.7 billion during the review period. Mobile money transfers rose significantly to KSh 3.6 trillion in 2017 while the number of mobile commerce transactions increased almost two-fold. The sector's growth was also supported by increased use of the Internet as evidenced by a 6.5 per cent increase in utilization of available bandwidth.

Financial and Insurance Activities

2.14. In 2017, the sector's growth decelerated to 3.1 per cent, mainly on account of significantly constrained growth in financial activities, despite better performance in insurance activities. Performance of activities of the financial sub-sector decelerated significantly from a growth of 6.9 per cent in 2016 to 2.6 per cent in 2017. The overall effect of the decline in financial activities was partially compensated by 6.5 per cent growth of the insurance sub-sector in 2017 compared to 5.2 per cent realized in 2016. The insurance sub-sector's performance was buoyed by a significant growth in gross premium income during the period under review. A drop in the growth of credit to the private sector from 4.1 per cent in 2016 to 2.4 per cent in 2017 reflected the subdual of performance in the financial sub-sector. However, total domestic credit rose by 7.9 per cent compared to 6.4 per cent in 2016, primarily due to a 12.1 per cent growth in credit to the national government. During the review period, extended broad money supply (M3) as at December 2017 grew by 8.9 per cent compared to 3.6 per cent in the same period of 2016.

Electricity Supply

2.15. Growth of gross value added of electricity supply decelerated to 6.9 per cent from a revised growth of 9.5 per cent in 2016. The slowdown in performance of the sector in the period under review was mainly attributable to depressed generation of hydro-electricity due to failure of short rains in 2016 and reduced long rains in 2017. There was a considerable increase in generation of electricity from thermal sources that are highly input intensive, and therefore increased the sector's production costs. Hydro generation declined by 29.9 per cent from 3,959.9 GWh in 2016 to 2,776.8 GWh in 2017. On the other hand, thermal generation increased significantly (72.3%) from 1,470.9 GWh in 2016 to 2,534.1 GWh in 2017. Renewable energy sources have continued to gain prominence as important sources of electricity supply. During the period under review, growth of the sector was supported by notable improvements in the generation of electricity using wind (8.7%) and geothermal sources (6.1%).

Construction

2.16 Activity in the construction sector remained robust during the review period though the growth decelerated for the second year in a row to stand at 8.6 per cent in 2017. Cement consumption decreased by 8.2 per cent from 6.3 million tonnes in 2016 to 5.8 million tonnes in 2017, an indication of a slowdown in growth of construction activity compared to the previous year. The sector continued to benefit from public investment in infrastructure such as roads and railways, as well as heightened activity in the construction of public and private buildings. The sector's growth was also driven by intensified civil works that led to a significant increase in the length of bitumen road, from 14.5 thousand kilometers in 2016 to 20.6 thousand kilometers in 2017. Similarly, the length of road under earth/gravel almost doubled in the year under review, a further reflection of gains realized in the sector.

Accommodation and Food Services

2.17. The sector remained on a recovery path to grow by 14.7 per cent in 2017 compared to a revised growth of 13.3 per cent in 2016. This growth was despite a backdrop of uncertainty surrounding the general elections and negative travel advisories issued by some countries. The improved performance was mainly attributable to enhanced security and concerted efforts instituted by the government to market the country as a favourite tourist destination. Key indicators for the sector pointed to a robust performance during the period under review. Earnings from tourism activities increased markedly (20.3%) from KSh 99.7 billion in 2016 to KSh 119.9 billion in 2017. The number of international visitor arrivals grew by 8.1 per cent to 1,448.8 thousand in 2017 from 1,339.7 thousand in 2016. This resulted to an increase in hotel bed-nights occupancy from 6,448.5 thousand in 2016 to 7,174.2 thousand in 2017.

2.18. Tables 2.1 and Table 2.2 present details on the Gross Domestic Product (GDP) at current prices and, sectoral contribution to GDP from 2013-2017. The nominal GDP is estimated to have expanded from KSh 7,194.1 billion in 2016 to KSh 7,749.4 billion in 2017. There were no significant changes in the structure of the economy in terms of sectoral contribution to GDP except for Agriculture, Forestry and Fishing, and manufacturing that shed a combined share of 1.3 per cent. Other notable changes in contribution to GDP included those of Construction and Wholesale and Retail, which increased by 0.8 and 0.3 percentage points, respectively, in 2017.

Table 2.1: Gross Domestic Product by Activity, 2013 - 2017

Industry	Current Prices, KSh Million				
	2013	2014	2015*	2016*	2017*
Agriculture, forestry and fishing.....	1,254,760	1,483,078	1,897,347	2,311,862	2,442,371
Growing of crops.....	875,165	1,066,344	1,446,376	1,830,608	1,927,867
Animal production.....	249,117	275,082	293,603	321,628	339,489
Support activities to agriculture.....	28,932	30,770	37,371	33,510	38,857
Forestry & logging.....	67,230	72,148	79,697	91,084	99,511
Fishing & aquaculture.....	34,315	38,732	40,300	35,033	36,647
Mining and quarrying.....	40,742	44,936	54,584	59,130	58,459
Manufacturing.....	506,612	537,999	588,896	653,839	648,397
Manufacture of food, beverages and tobacco.....	201,269	207,730	230,909	260,818	270,142
Other manufacturing and repair and installation.....	305,343	330,269	357,987	393,021	378,255
Electricity supply.....	53,901	55,190	89,358	131,565	140,708
Water supply; sewerage, waste management.....	40,442	42,102	46,814	50,418	55,989
Construction.....	213,565	262,090	307,563	360,806	452,439
Wholesale and retail trade; repairs.....	380,646	431,985	473,395	524,303	588,540
Transportation and storage.....	378,525	462,457	510,488	561,757	599,438
Land transport.....	287,053	351,796	379,320	404,231	415,848
Air transport including support services.....	17,522	16,960	18,896	27,416	31,954
All other transport including postal and courier activities.....	73,950	93,700	112,272	130,110	151,636
Accommodation and food service activities.....	58,037	49,151	49,356	51,565	60,824
Information and communication.....	68,478	65,592	91,200	103,807	109,388
Telecommunications.....	31,937	27,647	52,410	61,579	66,233
Publishing, broadcasting, other IT and information activities.....	36,541	37,945	38,790	42,228	43,155
Financial and insurance activities.....	313,120	366,764	423,956	505,331	577,824
Financial activities.....	241,478	261,282	326,609	395,054	466,341
Insurance activities.....	71,643	105,483	97,347	110,277	111,482
Real estate.....	375,588	417,829	474,318	532,121	575,347
Professional, scientific and technical activities.....	48,349	51,992	55,812	61,009	65,178
Administrative and support service activities.....	57,312	61,067	63,849	67,750	72,067
Public administration and defence.....	208,647	243,526	267,645	299,005	330,899
Education.....	251,958	279,543	308,128	308,135	319,445
Pre-primary and Primary education.....	115,460	126,156	137,521	137,002	159,293
General secondary education.....	87,370	96,581	107,462	96,604	82,550
Higher and other education.....	49,127	56,807	63,145	74,529	77,602
Human health and social work activities.....	75,157	91,969	108,023	119,561	126,311
Arts, entertainment and recreation.....	6,636	7,490	8,045	8,864	8,969
Other service activities.....	30,109	34,506	39,486	43,128	48,270
Activities of households as employers;.....	25,462	28,090	30,625	32,370	34,075
Financial Intermediation Services Indirectly Measured (FISIM)	-124,136	-134,588	-163,306	-200,667	-228,918
All economic activities	4,263,911	4,882,769	5,725,580	6,585,658	7,086,020
Taxes on products.....	481,179	519,878	558,605	608,489	663,406
GDP at market prices	4,745,090	5,402,647	6,284,185	7,194,147	7,749,426

* Provisional

+ Revised

Table 2.2: Gross Domestic Product by Activity

Industry	Percentage Contribution to GDP				
	2013	2014	2015*	2016*	2017*
Agriculture, forestry and fishing.....	26.4	27.5	30.2	32.1	31.5
Growing of crops.....	18.4	19.7	23.0	25.4	24.9
Animal production.....	5.3	5.1	4.7	4.5	4.4
Support activities to agriculture.....	0.6	0.6	0.6	0.5	0.5
Forestry & logging.....	1.4	1.3	1.3	1.3	1.3
Fishing & aquaculture.....	0.7	0.7	0.6	0.5	0.5
Mining and quarrying.....	0.9	0.8	0.9	0.8	0.8
Manufacturing.....	10.7	10.0	9.4	9.1	8.4
Manufacture of food, beverages and tobacco.....	4.2	3.8	3.7	3.6	3.5
Other manufacturing and repair and installation.....	6.4	6.1	5.7	5.5	4.9
Electricity supply.....	1.1	1.0	1.4	1.8	1.8
Water supply; sewerage, waste management.....	0.9	0.8	0.7	0.7	0.7
Construction.....	4.5	4.9	4.9	5.0	5.8
Wholesale and retail trade; repairs.....	8.0	8.0	7.5	7.3	7.6
Transportation and storage.....	8.0	8.6	8.1	7.8	7.7
Land transport.....	6.0	6.5	6.0	5.6	5.4
Air transport including support services.....	0.4	0.3	0.3	0.4	0.4
All other transport including postal and courier activities.....	1.6	1.7	1.8	1.8	2.0
Accommodation and food service activities.....	1.2	0.9	0.8	0.7	0.8
Information and communication.....	1.4	1.2	1.5	1.4	1.4
Telecommunications.....	0.7	0.5	0.8	0.9	0.9
Publishing, broadcasting, other IT and information activities.....	0.8	0.7	0.6	0.6	0.6
Financial and insurance activities.....	6.6	6.8	6.7	7.0	7.5
Financial activities.....	5.1	4.8	5.2	5.5	6.0
Insurance activities.....	1.5	2.0	1.5	1.5	1.4
Real estate.....	7.9	7.7	7.5	7.4	7.4
Professional, scientific and technical activities.....	1.0	1.0	0.9	0.8	0.8
Administrative and support service activities.....	1.2	1.1	1.0	0.9	0.9
Public administration and defence.....	4.4	4.5	4.3	4.2	4.3
Education.....	5.3	5.2	4.9	4.3	4.1
Primary education.....	2.4	2.3	2.2	1.9	2.1
General secondary education.....	1.8	1.8	1.7	1.3	1.1
Higher and other education.....	1.0	1.1	1.0	1.0	1.0
Human health and social work activities.....	1.6	1.7	1.7	1.7	1.6
Arts, entertainment and recreation.....	0.1	0.1	0.1	0.1	0.1
Other service activities.....	0.6	0.6	0.6	0.6	0.6
Activities of households as employers;.....	0.5	0.5	0.5	0.4	0.4
Financial Intermediation Services Indirectly Measured (FISIM)...	-2.6	-2.5	-2.6	-2.8	-3.0
All economic activities	89.9	90.4	91.1	91.5	91.4
Taxes on products.....	10.1	9.6	8.9	8.5	8.6
GDP at market prices	100.0	100.0	100.0	100.0	100.0

* Provisional

+ Revised

2.19. Details of GDP valued at 2009 prices and the corresponding growth rates from 2013 to 2017 are presented in Table 2.3 and Table 2.4, respectively. Gross domestic product in real terms increased from KSh 4,300.3 billion in 2016 to KSh 4,510.4 billion in 2017. Real GDP grew from a revised growth of 5.9 per cent registered in 2016 to stand at 4.9 per cent in 2017. Key drivers of the economy posted significantly constrained growths, and therefore largely accounted for the slowdown in 2017. During the review period, primary and secondary industries that include Agriculture, Mining, Manufacturing, Electricity and Water supply and, Construction activities grew at an average growth of 4.3 (significantly slower), compared to the service sectors that posted improved performance (approximately 7.0 per cent). This in essence implied that the growth realized in 2017 was mainly supported by performance of the service sectors.

Table 2.3: Gross Domestic Product by Activity

Industry	Constant 2009 Prices, KSh Million				
	2013	2014	2015 ⁺	2016 ⁺	2017 [*]
Agriculture, forestry and fishing.....	818,989	854,753	900,421	942,761	957,926
Growing of crops.....	562,510	595,801	638,720	682,156	695,416
Animal production.....	167,372	169,798	173,546	177,418	178,428
Support activities to agriculture.....	25,983	24,189	24,641	19,984	19,419
Forestry & logging.....	41,567	42,946	43,377	46,515	48,299
Fishing & aquaculture.....	21,557	22,019	20,137	16,688	16,364
Mining and quarrying.....	32,405	37,235	41,809	45,770	48,573
Manufacturing.....	403,128	413,281	428,153	439,665	440,478
Manufacture of food, beverages and tobacco.....	151,260	153,450	162,637	167,243	167,635
Other manufacturing and repair and installation.....	251,868	259,831	265,516	272,422	272,844
Electricity supply.....	57,301	61,461	68,499	75,039	80,234
Water supply; sewerage, waste management.....	29,659	30,826	31,654	33,460	34,330
Construction.....	164,220	185,696	211,314	232,111	252,017
Wholesale and retail trade; repairs.....	275,291	294,357	311,746	322,468	340,812
Transportation and storage.....	241,112	254,358	274,755	296,145	317,791
Land transport.....	164,166	172,910	183,734	194,514	199,697
Air transport including support services.....	21,570	21,508	21,275	22,118	23,279
All other transport including postal and courier activities.....	55,376	59,941	69,746	79,513	94,816
Accommodation and food service activities.....	52,441	43,657	43,086	48,803	55,986
Information and communication.....	121,890	139,623	149,969	164,530	182,595
Telecommunications.....	91,216	109,528	118,965	132,280	149,130
Publishing, broadcasting, other IT and information activities.....	30,674	30,095	31,004	32,250	33,465
Financial and insurance activities.....	212,185	229,819	251,442	268,198	276,506
Financial activities.....	180,674	196,614	216,554	231,504	237,427
Insurance activities.....	31,511	33,206	34,888	36,694	39,079
Real estate.....	294,747	311,148	333,537	362,724	384,955
Professional, scientific and technical activities.....	39,111	40,712	42,188	44,820	46,740
Administrative and support service activities.....	48,201	49,361	50,113	52,060	54,046
Public administration and defence.....	141,678	149,556	157,834	165,400	174,112
Education.....	249,001	268,359	281,542	296,667	314,637
Pre-primary and Primary education.....	111,490	112,041	113,891	117,341	121,362
General secondary education.....	93,881	107,902	117,011	122,239	134,649
Higher and other education.....	43,630	48,417	50,640	57,087	58,626
Human health and social work activities.....	63,579	68,728	72,745	76,203	80,745
Arts, entertainment and recreation.....	5,039	5,190	5,269	5,479	5,822
Other service activities.....	24,403	25,989	27,551	29,212	31,254
Activities of households as employers;.....	18,449	18,726	19,007	19,273	19,581
Financial Intermediation Services Indirectly Measured.....	-86,932	-96,763	-109,826	-112,162	-105,734
All economic activities	3,205,897	3,386,075	3,592,808	3,808,627	3,993,407
Taxes on products.....	440,924	456,111	469,093	491,676	516,984
GDP at market prices	3,646,821	3,842,186	4,061,901	4,300,302	4,510,391

* Provisional

+ Revised

Table 2.4: Gross Domestic Product by Activity

Industry	Percentage Changes (growth)				
	2013	2014	2015 ⁺	2016 ⁺	2017*
Agriculture, forestry and fishing.....	5.4	4.4	5.3	4.7	1.6
Growing of crops.....	6.6	5.9	7.2	6.8	1.9
Animal production.....	1.9	1.4	2.2	2.2	0.6
Support activities to agriculture.....	3.8	-6.9	1.9	-18.9	-2.8
Forestry & logging.....	5.0	3.3	1.0	7.2	3.8
Fishing & aquaculture.....	5.9	2.1	-8.6	-17.1	-1.9
Mining and quarrying.....	-4.2	14.9	12.3	9.5	6.1
Manufacturing.....	5.6	2.5	3.6	2.7	0.2
Manufacture of food, beverages and tobacco.....	10.5	1.4	6.0	2.8	0.2
Other manufacturing and repair and installation.....	2.8	3.2	2.2	2.6	0.2
Electricity supply.....	9.8	7.3	11.5	9.5	6.9
Water supply; sewerage, waste management.....	0.9	3.9	2.7	5.7	2.6
Construction.....	6.1	13.1	13.8	9.8	8.6
Wholesale and retail trade; repairs.....	8.4	6.9	5.9	3.4	5.7
Transportation and storage.....	1.3	5.5	8.0	7.8	7.3
Land transport.....	4.5	5.3	6.3	5.9	2.7
Air transport including support services.....	5.4	-0.3	-1.1	4.0	5.2
All other transport including postal and courier activities.....	-8.2	8.2	16.4	14.0	19.2
Accommodation and food services.....	-4.6	-16.7	-1.3	13.3	14.7
Information and communication.....	12.5	14.5	7.4	9.7	11.0
Telecommunications.....	17.1	20.1	8.6	11.2	12.7
Publishing, broadcasting, other IT and information activities.....	0.8	-1.9	3.0	4.0	3.8
Financial and insurance activities.....	8.2	8.3	9.4	6.7	3.1
Financial activities.....	8.1	8.8	10.1	6.9	2.6
Insurance activities.....	8.4	5.4	5.1	5.2	6.5
Real estate.....	4.1	5.6	7.2	8.8	6.1
Professional, scientific and technical activities.....	6.7	4.1	3.6	6.2	4.3
Administrative and support service activities.....	1.2	2.4	1.5	3.9	3.8
Public administration and defence.....	2.8	5.6	5.5	4.8	5.3
Education.....	6.3	7.8	4.9	5.4	6.1
Primary education.....	1.6	0.5	1.7	3.0	3.4
General secondary education.....	12.2	14.9	8.4	4.5	10.2
Higher and other education.....	7.2	11.0	4.6	12.7	2.7
Human health and social work activities.....	7.7	8.1	5.8	4.8	6.0
Arts, entertainment and recreation.....	3.0	3.0	1.5	4.0	6.3
Other service activities.....	7.3	6.5	6.0	6.0	7.0
Activities of households as employers;.....	1.5	1.5	1.5	1.4	1.6
Financial Intermediation Services Indirectly Measured.....	5.2	11.3	13.5	2.1	-5.7
All industries at basic prices	5.4	5.6	6.1	6.0	4.9
Taxes on products.....	9.5	3.4	2.8	4.8	5.1
GDP at market prices	5.9	5.4	5.7	5.9	4.9

* Provisional

+Revised

2.20. Table 2.5 shows the sectoral contribution to the overall growth for the period 2013-2017. The highest contributors to the growth recorded in 2017 were taxes on products (12.0%); Real Estate (10.6%); Transportation and Storage (10.3%); Construction (9.5%); Education (8.6%) and Information and Communication Technology (8.6%). This was a significant shift in structure of the sources of growth in 2017, compared to past years, where primary and secondary industries dominated in terms of contribution to overall growth. In 2017, all primary and secondary industries' contribution to growth decelerated notably, leaving a considerable component of the growth to be explained by service-oriented sectors.

Table 2.5: Sources of Growth, 2013-2017

Industry	Percentage Changes (growth)				
	2013	2014	2015 ⁺	2016 ⁺	2017*
Agriculture, forestry and fishing.....	20.9	18.3	20.8	17.8	7.2
Growing of crops.....	17.3	17.0	19.5	18.2	6.3
Animal production.....	1.6	1.2	1.7	1.6	0.5
Support activities to agriculture.....	0.5	-0.9	0.2	-2.0	-0.3
Forestry & logging.....	1.0	0.7	0.2	1.3	0.8
Fishing & aquaculture.....	0.6	0.2	-0.9	-1.4	-0.2
Mining and quarrying.....	-0.7	2.5	2.1	1.7	1.3
Manufacturing.....	10.6	5.2	6.8	4.8	0.4
Manufacture of food, beverages and tobacco.....	7.1	1.1	4.2	1.9	0.2
Other manufacturing and repair and installation.....	3.4	4.1	2.6	2.9	0.2
Electricity supply.....	2.5	2.1	3.2	2.7	2.5
Water supply; sewerage, waste management.....	0.1	0.6	0.4	0.8	0.4
Construction.....	4.7	11.0	11.7	8.7	9.5
Wholesale and retail trade; repairs.....	10.5	9.8	7.9	4.5	8.7
Transportation and storage.....	1.6	6.8	9.3	9.0	10.3
Land transport.....	3.5	4.5	4.9	4.5	2.5
Air transport including support services.....	0.5	0.0	-0.1	0.4	0.6
All other transport including postal and courier activities.....	-2.5	2.3	4.5	4.1	7.3
Accommodation and food services.....	-1.2	-4.5	-0.3	2.4	3.4
Information and communication.....	6.7	9.1	4.7	6.1	8.6
Telecommunications.....	6.6	9.4	4.3	5.6	8.0
Publishing, broadcasting, other IT and information activities.....	0.1	-0.3	0.4	0.5	0.6
Financial and insurance activities.....	7.9	9.0	9.8	7.0	4.0
Financial activities.....	6.7	8.2	9.1	6.3	2.8
Insurance activities.....	1.2	0.9	0.8	0.8	1.1
Real estate.....	5.8	8.4	10.2	12.2	10.6
Professional, scientific and technical activities.....	1.2	0.8	0.7	1.1	0.9
Administrative and support service activities.....	0.3	0.6	0.3	0.8	0.9
Public administration and defence.....	1.9	4.0	3.8	3.2	4.1
Education.....	7.3	9.9	6.0	6.3	8.6
Primary education.....	0.9	0.3	0.8	1.4	1.9
General secondary education.....	5.0	7.2	4.1	2.2	5.9
Higher and other education.....	1.4	2.4	1.0	2.7	0.7
Human health and social work activities.....	2.3	2.6	1.8	1.5	2.2
Arts, entertainment and recreation.....	0.1	0.1	0.0	0.1	0.2
Other service activities.....	0.8	0.8	0.7	0.7	1.0
Activities of households as employers;.....	0.1	0.1	0.1	0.1	0.1
Financial Intermediation Services Indirectly Measured.....	-2.1	-5.0	-5.9	-1.0	3.1
All industries at basic prices	81.2	92.2	94.1	90.5	88.0
Taxes on products.....	18.8	7.8	5.9	9.5	12.0
GDP at market prices	100.0	100.0	100.0	100.0	100.0

* Provisional

+ Revised

2.21. Table 2.6 provides the annual production accounts for all industries for the period 2013-2017. Total output grew by 6.2 per cent from KSh 11,202.5 billion in 2016 to KSh 12,248.3 billion in 2017. Intermediate consumption, which entails the value of goods and services used up in the process of production accelerated to grow by 11.8 per cent in 2017 compared to an increase of 6.4 per cent in 2016. The value of compensation of employees grew faster (12.9%) in 2017 compared to 8.9 per cent increase in 2016. In contrast, the gross operating surplus/mixed income that is interpreted as the remuneration of capital for incorporated enterprises; and return for labour for unincorporated enterprises expanded by 5.1 per cent in 2017.

Table 2.6: Annual Production Accounts by Industry, 2013-2017

Industry	Current Prices KSh Million				
	2013	2014	2015 ⁺	2016 ⁺	2017*
Agriculture, forestry and fishing					
Output at basic prices...	1,502,250	1,762,894	2,212,671	2,665,810	2,844,984
Intermediate consumption...	247,490	279,817	315,324	353,948	402,613
Value added, gross...	1,254,760	1,483,077	1,897,347	2,311,862	2,442,371
Compensation of employees...	131,228	153,843	209,471	260,998	288,042
Operating surplus/mixed income, gross...	1,123,532	1,329,235	1,687,876	2,050,864	2,154,329
Mining and quarrying					
Output at basic prices...	69,514	78,638	91,477	99,953	104,350
Intermediate consumption...	28,772	33,702	36,892	40,823	45,891
Value added, gross...	40,742	44,936	54,584	59,130	58,459
Compensation of employees...	8,843	13,940	17,854	20,050	22,416
Operating surplus/mixed income, gross...	31,899	30,996	36,731	39,079	36,044
Manufacturing					
Output at basic prices...	1,737,699	1,820,369	1,977,169	2,120,718	2,204,805
Intermediate consumption...	1,231,087	1,282,369	1,388,274	1,466,879	1,556,408
Value added, gross...	506,612	537,999	588,896	653,839	648,397
Compensation of employees...	127,186	147,453	163,392	174,767	188,893
Operating surplus/mixed income, gross...	379,426	390,546	425,503	479,072	459,504
Electricity, gas and water supply					
Output at basic prices...	171,628	175,523	208,879	251,267	264,439
Intermediate consumption...	77,285	78,231	72,707	69,284	67,742
Value added, gross...	94,343	97,292	136,172	181,983	196,697
Compensation of employees...	27,127	25,308	24,269	30,413	34,055
Operating surplus/mixed income, gross...	67,215	71,985	111,903	151,570	162,643
Construction					
Output at basic prices...	582,896	683,376	804,219	823,871	1,031,493
Intermediate consumption...	369,331	421,285	496,657	463,065	579,055
Value added, gross...	213,565	262,090	307,563	360,806	452,439
Compensation of employees...	98,694	126,564	185,235	188,642	282,035
Operating surplus/mixed income, gross...	114,872	135,526	122,328	172,164	170,404
Wholesale and retail trade					
Output at basic prices...	685,949	773,371	839,519	923,880	1,030,389
Intermediate consumption...	305,303	341,386	366,124	399,578	441,848
Value added, gross...	380,646	431,985	473,395	524,303	588,540
Compensation of employees...	143,960	174,523	178,893	200,609	228,595
Operating surplus/mixed income, gross...	236,686	257,462	294,502	323,694	359,945
Transportation and storage					
Output at basic prices...	775,826	893,141	956,867	1,025,831	1,115,665
Intermediate consumption...	397,301	430,684	446,380	464,075	516,227
Value added, gross...	378,525	462,457	510,488	561,757	599,438
Compensation of employees...	111,555	128,867	145,492	152,348	169,929
Operating surplus/mixed income, gross...	266,970	333,590	364,996	409,409	429,509
Accommodation and Food Services					
Output at basic prices...	132,153	113,503	116,720	134,507	157,992
Intermediate consumption...	74,115	64,351	67,364	82,942	97,168
Value added, gross...	58,037	49,151	49,356	51,565	60,824
Compensation of employees...	29,678	30,466	33,887	35,257	38,101
Operating surplus/mixed income, gross...	28,359	18,685	15,469	16,308	22,723
Information and communication					
Output at basic prices...	228,405	259,000	280,434	311,221	345,068
Intermediate consumption...	159,928	193,408	189,234	207,414	235,679
Value added, gross...	68,478	65,592	91,200	103,807	109,388
Compensation of employees...	50,238	55,138	62,602	71,234	73,168
Operating surplus/mixed income, gross...	18,240	10,454	28,598	32,573	36,220
Financial and insurance activities					
Output at basic prices...	413,707	492,198	555,690	645,062	741,097
Intermediate consumption...	100,587	125,434	131,734	139,732	163,273
Value added, gross...	313,120	366,764	423,956	505,331	577,824
Compensation of employees...	93,668	102,495	83,194	89,197	88,066
Operating surplus/mixed income, gross...	219,452	264,269	340,762	416,134	489,758

* Provisional

+ Revised

Table 2.6: Annual Production Accounts by Industry, 2013-2017 (Cont'd)

	Current Prices					KSh Million
Industry	2013	2014	2015*	2016*	2017*	
Real estate						
Output at basic prices.....	420,365	467,885	531,735	601,937	655,078	
Intermediate consumption.....	44,777	50,056	57,418	69,816	79,731	
Value added, gross.....	375,588	417,829	474,318	532,121	575,347	
Compensation of employees.....	32,644	36,436	40,820	44,831	48,658	
Operating surplus/mixed income, gross.....	342,944	381,393	433,498	487,290	526,689	
Professional, scientific and technical activities						
Output at basic prices.....	71,247	72,950	74,812	81,361	88,793	
Intermediate consumption.....	22,898	20,958	18,999	20,351	23,615	
Value added, gross.....	48,349	51,992	55,812	61,009	65,178	
Compensation of employees.....	28,230	30,387	32,551	34,699	37,464	
Operating surplus/mixed income, gross.....	20,119	21,605	23,261	26,311	27,715	
Administrative and support service activities						
Output at basic prices.....	68,239	72,794	75,866	80,656	86,112	
Intermediate consumption.....	10,927	11,726	12,016	12,906	14,046	
Value added, gross.....	57,312	61,067	63,849	67,750	72,067	
Compensation of employees.....	25,050	25,976	32,114	33,287	34,777	
Operating surplus/mixed income, gross.....	32,262	35,092	31,735	34,463	37,290	
Public administration and defence						
Output at basic prices.....	363,287	417,742	499,174	540,280	614,845	
Intermediate consumption.....	154,639	174,216	231,529	241,275	283,947	
Value added, gross.....	208,647	243,526	267,645	299,005	330,899	
Compensation of employees.....	164,585	191,806	203,751	232,562	261,155	
Operating surplus/mixed income, gross.....	44,062	51,720	63,893	66,443	69,744	
Education						
Output at basic prices.....	430,102	483,396	537,608	557,815	587,635	
Intermediate consumption.....	178,144	203,852	229,480	249,680	268,191	
Value added, gross.....	251,958	279,543	308,128	308,135	319,445	
Compensation of employees.....	234,474	266,008	294,325	285,915	301,157	
Operating surplus/mixed income, gross.....	17,484	13,536	13,803	22,220	18,287	
Health and social work						
Output at basic prices.....	154,479	164,850	185,698	210,337	232,983	
Intermediate consumption.....	79,322	72,881	77,675	90,776	106,672	
Value added, gross.....	75,157	91,969	108,023	119,561	126,311	
Compensation of employees.....	84,875	104,938	107,039	121,068	137,049	
Operating surplus/mixed income, gross.....	-9,718	-12,969	984	-1,507	-10,738	
Other service activities						
Output at basic prices.....	95,188	106,339	117,002	127,960	142,596	
Intermediate consumption.....	32,982	36,252	38,847	43,598	51,281	
Value added, gross.....	62,206	70,086	78,155	84,361	91,314	
Compensation of employees.....	51,439	57,499	62,864	69,653	76,717	
Operating surplus/mixed income, gross.....	10,767	12,587	15,291	14,708	14,597	
Less : Financial services indirectly measured...						
Intermediate consumption.....	124,136	134,588	163,306	200,667	228,918	
Value added, gross.....	-124,136	-134,588	-163,306	-200,667	-228,918	
All industries at basic prices						
Output at basic prices.....	7,902,933	8,837,967	10,065,540	11,202,466	12,248,323	
Intermediate consumption.....	3,639,022	3,955,197	4,339,960	4,616,808	5,162,303	
Gross value added at basic prices.....	4,263,911	4,882,769	5,725,580	6,585,658	7,086,020	
Other taxes on production.....	137,804	151,789	168,336	186,119	201,542	
Less : Subsidies						
Compensation of employees.....	1,443,473	1,671,646	1,877,753	2,045,528	2,310,277	
Gross operating surplus/mixed income.....	2,682,633	3,059,334	3,679,491	4,354,011	4,574,201	
Total economy						
Output at basic prices.....	7,902,933	8,837,967	10,065,540	11,202,466	12,248,323	
Taxes on products less subsidies on products.....	481,179	519,878	558,605	608,489	663,406	
Intermediate consumption.....	3,639,022	3,955,197	4,339,960	4,616,808	5,162,303	
GDP at market prices	4,745,090	5,402,647	6,284,185	7,194,147	7,749,426	

* Provisional

+ Revised

2.22. The components of expenditure on GDP at current prices and their respective shares to GDP at market prices are shown Table 2.7 and Table 2.8, respectively. Gross domestic expenditure increased from KSh 7,889.7 billion in 2016 to KSh 8,823.0 billion in 2017. The share of private consumption remained dominant over other components but the magnitude was largely unchanged over the five-year period. Similarly, the share of government final consumption remained relatively stable at about 14.0 per cent during the same period. The contribution of Gross Fixed Capital Formation (GFCF) rallied from a dip of 4.3 percentage points in 2016 to stand at 18.9 per cent. The share of imports of goods and services to total gross domestic product grew faster than that of export of goods and services during the review period.

Table 2.7: Expenditure on the Gross Domestic Product, 2013-2017

Expenditure category	Current Prices - KSh Million				
	2013	2014	2015 ⁺	2016 ⁺	2017 [*]
Government final consumption expenditure.....	679,876	764,783	885,293	956,349	1,105,243
Private final consumption expenditure.....	3,787,901	4,272,830	4,907,347	5,637,043	6,162,336
Final consumption expenditure by NPISH.....	43,552	43,709	47,726	52,191	61,877
Gross fixed capital formation.....	976,086	1,236,107	1,358,366	1,237,818	1,461,256
Changes in inventories.....	-22,059	-24,203	-9,406	6,288	32,286
Gross domestic expenditure	5,465,356	6,293,226	7,189,326	7,889,689	8,822,999
Exports of goods and services.....	945,478	988,521	1,042,700	1,005,110	1,079,589
Imports of goods and services.....	1,575,731	1,782,945	1,735,621	1,638,838	1,973,678
Discrepancy ¹	-89,959	-96,392	-212,220	-61,815	-179,484
Gross domestic product at market prices	4,745,143	5,402,410	6,284,185	7,194,147	7,749,426

¹ Difference between GDP production approach and GDP expenditure approach

² Non Profit Institutions Serving Households

⁺ Provisional

^{*} Revised

Table 2.8: Expenditure on the Gross Domestic Product, 2013-2017

Expenditure category	Percentage contribution to GDP				
	2013	2014	2015 ⁺	2016 ⁺	2017 [*]
Government final consumption expenditure.....	14.3	14.2	14.1	13.3	14.3
Private final consumption expenditure.....	79.8	79.1	78.1	78.4	79.5
Final consumption expenditure by NPISH.....	0.9	0.8	0.8	0.7	0.8
Gross fixed capital formation.....	20.6	22.9	21.6	17.2	18.9
Changes in inventories.....	-0.5	-0.4	-0.1	0.1	0.4
Gross domestic expenditure	115.2	116.5	114.4	109.7	113.9
Exports of goods and services.....	19.9	18.3	16.6	14.0	13.9
Imports of goods and services.....	33.2	33.0	27.6	22.8	25.5
Discrepancy.....	-1.9	-1.8	-3.4	-0.9	-2.3
Gross domestic product at market prices	100.0	100.0	100.0	100.0	100.0

⁺ Provisional

^{*} Revised

2.23. Components of expenditure on GDP valued at constant prices are presented in Table 2.9. The growth of gross domestic expenditure increased more than three-fold from 2.5 per cent in 2016 to 7.8 per cent in 2017. Private consumption expenditure recorded the highest growth since 2013 (7.0%) in 2017, while government consumption grew slower by 0.1 percentage points. The value of export of goods and services contracted further by 6.2 per cent while that of imports rallied from a contraction of 6.3 per cent to grow by 8.4 per cent mainly due to recovery of the international oil prices.

Table 2.9: Expenditure on the Gross Domestic Product, 2013-2017

Expenditure category	Constant 2009 Prices - KSh Million				
	2013	2014	2015 ⁺	2016 ⁺	2017 ⁺
Government final consumption expenditure...	532,890	541,923	604,354	655,598	710,508
Private final consumption expenditure	2,824,756	2,946,395	3,099,387	3,244,554	3,470,673
Final consumption expenditure by NPISH.....	33,150	33,502	34,328	35,143	36,479
Gross fixed capital formation	725,143	828,131	882,677	800,038	850,356
Changes in inventories	-8,545	-33,774	-48,544	-47,767	-13,524
Gross domestic expenditure	4,107,394	4,316,176	4,572,203	4,687,565	5,054,491
Exports of goods and services	711,768	753,318	800,053	779,133	731,107
Imports of goods and services	1,132,058	1,249,558	1,264,204	1,184,866	1,284,063
Discrepancy ¹	-40,245	22,095	-46,150	18,470	8,856
Gross domestic product at market prices	3,646,858	3,842,032	4,061,901	4,300,302	4,510,391

¹ Difference between GDP production approach and GDP expenditure approach

⁺ Provisional

⁺ Revised

Table 2.10: Expenditure on the Gross Domestic Product, 2013-2017

Expenditure category	Percentage Changes (growth)				
	2013	2014	2015 ⁺	2016 ⁺	2017 ⁺
Government final consumption expenditure	6.1	1.7	11.5	8.5	8.4
Private final consumption expenditure	8.4	4.3	5.2	4.7	7.0
Final consumption expenditure by NPISH.....	3.5	1.1	2.5	2.4	3.8
Gross fixed capital formation	2.1	14.2	6.6	-9.4	6.3
Gross domestic expenditure	6.4	5.1	5.9	2.5	7.8
Exports of goods and services	-2.2	5.8	6.2	-2.6	-6.2
Imports of goods and services	-0.4	10.4	1.2	-6.3	8.4
Gross domestic product at market prices	5.9	5.4	5.7	5.9	4.9

⁺ Provisional

⁺ Revised

2.24. Table 2.11a provides details of the value of additions to fixed assets by type at current prices from 2013 to 2017. Table 2.11b shows the shares of the various types of fixed assets during the period under review. The value of additions to fixed assets increased from KSh 1,237.8 billion in 2016 to KSh 1,461.3 billion in 2017. The value of dwellings, buildings, and other machinery and equipment accounted for 23.3, 22.2 and 17.8 per cent of total Gross Fixed Capital Formation (GFCF), respectively in 2017.

Table 2.11a: Gross Fixed Capital Formation, 2013-2017

Type of Asset	Current Prices - KSh Million				
	2013	2014	2015 ⁺	2016 ⁺	2017 ⁺
Dwellings	197,336	231,539	257,322	270,289	340,606
Buildings other than dwellings	195,630	224,904	245,175	261,591	324,520
Other structures	109,016	133,706	180,304	166,166	173,207
Transport equipment	182,236	298,121	302,856	175,507	215,455
ICT equipment	63,247	57,896	73,407	79,052	93,806
Other machinery and equipment	190,000	249,141	251,648	232,368	259,475
Animal resources yielding repeat products	9,407	9,674	10,438	11,373	9,261
Tree, crop and plant resources yielding repeat products	6,832	6,322	6,616	6,973	7,362
Intellectual property products	22,382	24,804	30,601	34,500	37,564
Total	976,086	1,236,107	1,358,366	1,237,818	1,461,256

⁺ Provisional

⁺ Revised

Table 2.11b: Gross Fixed Capital Formation, 2013-2017

Type of Asset	Percentage Contribution				
	2013	2014	2015*	2016*	2017*
Dwellings.....	20.2	18.7	18.9	21.8	23.3
Buildings other than dwellings.....	20.0	18.2	18.0	21.1	22.2
Other structures.....	11.2	10.8	13.3	13.4	11.9
Transport equipment.....	18.7	24.1	22.3	14.2	14.7
ICT equipment.....	6.5	4.7	5.4	6.4	6.4
Other machinery and equipment.....	19.5	20.2	18.5	18.8	17.8
Animal resources yielding repeat products.....	1.0	0.8	0.8	0.9	0.6
Tree crop and plant resources yielding repeat products..	0.7	0.5	0.5	0.6	0.5
Intellectual property products.....	2.3	2.0	2.3	2.8	2.6
Total	100.0	100.0	100.0	100.0	100.0

* Provisional

+ Revised

2.25. Tables 2.12a and 2.12b present the values of real GFCF by type of asset and the corresponding growth rates for the period 2013 - 2017. The total value of real GFCF increased by 6.3 per cent in 2017 compared to a contraction of 9.4 per cent in 2016. The rebound was mainly as a result of a substantial growth in additions to transport equipment during the review period. The value of additions to dwellings and other buildings other than dwellings, grew by 15.8 and 13.6 per cent, respectively, in 2017.

Table 2.12a: Gross Fixed Capital Formation, 2013-2017

Type of Asset	Constant 2009 Prices - KSh Million				
	2013	2014	2015*	2016*	2017*
Dwellings.....	156,739	172,082	188,006	189,862	219,767
Buildings other than dwellings.....	156,352	170,332	182,275	187,856	213,368
Other structures.....	87,128	101,263	134,046	119,328	113,881
Transport equipment.....	140,838	225,839	218,525	123,997	147,783
ICT equipment.....	47,791	36,357	34,521	47,412	48,425
Other machinery and equipment.....	106,167	90,862	89,126	91,804	66,296
Animal resources yielding repeat products.....	6,173	5,944	6,104	6,509	5,171
Tree crop and plant resources yielding repeat products...	5,607	4,971	5,047	5,162	5,283
Intellectual property products.....	18,348	20,480	25,027	28,107	30,382
Total	725,143	828,131	882,677	800,038	850,356

* Provisional

+ Revised

Table 2.12b: Gross Fixed Capital Formation, 2013-2017

Type of Asset	Percentage Changes (growth)				
	2013	2014	2015*	2016*	2017*
Dwellings.....	10.2	9.8	9.3	1.0	15.8
Buildings other than dwellings.....	12.0	8.9	7.0	3.1	13.6
Other structures.....	1.6	16.2	32.4	-11.0	-4.6
Transport equipment.....	3.0	60.4	-3.2	-43.3	19.2
ICT equipment.....	-5.8	-23.9	-5.1	37.3	2.1
Other machinery and equipment.....	-15.0	-14.4	-1.9	3.0	-27.8
Animal resources yielding repeat products.....	5.0	-3.7	2.7	6.6	-20.6
Tree crop and plant resources yielding repeat products..	2.6	-11.3	1.5	2.3	2.4
Intellectual property products.....	-2.4	11.6	22.2	12.3	8.1
Total	2.1	14.2	6.6	-9.4	6.3

* Provisional

+ Revised

2.26. The relationship between the GDP and Gross National Income (GNI) for the period 2013 to 2017 is shown in Table 2.13 and Table 2.14. The nominal GNI increased from KSh 7,124.7 billion in 2016 to 7,664.6 billion in 2017. Similarly, the Gross National Disposable Income (GNDI) grew by 9.0 per cent from KSh billion 7,452.6 billion in 2016 to KSh 8,124.6 billion in 2017. Gross domestic product per capita rose from KSh 158,576 in 2016 to KSh 166,315 in 2017 while GNI per capita increased by 4.9 per cent to stand at KSh 164,494 in 2017. Primary incomes receivable from the rest of the world declined from KSh 44.0 billion in 2016 to KSh 41.2 billion in 2017. Current transfers receivable from the rest of the world increased significantly to stand at KSh 465.8 billion in 2017.

Table 2.13: Gross Domestic Product and Gross National Income, 2013-2017

	Current Prices - KSh Million				
	2013	2014	2015 ⁺	2016 ⁺	2017 [*]
Current Prices, KSh Million					
Compensation of employees.....	1,444,135	1,674,092	1,881,911	2,048,654	2,314,567
Consumption of fixed capital.....	561,868	730,422	815,724	861,559	995,876
Net operating surplus.....	2,257,907	2,478,256	3,027,945	3,675,444	3,775,577
Taxes on products.....	481,179	519,878	558,605	608,489	663,406
Gross domestic product at market prices..	4,745,090	5,402,647	6,284,185	7,194,147	7,749,426
Primary incomes					
Receivable from the rest of the world.....	28,712	43,643	48,298	43,991	41,208
Payable to rest of the world.....	-80,384	-119,981	-115,459	-113,407	-126,038
Gross national income at market prices...	4,693,419	5,326,310	6,217,024	7,124,731	7,664,596
Current transfers					
Receivable from the rest of the world.....	268,925	327,853	345,218	333,039	465,763
Payable to rest of the world.....	-4,020	-17,853	-6,217	-5,192	-5,787
Gross national disposable income.....	4,958,324	5,636,310	6,556,024	7,452,578	8,124,571
Per capita, KSh					
Gross domestic product at market prices.....	113,539	125,756	142,316	158,576	166,315
Gross national income at market prices.....	112,303	123,980	140,795	157,046	164,494
Constant prices					
GDP at market prices, KSh Million.....	3,646,858	3,842,032	4,061,901	4,300,302	4,510,391
Per capita.....	87,261	89,430	91,989	94,789	96,800
- Annual percentage change.....	3.0	2.5	2.9	3.0	2.1

* Provisional

+ Revised

Table 2.14: National Disposable Income and Saving, 2013-2017

	Current Prices - KSh Million				
	2013	2014	2015 [*]	2016 [*]	2017 [*]
Gross national disposable income.....	4,958,324	5,636,310	6,556,024	7,452,578	8,124,571
Consumption of fixed capital.....	561,868	730,422	815,724	861,559	995,876
Net national disposable income.....	4,396,455	4,905,889	5,740,300	6,591,019	7,128,694
Final consumption expenditure.....	4,511,328	5,081,322	5,840,366	6,645,583	7,329,456
Private	3,787,901	4,272,830	4,907,347	5,637,043	6,162,336
Non-Profit Institutions Serving Households.....	43,552	43,709	47,726	52,191	61,877
General government.....	679,876	764,783	885,293	956,349	1,105,243
Saving, net.....	-114,873	-175,434	-100,065	-54,564	-200,762
Financing of capital formation					
Saving, net.....	-114,873	-175,434	-100,065	-54,564	-200,762
Capital transfers from abroad, net.....	13,644	24,204	25,219	20,878	19,046
Total.....	-101,229	-151,230	-74,846	-33,686	-181,716
Gross fixed capital formation.....	976,086	1,236,107	1,358,366	1,237,818	1,461,256
Consumption of fixed capital.....	-561,868	-730,422	-815,724	-861,559	-995,876
Changes in inventories.....	-22,059	-24,203	-9,406	6,288	32,286
Net lending (+) / Net borrowing(-).....	-493,388	-632,712	-608,083	-416,233	-679,382
Total.....	-101,229	-151,230	-74,846	-33,686	-181,716

* Provisional

Table 2.15 Gross Domestic Product by Activity

Current prices – KSh million

Year	Quarter	Agriculture	Mining and quarrying	Manufacturing	Electricity and water supply	Construction	Wholesale and retail trade	Accommodation & Food services	Transport and storage	Information and communication	Financial & insurance
2013		1,254,760	40,742	506,612	94,343	213,565	380,646	58,037	378,525	68,478	313,120
2014		1,483,077	44,936	537,999	97,292	262,090	431,985	49,151	462,457	65,592	366,764
2015		1,897,347	54,584	588,896	136,172	307,563	473,395	49,356	510,488	91,200	423,956
2016		2,311,862	59,130	653,839	181,983	360,806	524,303	51,565	561,757	103,807	505,331
2017		2,442,371	58,459	648,397	196,697	452,439	588,540	60,824	599,438	109,388	577,824
2013	1	365,691	11,201	128,498	23,797	52,695	84,341	17,298	81,872	17,938	67,686
	2	337,137	8,747	120,997	24,606	53,364	94,698	12,896	90,388	15,253	79,135
	3	280,422	11,541	127,584	22,987	55,686	106,978	15,299	96,674	14,877	79,994
	4	271,511	9,252	129,533	22,953	51,820	94,628	12,544	109,592	20,410	86,305
2014	1	436,992	12,620	137,265	19,600	56,848	101,617	14,694	96,188	16,681	86,427
	2	385,837	9,945	134,877	23,663	67,642	106,012	10,466	114,294	14,934	92,478
	3	350,835	10,462	133,898	28,545	67,304	117,757	11,529	122,293	15,286	85,762
	4	309,413	11,908	131,959	25,484	70,297	106,599	12,463	129,683	18,691	102,097
2015 ⁺	1	534,251	15,604	148,868	26,572	69,183	110,838	13,485	115,942	20,172	96,870
	2	518,388	12,537	149,262	31,521	75,824	116,716	10,604	122,489	19,429	102,063
	3	454,375	14,275	149,826	37,739	77,348	130,084	12,404	131,738	21,572	104,330
	4	390,332	12,167	140,940	40,340	85,208	115,757	12,862	140,319	30,027	120,692
2016 ⁺	1	577,774	14,529	161,606	37,184	78,403	116,736	12,567	112,130	25,341	113,724
	2	701,637	13,905	172,116	51,447	90,615	124,101	10,568	142,533	22,908	122,895
	3	613,867	13,993	169,047	47,428	94,549	147,957	13,743	150,568	23,566	125,528
	4	418,584	16,702	151,070	45,925	97,238	135,509	14,687	156,526	31,992	143,184
2017*	1	665,443	15,104	165,016	43,492	96,481	132,948	15,431	121,809	27,383	146,766
	2	744,884	13,737	170,440	56,228	113,232	143,157	12,364	153,464	24,368	132,470
	3	628,474	14,841	164,344	53,152	114,906	167,613	16,095	155,027	24,689	151,903
	4	403,570	14,778	148,597	43,826	127,819	144,822	16,935	169,137	32,948	146,684

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* Provisional

Table 2.15: Gross Domestic Product by Activity (Cont'd)

Current prices – KSh million												
Year	Quarter	Public administration	Professional, administrative and support services	Real estate	Education	Health	Other services	FISIM	All indust. at basic prices	Taxes on products	GDP at market prices	GDP, seasonally adjusted
2013		208,647	105,661	375,588	251,958	75,157	62,206	-124,136	4,263,911	481,179	4,745,090	
2014		243,526	113,059	417,829	279,543	91,969	70,086	-134,588	4,882,769	519,878	5,402,647	
2015		267,645	119,662	474,318	308,128	108,023	78,155	-163,306	5,725,580	558,605	6,284,185	
2016		299,005	128,759	532,121	308,135	119,561	84,361	-200,667	6,585,658	608,489	7,194,147	
2017		330,899	137,245	575,347	319,445	126,311	91,314	-228,918	7,086,020	663,406	7,749,426	
2013	1	51,716	24,352	90,941	64,702	17,158	14,810	-28,042	1,086,656	111,189	1,197,844	1,139,995
	2	54,629	25,276	92,477	61,941	18,642	15,088	-31,652	1,073,623	119,263	1,192,885	1,175,187
	3	51,475	27,084	94,832	62,337	18,736	15,760	-31,209	1,051,057	130,947	1,182,005	1,203,734
	4	50,827	28,949	97,339	62,978	20,621	16,549	-33,234	1,052,575	119,781	1,172,356	1,236,981
2014	1	59,526	25,433	100,053	73,210	19,926	16,711	-31,803	1,241,987	120,003	1,361,990	1,301,203
	2	64,979	26,922	103,610	69,185	23,211	17,056	-34,101	1,231,010	132,308	1,363,319	1,330,466
	3	56,852	29,301	106,168	67,468	23,397	17,547	-31,145	1,213,259	138,105	1,351,363	1,361,689
	4	62,169	31,404	107,998	69,681	25,435	18,772	-37,540	1,196,513	129,462	1,325,976	1,419,898
2015 ⁺	1	61,683	28,113	112,056	82,563	23,440	18,846	-34,843	1,443,642	127,014	1,570,656	1,514,901
	2	73,267	28,819	116,345	77,718	27,581	19,136	-40,989	1,460,712	140,750	1,601,461	1,542,708
	3	63,165	30,578	120,970	75,114	27,553	19,963	-38,017	1,433,017	147,973	1,580,991	1,575,647
	4	69,530	32,151	124,947	72,733	29,449	20,211	-49,457	1,388,209	142,868	1,531,077	1,662,375
2016 ⁺	1	66,894	30,119	123,770	84,690	25,958	20,471	-45,019	1,556,875	136,367	1,693,242	1,653,028
	2	81,395	31,436	133,444	78,466	30,817	20,586	-50,732	1,778,138	150,612	1,928,749	1,833,652
	3	72,148	32,630	135,903	74,695	31,093	21,532	-49,648	1,718,600	164,502	1,883,102	1,856,008
	4	78,568	34,574	139,004	70,285	31,693	21,772	-55,268	1,532,046	157,008	1,689,054	1,859,769
2017 ⁺	1	71,561	31,713	141,524	82,025	28,374	22,579	-56,150	1,751,498	157,273	1,908,772	1,882,397
	2	85,747	34,048	142,942	80,606	32,548	22,436	-48,315	1,914,354	160,721	2,075,075	1,948,951
	3	82,706	34,341	143,829	79,280	32,175	23,185	-61,944	1,824,615	179,536	2,004,152	1,961,260
	4	90,885	37,143	147,052	77,534	33,215	23,115	-62,508	1,595,552	165,875	1,761,427	1,962,885

+ Revised
Provisional

Economic Survey 2018

Table 2.16 Gross Domestic Product by Activity

Constant 2009 Prices –KSh Million

Year	Quarter	Agriculture	Mining and quarrying	Manufacturing	Electricity & water supply	Construction	Wholesale and retail trade	Accommodation & Food Services	Transport and storage	Information and communication	Financial & insurance
2013		818,989	32,405	403,128	86,961	164,220	275,291	52,441	241,112	121,890	212,185
2014		854,753	37,235	413,281	92,287	185,696	294,357	43,657	254,358	139,623	229,819
2015		900,421	41,809	428,153	100,153	211,314	311,746	43,086	274,755	149,969	251,442
2016		942,761	45,770	439,665	108,499	232,111	322,468	48,803	296,145	164,530	268,198
2017		957,926	48,573	440,478	114,564	252,017	340,812	55,986	317,791	182,595	276,506
2013	1	247,605	9,243	102,483	21,106	39,810	63,479	16,318	53,589	29,516	51,666
	2	225,683	6,752	98,321	22,112	40,543	69,125	10,857	58,508	26,194	52,662
	3	174,456	8,754	100,552	21,694	42,883	76,603	13,504	61,356	26,880	53,531
	4	171,245	7,656	101,772	22,048	40,985	66,084	11,762	67,659	39,300	54,326
2014	1	258,061	10,328	107,565	21,913	42,844	69,357	13,255	55,497	33,400	55,414
	2	235,675	8,559	105,381	23,137	47,230	72,442	8,222	61,810	28,658	56,443
	3	186,756	8,875	101,099	23,347	46,631	80,704	10,060	66,670	31,939	58,071
	4	174,261	9,473	99,237	23,891	48,991	71,853	12,120	70,381	45,626	59,891
2015 ⁺	1	278,211	11,240	110,684	24,065	48,368	73,194	11,878	60,080	36,374	60,965
	2	246,081	9,728	108,579	25,884	52,970	75,913	8,075	67,350	31,030	61,331
	3	194,154	10,521	105,798	25,483	54,538	86,328	10,146	73,542	33,838	64,909
	4	181,974	10,320	103,091	24,722	55,438	76,311	12,987	73,782	48,726	64,238
2016 ⁺	1	290,385	11,988	112,038	26,604	52,802	75,735	12,781	65,376	40,227	66,309
	2	264,760	10,755	113,533	28,926	56,778	77,533	9,168	71,981	33,782	66,534
	3	203,320	11,549	109,553	27,179	59,879	89,564	11,509	77,576	36,820	69,280
	4	184,296	11,479	104,540	25,789	62,651	79,636	15,344	81,212	53,701	66,075
2017 [*]	1	293,880	12,861	113,394	28,226	57,155	79,399	14,901	71,540	45,264	69,838
	2	267,693	11,362	113,376	30,667	62,178	81,729	10,595	77,733	37,441	68,849
	3	211,044	12,214	109,562	28,392	63,222	95,130	13,294	81,619	40,743	70,216
	4	185,309	12,136	104,146	27,279	69,461	84,553	17,196	86,900	59,147	67,604

+ Revised

* Provisional

Table 2.16: Gross Domestic Product by Activity (Cont'd)

Constant 2009 Prices – KSh Million

Year	Quarter	Public administration	Professional, admin and support services	Real estate	Education	Health	Other services	FISIM	All indust. at basic prices	Taxes on products	GDP at market prices	GDP, seasonally adjusted
2013		141,678	87,312	294,747	249,001	63,579	47,891	-86,932	3,205,897	440,924	3,646,821	
2014		149,556	90,073	311,148	268,359	68,728	49,905	-96,763	3,386,075	456,111	3,842,186	
2015		157,834	92,301	333,537	281,542	72,745	51,827	-109,826	3,592,808	469,093	4,061,901	
2016		165,400	96,880	362,724	296,667	76,203	53,964	-112,162	3,808,627	491,676	4,300,302	
2017		174,112	100,786	384,955	314,637	80,745	56,657	-105,734	3,993,407	516,984	4,510,391	
2013	1	36,175	20,342	72,476	61,552	14,849	11,652	-21,267	830,593	103,755	934,348	899,066
	2	35,711	20,966	73,220	61,948	16,249	11,739	-21,350	809,239	108,351	917,590	908,178
	3	36,636	22,390	74,057	62,680	15,954	12,065	-21,892	782,102	120,259	902,361	918,941
	4	33,156	23,615	74,994	62,821	16,528	12,434	-22,423	783,963	108,560	892,522	926,918
2014	1	37,954	20,488	76,009	67,065	15,529	12,270	-22,980	873,970	108,947	982,917	940,126
	2	40,292	21,459	77,290	67,292	17,535	12,284	-23,650	860,057	112,704	972,761	958,687
	3	34,222	23,288	78,813	67,179	17,355	12,417	-24,702	822,725	121,362	944,087	968,312
	4	37,088	24,839	79,036	66,823	18,310	12,934	-25,431	829,324	113,098	942,421	980,207
2015 ⁺	1	37,435	21,928	80,827	69,978	16,329	12,735	-25,982	928,309	110,959	1,039,268	996,445
	2	43,972	22,325	82,645	70,408	18,610	12,754	-26,696	910,959	115,715	1,026,674	1,008,599
	3	37,235	23,450	84,294	70,508	18,429	13,167	-27,829	878,509	122,957	1,001,467	1,025,663
	4	39,193	24,598	85,772	70,648	19,376	13,171	-29,319	875,031	119,462	994,493	1,040,733
2016 ⁺	1	39,469	22,735	88,429	74,295	17,003	13,247	-28,529	980,894	114,043	1,094,937	1,055,019
	2	46,702	23,682	89,856	74,397	19,573	13,236	-28,284	972,915	118,570	1,091,485	1,069,985
	3	38,916	24,527	91,398	74,543	19,507	13,729	-27,954	930,895	127,818	1,058,713	1,080,074
	4	40,314	25,935	93,040	73,433	20,120	13,752	-27,395	923,923	131,245	1,055,168	1,092,878
2017 [*]	1	41,214	23,522	94,758	78,812	17,798	14,119	-28,160	1,028,521	119,925	1,148,446	1,108,675
	2	49,167	25,074	96,032	78,687	20,880	13,930	-26,254	1,019,141	125,987	1,145,128	1,121,461
	3	40,896	25,163	96,873	78,594	20,705	14,352	-26,206	975,812	132,933	1,108,744	1,130,515
	4	42,835	27,026	97,292	78,544	21,361	14,257	-25,114	969,933	138,140	1,108,073	1,144,779

+ Revised

* Provisional

Table 2.17: Growth rate of Gross Domestic Product by Activity

Constant 2009 Prices – Per cent

Year	Quarter	Agriculture	Mining and quarrying	Manufacturing	Electricity and water supply	Construction	Wholesale and retail trade	Accommodation & restaurant	Transport and storage	Information and communication	Financial & insurance
2013		5.4	-4.2	5.6	6.6	6.1	8.4	-4.6	1.3	12.5	8.2
2014		4.4	14.9	2.5	6.1	13.1	6.9	-16.7	5.5	14.5	8.3
2015		5.3	12.3	3.6	8.5	13.8	5.9	-1.3	8.0	7.4	9.4
2016		4.7	9.5	2.7	8.3	9.8	3.4	13.3	7.8	9.7	6.7
2017		1.6	6.1	0.2	5.6	8.6	5.7	14.7	7.3	11.0	3.1
2013	1	5.3	16.9	9.6	5.6	9.4	15.7	-19.6	-8.7	15.0	10.7
	2	6.8	-20.1	7.5	10.4	9.8	11.3	1.2	1.1	11.6	10.0
	3	5.8	0.4	5.3	7.0	9.3	5.7	12.4	2.8	12.6	7.1
	4	3.6	-12.6	0.4	3.7	-2.9	2.5	-1.3	9.7	11.3	5.2
2014	1	4.2	11.7	5.0	3.8	7.6	9.3	-18.8	3.6	13.2	7.3
	2	4.4	26.8	7.2	4.6	16.5	4.8	-24.3	5.6	9.4	7.2
	3	7.1	1.4	0.5	7.6	8.7	5.4	-25.5	8.7	18.8	8.5
	4	1.8	23.7	-2.5	8.4	19.5	8.7	3.0	4.0	16.1	10.2
2015	1	7.8	8.8	2.9	9.8	12.9	5.5	-10.4	8.3	8.9	10.0
	2	4.4	13.7	3.0	11.9	12.2	4.8	-1.8	9.0	8.3	8.7
	3	4.0	18.5	4.6	9.1	17.0	7.0	0.8	10.3	5.9	11.8
	4	4.4	8.9	3.9	3.5	13.2	6.2	7.2	4.8	6.8	7.3
2016 ⁺	1	4.4	6.6	1.2	10.6	9.2	3.5	7.6	8.8	10.6	8.8
	2	7.6	10.6	4.6	11.8	7.2	2.1	13.5	6.9	8.9	8.5
	3	4.7	9.8	3.5	6.7	9.8	3.7	13.4	5.5	8.8	6.7
	4	1.3	11.2	1.4	4.3	13.0	4.4	18.1	10.1	10.2	2.9
2017 [*]	1	1.2	7.3	1.2	6.1	8.2	4.8	16.6	9.4	12.5	5.3
	2	1.1	5.6	-0.1	6.0	9.5	5.4	15.6	8.0	10.8	3.5
	3	3.8	5.8	0.0	4.5	5.6	6.2	15.5	5.2	10.7	1.4
	4	0.5	5.7	-0.4	5.8	10.9	6.2	12.1	7.0	10.1	2.3

+ Revised

* Provisional

Table 2.17: Growth rate of Gross Domestic Product by Activity (Cont'd)

Constant 2009 prices – Per cent

Year	Quarter	Public administration	Professional, admin and support services	Real estate	Education	Health	Other services	FISIM	All indust. at basic prices	Taxes on products	GDP at market prices	GDP, seasonally adjusted
2013		2.8	3.6	4.1	6.3	7.7	4.6	5.2	5.4	9.5	5.9	
2014		5.6	3.2	5.6	7.8	8.1	4.2	11.3	5.6	3.4	5.4	
2015		5.5	2.5	7.2	4.9	5.8	3.9	13.5	6.1	2.8	5.7	
2016		4.8	5.0	8.8	5.4	4.8	4.1	2.1	6.0	4.8	5.9	
2017		5.3	4.0	6.1	6.1	6.0	5.0	-5.7	4.9	5.1	4.9	
2013	1	3.6	7.9	3.8	6.6	-1.9	3.2	9.9	5.5	11.3	6.1	1.5
	2	3.8	6.2	3.9	8.1	9.7	4.9	6.4	6.8	13.6	7.5	1.0
	3	7.1	1.4	4.2	5.4	8.5	4.0	2.4	5.9	10.0	6.4	1.2
	4	-3.4	0.0	4.6	5.3	15.0	6.1	2.6	3.5	3.4	3.5	0.9
2014	1	4.9	0.7	4.9	9.0	4.6	5.3	8.1	5.2	5.0	5.2	1.4
	2	12.8	2.4	5.6	8.6	7.9	4.6	10.8	6.3	4.0	6.0	2.0
	3	-6.6	4.0	6.4	7.2	8.8	2.9	12.8	5.2	0.9	4.6	1.0
	4	11.9	5.2	5.4	6.4	10.8	4.0	13.4	5.8	4.2	5.6	1.2
2015 ⁺	1	-1.4	7.0	6.3	4.3	5.2	3.8	13.1	6.2	1.8	5.7	1.7
	2	9.1	4.0	6.9	4.6	6.1	3.8	12.9	5.9	2.7	5.5	1.2
	3	8.8	0.7	7.0	5.0	6.2	6.0	12.7	6.8	1.3	6.1	1.7
	4	5.7	-1.0	8.5	5.7	5.8	1.8	15.3	5.5	5.6	5.5	1.5
2016 ⁺	1	5.4	3.7	9.4	6.2	4.1	4.0	9.8	5.7	2.8	5.4	1.4
	2	6.2	6.1	8.7	5.7	5.2	3.8	5.9	6.8	2.5	6.3	1.4
	3	4.5	4.6	8.4	5.7	5.9	4.3	0.4	6.0	4.0	5.7	0.9
	4	2.9	5.4	8.5	3.9	3.8	4.4	-6.6	5.6	9.9	6.1	1.2
2017 [*]	1	4.4	3.5	7.2	6.1	4.7	6.6	-1.3	4.9	5.2	4.9	1.4
	2	5.3	5.9	6.9	5.8	6.7	5.2	-7.2	4.8	6.3	4.9	1.2
	3	5.1	2.6	6.0	5.4	6.1	4.5	-6.3	4.8	4.0	4.7	0.8
	4	6.3	4.2	4.6	7.0	6.2	3.7	-8.3	5.0	5.3	5.0	1.3

+ Revised

* Provisional

Employment, Earnings and Consumer Prices

Overview

This chapter presents analysis of the labour market over a five year period. During this period, the Government adopted strategies to create employment opportunities which include implementation of programmes for the youth, women and the persons with disabilities. These programmes include reservation of thirty per cent of all Government procurement opportunities for women, youth and persons with disabilities, devolution of some services and functions to counties coupled with increased resource allocation to the devolved units. This increased economic activities thereby impacting positively on employment creation.

3.2. Majority of the sectors recorded improved performance in employment in 2017. In total, there were 16.9 million jobs in 2017. The nominal annual average earnings in the modern sector per person increased from KSh 645,035.2 in 2016 to KSh 684,097.0 in 2017. Inflation as measured by Consumer Price Index increased from 6.3 per cent recorded in 2016 to 8.0 per cent in 2017. However, annual real average earnings per person decreased from KSh 379,968.9 to KSh 369,004.3 over the same period.

Employment 3.3. As indicated in Table 3.1, the number of persons engaged, excluding those engaged in rural small scale agriculture and pastoralist activities, rose by 5.6 per cent from 16.0 million in 2016 to 16.9 million in 2017. The number of new jobs created in the modern sector were 110.0 thousand in 2017 compared to 84.8 thousand jobs created in 2016. The new jobs included the extra personnel engaged in the public sector to serve in the Independent Electoral and Boundaries Commission (IEBC) and recruitment in the essential services which include health, education and security services. The informal sector which constituted 83.4 per cent of the total employment, created 787.8 thousand new jobs in 2017 as shown in Figure 3.1. The total number of self-employed and unpaid family workers within the modern sector was estimated to have increased from 132.5 thousand in 2016 to 139.4 thousand in 2017. The new jobs from the self-employed category could be attributed to business start ups by women and youth due to the ease in accessing low cost credit from government programmes such as the Uwezo Fund.

Table 3.1: Recorded Employment¹, 2013 - 2017

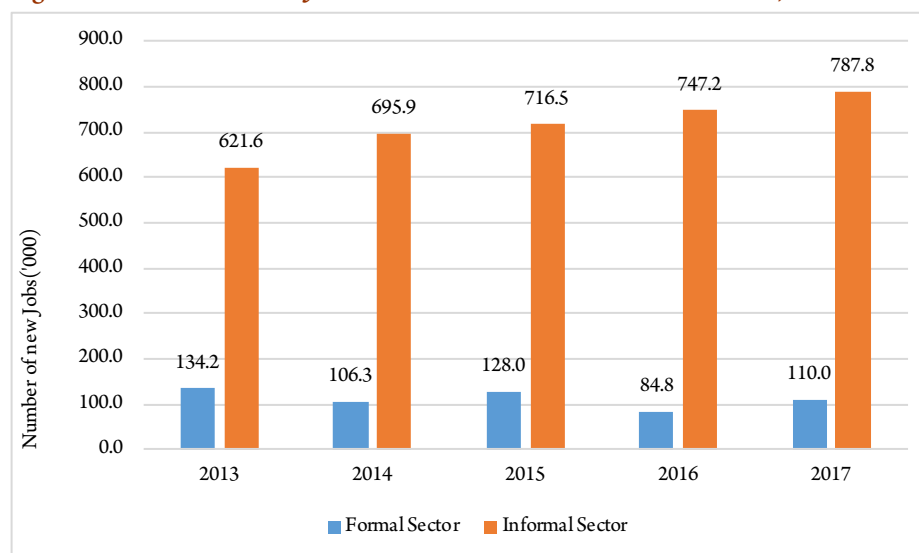
	'000				
	2013	2014	2015	2016	2017*
Modern Establishments					
Wage Employees	2,283.1	2,370.2	2,478.0	2,553.5	2,656.6
Self-employed and unpaid family workers	83.8	103.0	123.2	132.5	139.4
Sub -Total	2,366.9	2,473.2	2,601.2	2,686.0	2,796.0
Informal Sector ²	11,150.1	11,846.0	12,562.4	13,309.7	14,097.5
TOTAL	13,517.0	14,319.2	15,163.6	15,995.7	16,893.5

* Provisional

¹ Refers to employment stock as at 30th June and excludes small scale farming and pastoralist activities.

² Estimated

Figure 3.1: Number of New Jobs Created in Formal and Informal Sectors, 2013 – 2017



Formal Sector Employment

3.4. Analysis of wage employment in the modern sector by industry and sector from 2013 to 2017 is presented in Table 3.2. Overall wage employment in the modern sector increased by 4.0 per cent in 2017, which was higher than the 3.0 per cent growth registered in 2016.

3.5. **Private sector:** The wage employment in the private sector increased by 2.7 per cent to 1.9 million persons in 2017. However, the contribution of employment by the sector to formal sector employment declined slightly from 71.2 per cent in 2016 to 70.3 per cent in 2017. The private sector created 49.2 thousand new jobs compared to 57.6 thousand jobs created in 2016. During the period under review, employment in the Education sector grew by 7.7 per cent in 2017, and created 15.2 thousand new jobs.

3.6. Agriculture, forestry and fishing; Manufacturing and; Wholesale and retail trade and repair of motor vehicles and motor cycles industries contributed the highest wage employment with a share of 15.5, 14.8 and 13.4 per cent of the total private sector employment, respectively. Wholesale and retail trade; repair of motor vehicles and motorcycles sector registered 10.8 thousand new jobs. However, wage employment in the Agriculture, forestry and Fishing declined by 1.6 per cent. Similarly, wage employment in the Financial and insurance activities; and Mining and quarrying Service activities declined by 2.3 per cent and 1.4 per cent, respectively in the review period.

3.7. **Public sector:** Total employment in the public sector increased from 736.3 thousand persons in 2016 to 790.2 thousand persons in 2017, an increase of 7.3 per cent. This was an improvement compared to the 2.5 per cent increase realized in 2016. Public administration and defence; and Education were some of the activities that generated significant wage employment within the Public Sector with 49.1 thousand and 11.9 thousand jobs created in 2017. Human health and social work activities sector also registered 4.9 thousand new job opportunities over the same period.

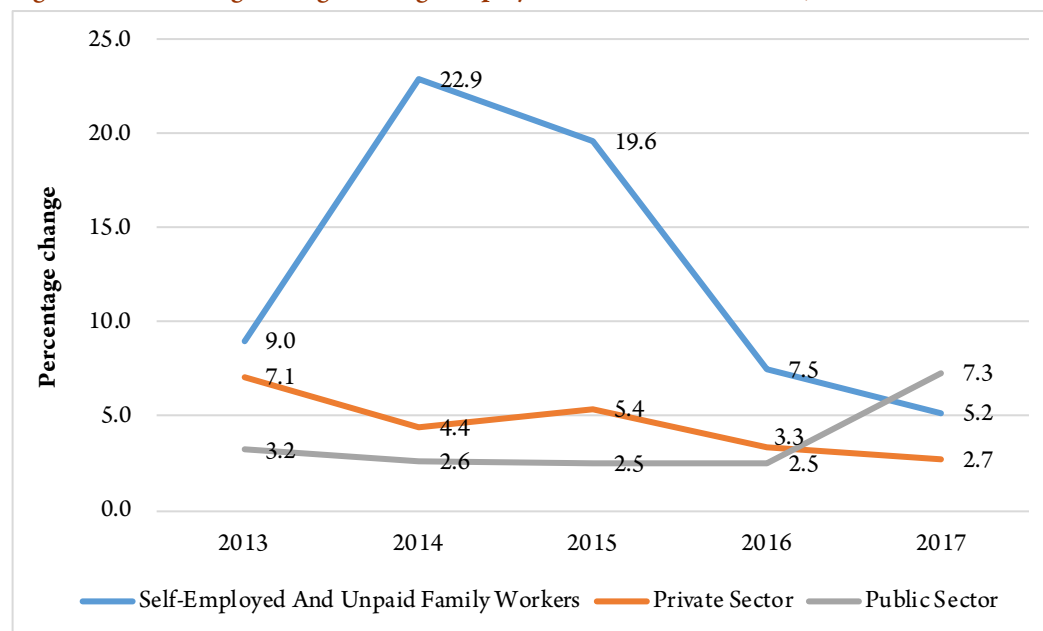
Table 3.2: Wage Employment by Industry and Sector, 2013 – 2017

	'000					
	2013	2014	2015	2016	2017*	Percentage change
PRIVATE SECTOR:						
Agriculture, forestry and fishing	299.9	290.6	294.0	294.5	289.8	-1.6
Mining and quarrying	8.7	12.2	13.8	14.6	14.4	-1.4
Manufacturing	253.4	261.3	269.0	274.3	276.9	0.9
Electricity, gas, steam and air conditioning supply	1.1	0.9	0.9	1.0	1.0	0.0
Water supply; sewerage, waste management and remediation activities	1.4	1.4	1.4	1.6	1.7	6.3
Construction	111.6	125.4	140.2	155.0	159.4	2.8
Wholesale and retail trade; repair of motor vehicles and motorcycles	210.9	218.9	230.7	238.5	249.3	4.5
Transportation and storage	58.8	62.1	64.8	67.8	68.9	1.6
Accommodation and food service activities	72.1	71.7	74.7	75.9	78.2	3.0
Information and communication	90.6	97.3	103.8	108.7	115.2	6.0
Financial and insurance activities	56.3	58.1	62.7	65.0	63.5	-2.3
Real estate activities	3.8	3.9	4.0	4.1	4.2	2.4
Professional, scientific and technical activities	59.4	60.7	62.6	64.8	67.6	4.3
Administrative and support service activities	4.8	4.9	5.2	5.4	5.8	7.4
Public administration and defence; compulsory social security	-	-	-	-	-	-
Education	142.5	166.8	189.1	196.9	212.1	7.7
Human health and social work activities	80.1	85.2	91.3	95.7	102.2	6.8
Arts, entertainment and recreation	4.3	4.3	4.5	4.6	4.8	4.3
Other service activities	29.2	30.5	31.7	33.2	34.7	4.5
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	109.8	112.1	114.1	114.4	115.4	0.9
Activities of extraterritorial organizations and bodies	1.1	1.1	1.1	1.2	1.3	8.3
TOTAL PRIVATE SECTOR	1,599.8	1,669.4	1,759.6	1,817.2	1,866.4	2.7
PUBLIC SECTOR:						
Agriculture, forestry and fishing	42.6	42.7	42.9	42.2	42.3	0.2
Mining and quarrying	0.7	0.6	0.6	0.6	0.6	0.0
Manufacturing	26.0	26.1	26.5	26.5	26.4	-0.4
Electricity, gas, steam and air conditioning supply	13.5	14.4	16.0	16.3	17.9	9.8
Water supply; sewerage, waste management and remediation activities	8.1	9.0	10.1	11.1	12.8	15.3
Construction	18.1	7.7	7.9	8.0	8.5	6.3
Wholesale and retail trade; repair of motor vehicles and motorcycles	1.3	1.3	1.3	1.3	1.5	15.4
Transportation and storage	17.2	17.6	17.8	18.0	19.0	5.6
Accommodation and food service activities	1.4	1.4	1.4	1.5	1.6	6.7
Information and communication	1.8	1.8	1.9	1.9	1.9	0.0
Financial and insurance activities	9.0	9.4	10.6	10.8	11.3	4.6
Real estate activities	-	-	-	-	-	-
Professional, scientific and technical activities	5.8	5.9	5.9	5.9	6.2	5.1
Administrative and support service activities	-	-	-	-	-	-
Public administration and defence; compulsory social security	222.4	227.0	222.0	231.3	262.4	13.4
Education	280.8	302.4	318.3	326.7	338.6	3.6
Human health and social work activities	32.2	31.1	32.7	31.9	36.8	15.4
Arts, entertainment and recreation	2.4	2.4	2.5	2.4	2.3	-4.2
Other service activities	-	-	-	-	-	-
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	-	-	-	-	-	-
Activities of extraterritorial organizations and bodies	-	-	-	-	-	-
TOTAL PUBLIC SECTOR	683.3	700.8	718.4	736.3	790.2	7.3
TOTAL WAGE EMPLOYMENT	2,283.1	2,370.2	2,478.0	2,553.5	2,656.6	4.0

* Provisional.

3.8. Wage employment in the Private Sector recorded a decelerated growth of 2.7 per cent in 2017 compared to a 3.3 per cent growth in 2016 as shown in Figure 3.2. Similarly, the number of new jobs created within self employment recorded a decelerated growth of 5.2 per cent from 7.5 per cent growth the previous year.

Figure 3.2: Percentage Changes in Wage Employment in the Formal Sector, 2013 – 2017



3.9. Table 3.3 presents wage employment in the public sector by type of employer from 2013 to 2017. Overall, employment in the public sector increased by 7.3 per cent in 2017 compared to a 2.5 per cent rise in 2016. Employment in parastatal bodies registered the highest rise of 16.5 per cent to 110.1 thousand persons in the review period. This was attributed to the extra personnel engaged by IEBC for the 2017 General Elections. Employment in the County governments continued to rise and reached 132.6 thousand persons in 2017. This increase was attributed to hiring of more personnel following the continued implementation of devolved functions such as Agricultural services, provision of healthcare and pre-primary education services. Teachers Service Commission (TSC), the largest employer in the public sector, registered a decelerated growth of 1.7 per cent in 2017 compared to an increase of 2.4 per cent in 2016. Employment in the Ministries, extra-budgetary institutions, and Corporations controlled by Government increased by 10.0 per cent and 3.4 per cent, respectively, in 2017. This increase was mainly due to recruitment in the essential services which include health, education and security services.

Table 3.3 Wage Employment in the Public Sector, 2013 – 2017

						'000
	2013	2014	2015	2016	2017*	Annual Percentage Change
Ministries and other extra-budgetary institutions ¹	179.0	180.9	177.7	179.7	197.6	10.0
Teachers Service Commission	272.5	281.7	290.7	297.8	302.9	1.7
Parastatal Bodies ²	92.5	93.5	94.2	94.5	110.1	16.5
Corporations controlled by the Government ³	44.5	45.0	45.3	45.4	47.0	3.5
County governments	94.7	99.6	110.5	118.9	132.6	11.5
TOTAL	683.3	700.8	718.4	736.3	790.2	7.3

* Provisional.

¹ Includes employees of Judiciary and Parliament.² Refers to Government wholly-owned corporations.³ Refers to institutions where the Government has over 50 per cent shares but does not wholly own them.

3.10. Table 3.4 presents wage employment by industry and sex for 2016 to 2017. The number of females in wage employment increased by 10.4 per cent to 970.8 thousands females and accounted for 36.5 per cent of the total wage employment. Majority of the female were employed in Education; Agriculture, forestry and fishing and, Public administration and defense; compulsory social security sectors contributing 27.1, 12.6 and 9.0 per cent of the total female employment, respectively. The number of males in the wage employment increased from 1,674.5 thousand to 1,685.8 thousand over the same period. The total number of casual employees was 647.4 thousand, with a proportional of 24.4 per cent to the total wage employment. Generally, female participation has shown an increasing trend across most sectors which could partly be attributed to the government's affirmative action on employment in public institutions.

Table 3.4: Wage Employment by Industry and Sex, 2016 and 2017

'000

INDUSTRY	Male		Female		Total	
	2016	2017*	2016	2017*	2016	2017*
Agriculture, forestry and fishing ..	225.1	210.1	111.6	122.0	336.7	332.1
Mining and quarrying ...	12.7	12.5	2.5	2.5	15.2	15.0
Manufacturing ...	252.1	241.3	48.7	62.0	300.8	303.3
Electricity, gas, steam and air conditioning supply ...	12.8	13.8	4.5	5.1	17.3	18.9
Water supply; sewerage, waste management and remediation activities...	9.9	10.9	2.8	3.6	12.7	14.5
Construction ...	114.9	115.3	48.1	52.6	163.0	167.9
Wholesale and retail trade; repair of motor vehicles and motorcycles...	185.6	183.0	54.2	67.8	239.8	250.8
Transportation and storage...	65.0	65.4	20.8	22.5	85.8	87.9
Accommodation and food service activities...	54.6	55.1	22.8	24.7	77.4	79.8
Information and communication ...	72.9	75.4	37.7	41.7	110.6	117.1
Financial and insurance activities...	47.6	46.0	28.2	28.8	75.8	74.8
Real estate activities...	3.1	3.2	1.0	1.0	4.1	4.2
Professional, scientific and technical activities...	51.4	52.4	19.3	21.4	70.7	73.8
Administrative and support service activities...	4.9	5.2	0.5	0.6	5.4	5.8
Public administration and defence; compulsory social security...	148.3	175.3	83.0	87.1	231.3	262.4
Education ...	275.1	288.1	248.5	262.7	523.6	550.8
Human health and social work activities...	61.3	58.8	66.3	80.2	127.6	139.0
Arts, entertainment and recreation ...	4.8	4.9	2.2	2.2	7.0	7.1
Other service activities...	22.9	22.7	10.3	12.0	33.2	34.7
Activities of households as employers; un differentiated goods- and services- producing activities of households for own use...	48.6	45.5	65.8	69.9	114.4	115.4
Activities of extraterritorial organizations and bodies...	0.9	0.9	0.3	0.4	1.2	1.3
TOTAL	1,674.5	1,685.8	879.1	970.8	2,553.6	2,656.6
Of which: Regular	1,268.3	1,249.0	702.7	760.2	1,971.0	2,009.2
Casual	406.2	436.8	176.4	210.6	582.6	647.4

Wage Earnings in the Modern Sector

3.11. Total wage payments by industry in the modern sector from 2013 to 2017 is presented in Table 3.5. The wage payments relate to the basic salary and other allowances which are paid regularly to employees. Overall, nominal wage earnings rose by 10.3 per cent to KSh 1,817.3 billion in 2017 compared to an increase of 9.1 per cent in 2016. The private sector wage earnings went up by 10.9 per cent from KSh 1,143.6 billion in 2016, while wage earnings in public sector rose to 9.1 per cent from 503.5 billion in 2016 to 549.1 billion in 2017. The contribution of the public sector to the total wage earnings decreased marginally from 30.6 per cent in 2016 to 30.2 per cent in 2017.

Table 3.5: Wage Payments¹ by Industry and Sector, 2013 – 2017

KSh Million

	2013	2014	2015	2016	2017*
PRIVATE SECTOR:					
Agriculture, forestry and fishing	65,576.7	67,038.5	74,769.2	80,709.7	87,915.3
Mining and quarrying.....	2,587.9	4,196.5	5,412.9	6,081.7	6,806.4
Manufacturing.....	81,131.6	91,390.3	105,013.8	114,079.8	126,924.4
Electricity, gas, steam and air conditioning supply	1,256.2	1,151.2	1,255.4	1,401.0	1,655.3
Water supply; sewerage, waste management and remediation activities.....	196.6	246.0	289.4	343.3	410.3
Construction	52,893.3	68,809.2	87,022.4	97,846.9	104,174.3
Wholesale and retail trade; repair of motor vehicles and motorcycles	103,613.3	113,726.5	130,920.7	147,356.5	169,098.0
Transportation and storage	57,024.4	65,458.0	76,319.4	81,540.8	89,873.1
Accommodation and food service activities	25,185.1	25,933.9	28,955.8	30,100.1	32,538.5
Information and communication	65,920.7	72,710.6	83,234.7	95,049.4	107,706.2
Financial and insurance activities	82,242.8	87,451.4	101,893.5	109,094.0	111,658.3
Real estate activities	870.2	926.7	1,040.8	1,088.1	1,187.6
Professional, scientific and technical activities	48,444.5	52,317.9	58,897.7	64,547.4	73,087.9
Administrative and support service activities	5,712.1	6,056.6	7,057.5	7,585.5	8,540.2
Public administration and defence; compulsory social security	-	-	-	-	-
Education	116,483.5	138,368.5	167,352.3	176,528.2	197,516.5
Human health and social work activities	49,486.4	55,701.6	65,323.5	73,170.6	84,684.5
Arts, entertainment and recreation	2,194.7	2,290.4	2,575.8	2,786.4	3,092.6
Other service activities	16,903.3	19,993.6	23,446.0	25,982.3	30,332.7
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	19,464.2	20,853.2	23,219.8	24,687.6	26,952.8
Activities of extraterritorial organizations and bodies	2,804.2	2,973.8	3,309.8	3,642.2	4,036.4
TOTAL PRIVATE SECTOR	799,991.7	897,594.4	1,047,310.4	1,143,621.3	1,268,191.2
PUBLIC SECTOR:					
Agriculture, forestry and fishing	12,996.1	13,877.2	16,926.7	17,572.5	17,828.1
Mining and quarrying.....	197.3	197.9	237.2	250.0	261.4
Manufacturing.....	17,173.5	18,414.8	22,331.9	23,339.5	23,317.8
Electricity, gas, steam and air conditioning supply	14,540.6	16,007.3	21,088.0	22,019.9	23,667.4
Water supply; sewerage, waste management and remediation activities.....	4,172.5	5,248.6	6,375.2	7,165.5	8,063.5
Construction	9,190.8	4,182.7	5,257.6	5,669.8	6,171.2
Wholesale and retail trade; repair of motor vehicles and motorcycles	1,780.2	2,039.3	1,436.1	1,589.6	1,827.1
Transportation and storage	19,640.2	21,476.4	26,645.6	28,854.2	30,960.8
Accommodation and food service activities	1,177.6	1,413.7	1,844.0	2,133.8	2,463.2
Information and communication	1,031.0	1,127.9	1,363.7	1,424.0	1,457.1
Financial and insurance activities	12,282.3	13,394.3	18,097.5	18,822.0	19,175.2
Real estate activities	-	-	-	-	-
Professional, scientific and technical activities	2,873.3	3,077.3	3,732.9	3,886.0	4,147.3
Administrative and support service activities	-	-	-	-	-
Public administration and defence; compulsory social security	143,861.7	160,274.4	116,046.6	127,507.2	146,658.8
Education	106,638.2	123,557.2	182,027.0	202,778.1	215,686.7
Human health and social work activities	26,009.9	27,631.9	36,506.1	38,639.1	45,679.9
Arts, entertainment and recreation	1,379.0	1,522.8	1,827.2	1,850.0	1,783.3
Other service activities	-	-	-	-	-
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	-	-	-	-	-
Activities of extraterritorial organizations and bodies	-	-	-	-	-
TOTAL PUBLIC SECTOR	374,944.2	413,443.7	461,743.3	503,501.1	549,148.8
TOTAL PUBLIC AND PRIVATE	1,174,935.9	1,311,038.1	1,509,053.7	1,647,122.4	1,817,340.1

* Provisional

¹ Annualised June wages.

3.12. Annual wage payments in the public sector by type of employer are presented in Table 3.6. Wage earnings in the County governments recorded the highest increase of 15.0 per cent in earnings in the public sector; rising from KSh 96.4 billion in 2016 to KSh 110.9 billion in 2017. Similarly, total wage payments for the Ministries and other extra-budgetary institutions increased by 13.2 per cent from KSh 95.4 billion in 2016 to KSh 108.0 billion in 2017. Wage payments by TSC rose by 4.1 per cent to KSh 180.9 billion and accounted for 32.9 per cent of the total wage payments by the public sector.

Table 3.6: Total Wage Payments in the Public Sector, 2013 - 2017

	KSh Million				
	2013	2014	2015	2016	2017*
Ministries and other extra-budgetary institutions ¹	79,009.4	84,981.0	90,275.2	95,402.6	107,989.0
Teachers Service Commission	130,427.4	145,407.0	160,720.4	173,721.1	180,901.3
Parastatal Bodies ²	66,217.9	74,013.5	78,704.7	84,350.7	91,521.0
Majority Control by the Government ³	42,115.6	47,073.7	50,057.4	53,648.3	57,846.6
County governments	57,174.0	61,968.3	81,985.6	96,378.3	110,890.9
TOTAL PUBLIC SECTOR	374,944.3	413,443.7	461,743.3	503,501.1	549,148.8

* Provisional.

¹ Includes employees of Judiciary, Parliament, constitutional and Independent offices

² Refers to Government wholly-owned corporations.

³ Refers to institutions where the Government has over 50 per cent shares but does not wholly own them.

3.13. Annual average wage earnings per employee for the period 2013 to 2017 are presented in Table 3.7. Overall, annual average earnings increased by 6.1 per cent to KSh 684,097.0 in 2017 compared to the 5.9 per cent increase in 2016, translating to KSh 57,008.1 per month. The average earnings in the private sector increased by 8.0 per cent compared to 1.6 per cent in the public sector in the review period. Average earnings for workers in the private sector that recorded the highest increases were Mining and quarrying; Water supply; sewerage, waste management and remediation activities; and Electricity, gas, steam and air conditioning supply at 12.9 and 11.9 per cent, respectively, in 2017.

3.14. Table 3.8 presents percentage changes in wage employment and average earnings for the period 2012/2017 and 2016/2017. During the five year period, total wage employment rose by 23.2 per cent with wage employment in the private sector rising by 25.0 per cent, while that of the public sector went up by 19.3 per cent. In the private sector the highest increase in wage employment was registered in education at 98.4 per cent. This was followed by mining and quarrying; and construction activities with growths of 73.5 and 61.5 per cent, respectively. Average earnings in the economy have risen by 54.3 per cent over the five year period with public sector earnings rising by 43.3 per cent compared to 59.8 per cent for the private sector. In the public sector, employees in the County Government recorded a large increase of 152.4 per cent.

3.15. Table 3.9 presents the real average earnings per employee by sector adjusted for inflation. Overall, real average earnings declined by 2.9 per cent in 2017, compared an increase of 0.1 per cent recorded in 2016. This could be attributed to increase in inflation rates over the period. In the public sector, real average earnings declined by 6.9 per cent and fell by 1.1 per cent in the private sector.

Table 3.7: Average Annual Wage Earnings per Employee¹, 2013 – 2017

	KSh				
	2013	2014	2015	2016	2017*
PRIVATE SECTOR:					
Agriculture, forestry and fishing	218,637.7	230,717.7	254,274.7	274,049.3	303,399.8
Mining and quarrying.....	297,797.2	343,893.9	392,039.5	417,498.1	471,487.3
Manufacturing.....	320,187.1	349,733.7	390,406.1	415,959.4	458,321.7
Electricity, gas, steam and air conditioning supply.....	1,125,666.0	1,247,238.0	1,399,604.0	1,463,985.8	1,613,312.0
Water supply; sewerage, waste management and remediation activities.....	142,540.0	176,322.0	201,136.0	210,354.0	235,386.0
Construction.....	473,758.8	548,910.1	620,879.3	631,213.1	653,355.8
Wholesale and retail trade; repair of motor vehicles and motorcycles.....	491,409.9	519,429.6	567,591.9	617,753.6	678,269.3
Transportation and storage.....	969,506.0	1,053,344.1	1,177,969.1	1,203,429.8	1,304,985.7
Accommodation and food service activities.....	349,259.4	361,473.9	387,737.5	396,554.6	415,943.8
Information and communication	727,472.8	747,113.9	802,169.8	874,105.5	934,730.5
Financial and insurance activities.....	1,461,808.8	1,504,281.5	1,624,448.0	1,677,517.7	1,759,562.7
Real estate activities.....	228,154.6	238,649.9	260,652.5	265,659.8	281,424.2
Professional, scientific and technical activities.....	816,100.0	861,867.2	940,331.7	996,639.9	1,081,166.6
Administrative and support service activities.....	1,181,397.3	1,236,542.6	1,363,245.9	1,393,880.0	1,484,227.4
Public administration and defence; compulsory social security.....	-	-	-	-	-
Education.....	817,809.1	830,085.0	885,101.5	896,491.7	931,440.0
Human health and social work activities.....	617,576.4	654,012.7	715,536.5	764,256.0	828,851.1
Arts, entertainment and recreation.....	513,856.2	530,300.4	575,076.5	601,034.2	641,752.4
Other service activities.....	577,929.2	655,765.5	739,900.7	783,612.9	874,366.6
Activities of households as employers; un differentiated goods- and services- producing activities of households for own use	177,267.8	186,011.9	203,473.4	215,885.3	233,630.7
Activities of extraterritorial organizations and bodies.....	2,613,378.0	2,683,940.0	2,883,096.0	2,992,746.0	3,170,786.8
TOTAL PRIVATE SECTOR	500,065.8	537,670.4	595,211.6	629,323.6	679,489.2
PUBLIC SECTOR:					
Agriculture, forestry and fishing	347,891.6	367,655.6	394,286.8	416,034.3	421,089.2
Mining and quarrying.....	323,896.0	346,104.0	373,538.0	397,378.9	406,454.8
Manufacturing.....	752,483.8	797,183.7	843,573.8	881,901.1	881,745.9
Electricity, gas, steam and air conditioning supply.....	1,231,708.0	1,261,782.0	1,315,696.0	1,346,867.1	1,321,608.8
Water supply; sewerage, waste management and remediation activities.....	590,152.0	658,438.0	629,840.0	647,288.6	629,031.0
Construction.....	577,088.0	617,720.0	668,740.0	712,739.5	729,019.5
Wholesale and retail trade; repair of motor vehicles and motorcycles.....	910,344.7	1,018,154.2	1,082,241.8	1,196,994.4	1,260,092.0
Transportation and storage.....	1,298,010.1	1,382,681.1	1,500,059.7	1,600,876.0	1,627,290.2
Accommodation and food service activities.....	991,838.0	1,126,668.0	1,293,140.0	1,462,490.4	1,587,145.3
Information and communication	645,169.5	693,358.3	728,877.8	763,519.9	764,465.6
Financial and insurance activities.....	1,552,072.0	1,604,205.8	1,709,888.3	1,749,415.9	1,703,860.6
Real estate activities.....	-	-	-	-	-
Professional, scientific and technical activities.....	560,096.4	590,358.0	628,540.2	659,876.6	666,556.1
Administrative and support service activities.....	-	-	-	-	-
Public administration and defence; compulsory social security.....	461,100.8	481,382.8	522,748.8	551,311.1	558,864.2
Education.....	475,306.4	524,732.9	571,890.4	620,606.3	636,954.3
Human health and social work activities.....	915,027.2	1,005,817.6	1,116,394.3	1,212,243.5	1,241,942.9
Arts, entertainment and recreation.....	665,322.0	715,992.0	745,206.0	774,061.8	771,983.7
Other service activities.....	-	-	-	-	-
Activities of households as employers; un differentiated goods- and services- producing activities of households for own use	-	-	-	-	-
Activities of extraterritorial organizations and bodies.....	-	-	-	-	-
TOTAL PUBLIC SECTOR	548,731.4	589,984.8	642,743.1	683,861.0	694,981.1
TOTAL PRIVATE AND PUBLIC SECTOR	514,630.7	553,137.7	608,991.7	645,035.2	684,097.0
MEMORANDUM ITEMS IN PUBLIC SECTOR:					
Ministries and other extra-budgetary institutions	441,289.9	469,692.7	508,131.9	530,799.0	546,428.5
Teachers Service Commission	478,625.5	516,195.1	552,843.3	583,393.3	597,282.3
Parastatal Bodies ²	715,826.2	791,393.2	835,786.7	893,064.1	831,516.4
Majority Control by the Government ³	946,260.7	1,046,153.8	1,104,838.2	1,180,554.0	1,231,081.7
County governments	603,521.2	621,978.5	741,669.5	810,875.9	836,224.3
TOTAL PUBLIC SECTOR	548,731.4	589,984.8	642,743.1	683,861.0	694,981.1

* Provisional.

¹ Annualised June earnings² Refers to Government wholly-owned corporations.³ Refers to institutions where the Government has over 50 per cent shareholding but does not fully own them.

Table 3.8: Percentage changes in Wage Employment and Average Earnings¹, 2017/2012 and 2017/2016

	EMPLOYMENT		AVERAGE EARNINGS	
	2017/2012*	2017/2016*	2017/2012*	2017/2016*
PRIVATE SECTOR:				
Agriculture, forestry and fishing	-1.9	-1.6	66.6	10.7
Mining and quarrying.....	73.5	-1.4	91.7	12.9
Manufacturing.....	12.8	0.9	69.4	10.2
Electricity, gas, steam and air conditioning supply.....	-9.1	0.0	68.5	10.2
Water supply; sewerage, waste management and remediation activities.....	30.8	6.3	86.8	11.9
Construction.....	61.5	2.8	58.9	3.5
Wholesale and retail trade; repair of motor vehicles and motorcycles.....	26.5	4.5	59.7	9.8
Transportation and storage.....	18.6	1.6	58.9	8.4
Accommodation and food service activities.....	15.7	3.0	30.8	4.9
Information and communication	37.3	6.0	45.8	6.9
Financial and insurance activities.....	23.8	-2.3	39.9	4.9
Real estate activities.....	13.5	2.4	43.1	5.9
Professional, scientific and technical activities.....	18.8	4.3	57.7	8.5
Administrative and support service activities.....	28.9	7.4	51.3	6.5
Public administration and defence; compulsory social security.....	-	-	-	-
Education.....	98.4	7.7	33.7	3.9
Human health and social work activities.....	38.5	6.8	52.4	8.5
Arts, entertainment and recreation.....	20.0	4.3	46.8	6.8
Other service activities.....	23.0	4.5	77.8	11.6
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	8.6	0.9	52.8	8.2
Activities of extraterritorial organizations and bodies.....	30.0	8.3	37.9	5.9
TOTAL PRIVATE SECTOR	25.0	2.7	59.8	8.0
PUBLIC SECTOR:				
Agriculture, forestry and fishing	0.2	0.2	54.6	1.2
Mining and quarrying.....	-14.3	0.0	62.6	2.3
Manufacturing.....	3.1	-0.4	46.0	0.0
Electricity, gas, steam and air conditioning supply.....	35.6	9.8	33.1	-1.9
Water supply; sewerage, waste management and remediation activities.....	77.8	15.3	43.6	-2.8
Construction.....	-51.1	6.3	62.4	2.3
Wholesale and retail trade; repair of motor vehicles and motorcycles.....	66.7	15.4	7.4	5.3
Transportation and storage.....	11.1	5.6	60.7	1.6
Accommodation and food service activities.....	23.1	6.7	118.1	8.5
Information and communication	5.6	0.0	48.1	0.1
Financial and insurance activities.....	9.7	4.6	37.2	-2.6
Real estate activities.....	-	-	-	-
Professional, scientific and technical activities.....	6.9	5.1	48.9	1.0
Administrative and support service activities.....	-	-	-	-
Public administration and defence; compulsory social security.....	26.5	13.4	-1.6	1.4
Education.....	21.8	3.6	87.0	2.6
Human health and social work activities.....	19.1	15.4	76.9	2.4
Arts, entertainment and recreation.....	-4.2	-4.2	43.3	-0.3
Other service activities.....	-	-	-	-
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	-	-	-	-
Activities of extraterritorial organizations and bodies.....	-	-	-	-
TOTAL PUBLIC SECTOR	19.3	7.3	43.3	1.6
TOTAL PRIVATE AND PUBLIC SECTOR	23.2	4.0	54.3	6.1
MEMORANDUM ITEMS IN PUBLIC SECTOR:				
Ministries and other extra-budgetary institutions	-11.2	10.0	37.1	2.9
Teachers Service Commission	13.2	1.7	38.7	2.4
Parastatal Bodies ²	21.4	16.5	17.8	-6.9
Majority Control by the Government ³	7.7	3.4	32.0	4.3
County governments	251.9	11.6	152.4	3.1
TOTAL PUBLIC SECTOR	19.3	7.3	43.3	1.6

* Provisional.

¹ Annualised June earnings² Refers to Government wholly-owned corporations.³ Refers to institutions where the Government has over 50 per cent shareholding but does not fully own them.

Table 3.9: Estimated Real Average Wage Earnings per Employee¹, 2013–2017.

	KSh				
	2013	2014	2015	2016	2017*
PRIVATE SECTOR:					
Agriculture, forestry and fishing	156,628.5	153,904.1	158,466.1	161,433.4	163,654.9
Mining and quarrying	213,337.1	229,400.2	244,322.3	245,934.3	254,321.9
Manufacturing	229,376.8	233,295.8	243,304.3	245,027.9	247,220.3
Electricity, gas, steam and air conditioning supply	806,408.8	831,991.2	872,244.8	862,385.6	870,226.0
Water supply; sewerage, waste management and remediation activities	102,113.3	117,618.6	125,349.6	123,912.6	126,968.0
Construction	339,393.1	366,159.8	386,937.1	371,826.7	352,422.4
Wholesale and retail trade; repair of motor vehicles and motorcycles	352,038.0	346,494.3	353,728.0	363,898.2	365,860.8
Transportation and storage	694,538.3	702,651.0	734,120.1	708,900.7	703,913.8
Accommodation and food service activities	250,203.7	241,127.3	241,641.2	233,597.2	224,361.5
Information and communication	521,149.7	498,375.0	499,918.9	514,906.7	504,196.8
Financial and insurance activities	1,047,216.0	1,003,456.4	1,012,369.4	988,170.2	949,114.2
Real estate activities	163,446.2	159,195.5	162,440.8	156,491.4	151,801.2
Professional, scientific and technical activities	584,640.7	574,923.1	586,022.5	587,087.6	583,184.9
Administrative and support service activities	846,333.8	824,856.6	849,586.1	821,088.6	800,597.3
Public administration and defence; compulsory social security	-	-	-	-	-
Education	585,865.1	553,722.2	551,602.6	528,093.6	502,421.9
Human health and social work activities	442,421.7	436,270.2	445,928.3	450,197.9	447,085.1
Arts, entertainment and recreation	368,118.2	353,745.8	358,392.4	354,049.4	346,163.4
Other service activities	414,019.1	437,439.5	461,112.2	461,600.5	471,636.3
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	126,991.8	124,082.4	126,806.3	127,170.9	126,021.2
Activities of extraterritorial organizations and bodies	1,872,181.4	1,790,367.6	1,796,769.3	1,762,927.7	1,710,333.3
TOTAL PRIVATE SECTOR	358,239.0	358,662.1	370,940.8	370,713.7	366,518.8
PUBLIC SECTOR:					
Agriculture, forestry and fishing	249,223.9	245,250.9	245,722.8	245,072.1	227,137.0
Mining and quarrying	232,033.8	230,874.5	232,792.0	234,082.7	219,243.1
Manufacturing	539,067.1	531,774.9	525,722.2	519,498.8	475,616.7
Electricity, gas, steam and air conditioning supply	882,375.5	841,693.0	819,952.6	793,394.8	712,880.3
Water supply; sewerage, waste management and remediation activities	422,775.3	439,222.2	392,521.5	381,296.3	339,301.5
Construction	413,416.4	412,060.6	416,764.3	419,851.3	393,235.6
Wholesale and retail trade; repair of motor vehicles and motorcycles	652,156.1	679,177.0	674,462.0	705,109.8	679,697.9
Transportation and storage	929,873.3	922,340.8	934,849.6	943,023.1	877,765.9
Accommodation and food service activities	710,536.6	751,562.9	805,895.6	861,504.7	856,111.6
Information and communication	462,188.9	462,516.4	454,242.7	449,764.3	412,355.4
Financial and insurance activities	1,111,879.1	1,070,112.6	1,065,616.5	1,030,523.0	919,068.2
Real estate activities	-	-	-	-	-
Professional, scientific and technical activities	401,243.9	393,808.3	391,711.5	388,711.4	359,542.6
Administrative and support service activities	-	-	-	-	-
Public administration and defence; compulsory social security	330,325.1	321,114.5	325,781.4	324,759.1	301,453.2
Education	340,501.8	350,032.0	356,406.8	365,578.6	343,575.3
Human health and social work activities	655,510.6	670,947.6	695,746.2	714,092.6	669,908.3
Arts, entertainment and recreation	476,625.8	477,614.6	464,418.5	455,974.2	416,410.6
Other service activities	-	-	-	-	-
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	-	-	-	-	-
Activities of extraterritorial organizations and bodies	-	-	-	-	-
TOTAL PUBLIC SECTOR	393,102.2	393,559.3	400,562.8	402,839.9	374,875.2
TOTAL PRIVATE AND PUBLIC SECTOR	368,673.0	368,979.9	379,528.7	379,968.9	369,004.3
MEMORANDUM ITEMS IN PUBLIC SECTOR:					
Ministries and other extra-budgetary institutions	316,132.9	313,316.5	316,672.0	312,676.1	294,745.4
Teachers Service Commission	342,879.5	344,336.7	344,536.5	343,657.7	322,176.1
Parastatal Bodies ²	512,806.2	527,912.2	520,869.2	526,074.5	448,522.8
Majority Control by the Government ³	677,885.7	697,854.6	688,544.3	695,425.3	664,049.7
County governments	432,352.7	414,901.3	462,214.6	477,660.2	451,062.2
TOTAL PUBLIC SECTOR	393,102.2	393,559.3	400,562.8	402,839.9	374,875.2

* Provisional.

¹ Average earnings adjusted for the rise in consumer prices (Base year 2009). Annualised June earnings deflated by June CPI² Refers to Government wholly-owned corporations.³ Refers to institutions where the Government has over 50 per cent shareholding but does not fully own them.

3.16. Overall, wage employment grew by 4.0 per cent in 2017 compared to 3.1 per cent in 2016. The 'year on year' inflation in June 2017 was 9.2 per cent, up from 5.8 per cent the previous year. Real average earnings declined by 2.9 per cent compared to an increase of 0.1 per cent in 2016 mainly due to the increase in inflation.

Table 3.10: Changes in Wage Employment, Prices and Real Earnings, 2013 - 2017

	Per cent				
	2013	2014	2015	2016	2017*
Wage employment	6.0	3.8	4.5	3.1	4.0
Average earnings at current prices	16.1	7.5	10.1	5.9	6.1
Consumer prices (Inflation rates) ¹	4.9	7.4	7.0	5.8	9.2
Real average earnings	10.7	0.1	2.9	0.1	-2.9

* Provisional

¹ June inflation

Informal sector employment

3.17. The informal sector is characterized by small scale activities, easy entry and exit due to fewer regulations, skills gained from vocational intuitions, less capital investment, limited job security and also self-employment. This sector however excludes illegal activities such as drug trafficking and others. Over the years, it has expanded into activities of manufacturing and information, communication and technology.

3.18. Table 3.11, gives a breakdown of employment in the informal sector by broad economic activities over the past five years. During the review period, the informal sector employment grew by 6.0 per cent from 13.3 million persons in 2016 to 14.1 million persons in 2017 with rural areas accounting for almost two thirds of the total jobs.

Table 3.11: Number of Persons Engaged in the Informal Sector by Activity¹, 2013 – 2017

	000				
Activity	2013	2014	2015	2016	2017*
Manufacturing	2,233.7	2,364.9	2,545.3	2,710.2	2,841.3
Construction	292.2	307.3	320.6	337.1	363.0
Wholesale and Retail Trade, Hotels and Restaurants. ..	6,693.4	7,120.4	7,510.9	7,946.7	8,445.5
Transport and Communications ²	345.3	369.5	392.6	417.2	439.7
Community, Social and Personal Services	1,084.2	1,152.1	1,219.5	1,293.4	1,370.2
Others	501.3	531.8	573.5	605.1	637.8
TOTAL	11,150.1	11,846.0	12,562.4	13,309.7	14,097.5
Urban	3,973.7	4,208.1	4,458.0	4,709.9	4,999.8
Rural	7,176.4	7,637.9	8,104.4	8,599.8	9,097.7

* Provisional

¹ Estimated

² Includes mainly support services to transport activity

Minimum Wages and Collective Bargaining Agreements

3.19. On Labour Day 2017, the Government announced new statutory minimum wage rates that reflected a 18.0 per cent increase in the wages specified in both the regulation of wages Agriculture Order, 2017 and the Regulation of Wages (General) Order, 2017.

3.20. Table 3.12 presents gazetted monthly basic wages for the agricultural industry. On average, the monthly basic minimum wages for the agriculture industry increased from KSh 7,284 in 2016 to KSh 8,595 in 2017. Unskilled employees, the lowest paid category of workers, had their monthly wages raised from KSh 5,437 in 2016 to KSh 6,416 in 2017. Monthly wages for the highest paid category of workers which include farm foremen and farm clerks was increased from KSh 9,808 in 2016 to KSh 11,574 in 2017.

Table 3.12: Gazetted Monthly Basic Minimum Wages for Agricultural Industry, 2013 – 2017

	KSh				
Type of Employee	2013	2014	2015	2016	2017
Unskilled employees...	4,854	4,854	5,437	5,437	6,416
Stockman, Herdsman and Watchman...	5,606	5,606	6,279	6,279	7,409
Skilled And Semi-Skilled Employees:					
House servant or cook...	5,542	5,542	6,207	6,207	7,324
Farm foreman...	8,757	8,757	9,808	9,808	11,574
Farm clerk...	8,757	8,757	9,808	9,808	11,574
Section foreman...	5,669	5,669	6,350	6,350	7,492
Farm artisan...	5,802	5,802	6,498	6,498	7,668
Tractor driver...	6,153	6,153	6,891	6,891	8,131
Combine harvester driver...	6,778	6,778	7,592	7,592	8,958
Lorry driver or car driver...	7,113	7,113	7,967	7,967	9,401
AVERAGE	6,503	6,503	7,284	7,284	8,595

Source: Ministry of Labour and Social Protection

3.21. Table 3.13 presents the gazetted monthly basic minimum wages in urban areas in 2016 and 2017. The average monthly basic minimum wages in Nairobi, Mombasa and Kisumu cities rose from KSh 17,200 in 2016 to KSh 19,831 in 2017. Average monthly basic minimum wages in all former municipalities and Town Councils of Mavoko, Ruiru and Limuru, increased from KSh 15,980 in 2016 to KSh 17,423 in 2017. Similarly, average monthly basic minimum wages in all the other towns rose from KSh 13,593 to KSh 16,039 over the same period. In all urban areas, the highest paid workers were cashiers, heavy commercial vehicles/salesman drivers and artisans grade 1 over the review period.

Table 3.13: Gazetted Monthly Basic Minimum Wages¹ in Urban Areas, 2016 – 2017

KSh

Occupation	Nairobi , Mombasa & Kisumu Cities		All former Municipalities and Town Councils of Mavoko, Ruiru and Limuru		All other towns	
	2016	2017	2016	2017	2016	2017
General labourer including cleaner, sweeper, gardener, children's ayah, house servant, day watchman, messenger	10,954.70	12,926.55	10,107.10	11,926.40	5,844.20	6,896.15
Miner, stone cutter, turn boy ,waiter, cook, logger, line cutter.....	11,831.20	13,960.80	10,496.90	12,386.35	6,752.50	7,967.95
Night watchman.....	12,221.10	14,420.90	11,330.10	13,369.50	6,970.40	8,225.05
Machine attendant, sawmill sawyer, machine assistant, mass production machinist, shoe cutter, bakery worker, bakery assistant, tailor's assistant	12,416.00	14,650.90	11,553.90	13,633.60	9,364.70	11,050.35
Machinist (made-to-measure), shoe upper preparer, chaplis maker, vehicle service worker (petrol and service stations), bakery plant hand, laundry operator, junior clerk, wheeled tractor driver (light) ..	14,173.50	16,724.75	13,259.30	15,646.00	10,840.50	12,791.70
Printing machine operator, bakery machine operator, plywood machine operator, sawmill dresser, shop assistant, machine tool operator, dough maker, table hand baker or confectioner, copy - typist, driver (cars and light vans)	14,785.70	17,447.15	13,646.40	16,102.75	11,279.50	13,309.80
Pattern designer (draughts-man), garment and dress cutter, single hand oven man, charge-hand baker, general clerk, telephone operator, receptionist, storekeeper	16,872.40	19,909.45	15,425.40	18,201.95	13,152.50	15,519.95
Tailor, driver (medium sized vehicle).....	18,595.20	21,942.30	17,090.50	20,166.80	15,239.10	17,982.10
Dyer, crawler tractor driver, salesman.....	20,528.80	24,224.00	19,154.00	22,601.70	17,286.90	20,398.55
Saw doctor, caretaker (buildings).....	22,718.00	26,807.25	21,213.30	25,031.70	19,762.00	23,319.15
Cashier, driver (heavy commercial vehicle) salesman - driver.....	24,719.50	29,169.00	23,262.40	27,449.65	21,811.10	25,737.10
Ungraded artisan.....	14,785.70	17,447.15	13,646.40	16,102.75	11,279.50	13,309.80
Artisan Grade III.....	18,595.20	21,942.35	17,090.50	20,166.80	15,210.30	17,948.15
Artisan Grade II.....	20,084.00	23,699.10	19,154.00	22,601.70	17,286.90	20,398.55
Artisan Grade I.....	24,719.50	29,169.00	23,262.40	27,449.65	21,811.10	25,737.10
Average	17,200.03	19,830.96	15,979.51	17,422.86	13,592.75	16,039.43

Source: Ministry of Labour and Social Protection

¹ Excluding Housing Allowance

3.22. The total number of Collective Bargaining Agreements (CBA) registered in 2017 were 232 compared to 128 in 2016 as shown in Table 3.14. There was a notable increase in the number of agreements registered in Human health and social work activities, Financial and insurance activities; and Wholesale and retail trade activities which rose by 56, 19 and 34 agreements, respectively. However, there were fewer agreements made in Manufacturing; and Transport and storage in 2017. The average monthly basic wage awarded in 2017 was KSh 66,489. This average basic wage was influenced by the CBA between the Ministry of Health, the 47 County Governments and the Kenya Medical Practitioners, Pharmacists and Dentists Union. The number of unionisable employees covered by the agreements registered was 340,290 in 2017. The number of unionisable employees covered by the agreements in the Education sector were 24,628 in 2017 while those in Public administration and defence; compulsory social security 207,584 during the same period. The average monthly allowance offered was KSh 15,130.

Table 3.14: Collective Bargaining Agreements Registered by the Employment and Labour Relations Court, 2016 – 2017

Activity	No. of Agreements		No. of Unionisable Employees Covered by the Agreements		Average Monthly Basic Wage (KSh)		Average Monthly Allowances ¹ Offered (KSh)	
	2016	2017*	2016	2017*	2016	2017*	2016	2017*
Agriculture, Forestry And Fishing.....	18	5	3,211	5,131	13,133	15,963	10,900	6,947
Mining And Quarrying.....	1	-	402	-	36,691	-	12,500	-
Manufacturing.....	151	145	24,618	44,279	22,539	27,367	10,708	10,448
Electricity, Gas, Steam And Air Conditioning Supply.....		4	-	10,262	-	78,982	-	41,683
Water Supply; Sewerage, Waste Management And Remediation Activities.....	9	12	1,080	912	34,906	37,445	20,169	17,078
Construction.....	5	2	1,286	30	15,656	16,212	8,171	4,564
Wholesale And Retail Trade; Repair Of Motor Vehicles And Motorcycles.....	2	36	21	7,744	28,041	39,223	6,050	10,821
Transportation And Storage.....	39	20	12,583	4,993	43,186	47,655	16,773	24,365
Accommodation And Food Service Activities.....	9	13	318	1,342	21,546	33,166	12,237	10,336
Information And Communication.....	5	3	106	256	61,799	98,420	14,885	21,629
Financial And Insurance Activities.....	10	29	20,754	18,445	140,876	141,052	21,223	23,480
Real Estate Activities.....	-	2	-	180	-	28,808	-	11,200
Professional, Scientific And Technical Activities.....	2	5	519	652	35,889	34,278	13,600	12,889
Administrative And Support Service Activities.....	3	5	1,249	5,448	29,703	21,220	8,824	11,367
Public Administration And Defence; Compulsory Social Security.....	1	1	29	207,584	13,035	24,021	3,500	6,450
Education.....	24	29	297,472	24,628	27,934	276,436	14,959	14,433
Human Health And Social Work Activities.....	5	61	449	5,179	29,745	225,745	11,130	24,706
Arts, Entertainment And Recreation.....	9	6	596	1,731	20,912	17,701	10,757	14,464
Other Service Activities.....	5	7	2,943	1,348	73,053	61,379	8,192	9,619
Activities Of Households As Employers; Un differentiated Goods - And Services - Producing Activities Of Households For Own Use	-	-	-	-	-	-	-	-
Activities Of Extraterritorial Organizations And Bodies.....	-	1	-	146	-	38,214	-	11,000
Total Average	298	386	367,636	340,290	38,156	66,489	12,034	15,130

¹ Includes Housing, Leave and Travel allowances

Social Security 3.23. The National Social Security (NSSF) was established as a mandatory scheme whose main objective is to provide basic financial security benefits to Kenyans in both formal and informal sectors upon retirement. Table 3.15 gives the number of registered employers and employees, annual contributions from employees and annual benefits. During the year under review, the number of registered employers went up by 36.8 per cent from 98.1 thousand in 2016 to 134.2 thousand in 2017. Similarly, the number of registered employees increased from 3,864.4 thousand in 2016 to 3,905.1 thousand in 2017. The annual contribution and annual benefit rose marginally to KSh 9.5 billion and KSh 4.9 billion, respectively in 2017.

Table 3.15: Registered Employers, Employees, Contributions and Benefits, 2013- 2017

Details	2013	2014	2015	2016	2017*
Registered Employers '000	92.1	93.3	96.0	98.1	134.2
Registered Employees '000					
Male	2,955.0	2,975.4	2,698.7	2,862.4	2,898.2
Female	1,001.3	1,005.1	948.8	1,002.0	1,050.4
Total	3,956.3	3,980.5	3,662.1	3,864.4	3,905.1
Annual contribution (KSh million)	6,571.6	6,587.9	9,209.9	9,486.2	9,491.4
Annual benefits paid (KSh million)	2,844.6	2,881.3	3,999.2	4,839.0	4,856.3

Source: National Social Security Fund

* Provisional

Consumer Price Index 3.24. The Consumer Price Index (CPI) is a measure that examines the weighted average change in prices of a basket of consumer goods and services. This section provides a five year series of consumer price indices and average retail prices for some selected consumer goods in the basket.

3.25. The annual inflation as measured by the Consumer Price Index (CPI) increased from 6.3 per cent in 2016 to 8.0 per cent in 2017. The increase in inflation was mainly due to higher food prices as a result of drought experienced during the first half of the year. The increase in the prices of petrol, kerosene, diesel and electricity led to a rise in the cost of transport and manufactured goods during the review period. Further, the uncertainties brought about by the long electioneering period caused an increase in some retail prices of food items which included capsicums, onions, tomatoes, carrots and cabbages. However, the Government subsidized the cost of maize flour in the second half of 2017, in order to cushion the public from high food prices.

3.26. Food and non-alcoholic beverages index, which has the largest share in the CPI basket, recorded the highest increase of 13.4 per cent followed by restaurants and hotels at 5.5 per cent in 2017 as presented in Table 3.16. During the same period, transport index increased by 3.9 per cent mainly due to increase in pump prices of petrol, diesel and public transport fares. Housing, water, electricity, gas and other fuels index went up by 3.1 per cent due to increases in costs of house rent, kerosene and electricity.

Table 3.16: Consumer Price Indices and Inflation by Divisions, 2013 - 2017

COICOP Divisions	Percentage Share	Annual Average Index					Percentage Change
		2013	2014	2015	2016	2017	
Food & Non-Alcoholic Beverages	36.03	155.44	168.97	188.22	207.19	234.90	13.4
Alcoholic Beverages, Tobacco & Narcotics	2.06	141.02	148.03	153.42	173.69	179.18	3.2
Clothing & Footwear	7.43	129.65	135.85	142.19	148.20	153.70	3.7
Housing, Water, Electricity, Gas and other Fuels	18.30	133.82	141.31	145.81	148.21	152.84	3.1
Furnishings, Household Equipment and Routine Household Maintenance	6.16	129.72	136.27	142.34	147.98	152.66	3.2
Health	3.13	125.68	133.39	139.82	145.50	150.35	3.3
Transport	8.67	147.38	161.36	160.61	160.94	167.20	3.9
Communication	3.82	78.35	77.10	77.83	79.40	79.68	0.4
Recreation & Culture	2.25	127.90	140.95	145.27	151.45	153.83	1.6
Education	3.14	118.80	125.21	130.26	135.68	139.70	3.0
Restaurant & Hotels	4.49	149.90	159.82	168.08	177.34	187.01	5.5
Miscellaneous Goods & Services	4.52	127.37	133.02	139.41	145.18	150.42	3.6
Overall Index	100.00	140.11	149.74	159.60	169.68	183.23	8.0

3.27. Table 3.17 presents a breakdown of the annual average consumer price indices for classes of food and non-alcoholic beverages. Fruits and vegetables had the highest inflation rate in 2017 of 22.5 per cent and 21.1 per cent, respectively. The index for Sugar, jam, honey, chocolate and confectionery; Bread and Cereals; Milk, Cheese and Eggs increased notably by 15.3, 12.3 and 10.2 per cent, respectively, during the same period.

Table 3.17: Consumer Price Indices for Food and Non-Alcoholic Beverages, 2013 -2017

Food and non-alcoholic beverages	Percentage						Percentage
	Share	2013	2014	2015	2016	2017	Change
Bread and cereals	10.52	136.08	143.53	147.88	152.81	171.56	12.3
Meat	5.68	152.64	164.29	174.24	178.12	184.20	3.4
Fish and Sea foods	1.32	163.26	181.65	198.31	211.43	229.90	8.7
Milk, Cheese and Eggs	4.96	158.78	169.52	181.47	181.02	199.45	10.2
Oils and fats	1.69	163.69	163.27	161.90	163.80	173.90	6.2
Fruits	2.38	176.68	197.84	233.28	287.70	352.55	22.5
Vegetables	5.68	180.46	221.60	297.19	373.90	452.81	21.1
Sugar, jam, honey, chocolate and confectionery	2.33	165.24	153.37	152.29	164.57	189.82	15.3
Food products n.e.c.	0.11	127.48	135.99	144.70	147.55	146.76	-0.5
Coffee, tea and cocoa	0.38	121.20	122.03	125.10	130.20	132.99	2.1
Mineral waters, soft drinks, fruit and vegetable juices	1.00	136.26	141.04	143.97	153.92	157.41	2.3

3.28. Table 3.18 presents annual average retail prices of selected consumer goods. The price of one kilogram of sugar increased by 16.6 per cent from an average of KSh 118.2 in 2016 to an average of KSh 137.8 in 2017. During the year under review, there was shortage of maize grain which resulted to a price increase from KSh 42.8 per kilogram in 2016 to KSh 57.7 per kilogram in 2017. However, the price of a 13 kilogram cooking gas declined by 3.7 per cent from an average of KSh 2,154.8 in 2016 to KSh 2,075.3 in 2017.

Table 3.18: Average Retail Prices of Selected Consumer Goods in the Consumer Price Basket, 2013 - 2017

Item	Unit	KSh				
		2013	2014	2015	2016	2017
Beef - With Bones.....	1 Kg	342.5	369.1	392.5	399.6	410.3
Offals (Matumbo).....	1 Kg	203.3	217.8	236.6	244.1	254.1
Bread, White.....	400 Gms	47.5	49.2	48.9	49.2	49.5
Maize Grain - Loose.....	1 Kg	42.3	45.2	43.1	42.8	57.7
Milk - Packeted.....	1/2 Litre	48.8	50.8	52.7	53.5	59.6
Sugar.....	1 Kg	120.2	110.6	109.2	118.2	137.8
Wheat Flour.....	2 kg	137.9	136.4	129.1	124.3	131.3
English Potatoes.....	1 Kg	52.7	49.3	63.0	77.0	81.1
Kales (Sukuma-Wiki).....	1 Kg	41.8	38.8	38.4	40.1	52.8
Cabbages.....	1 Kg	49.0	41.4	42.9	59.1	66.5
Petrol - Super.....	1 Litre	113.1	112.8	94.7	90.3	99.3
Diesel.....	1 Litre	105.1	103.7	81.0	77.4	86.0
Kerosene.....	1 Litre	83.9	82.4	58.4	54.6	67.0
Electricity.....	200 KW/h	3,066.3	3,373.1	3,466.9	3,394.3	3,727.7
Electricity.....	50 KW/h	575.8	586.5	531.1	533.2	597.3
Gas.....	13 Kg	2,688.7	3,062.4	2,506.7	2,154.8	2,075.3

3.29. Table 3.19 presents inflation in the Nairobi Lower, Middle and Upper income groups, as well as the Rest of Urban areas. Nairobi lower income group recorded the highest annual inflation of 8.6 per cent, while Nairobi middle income and the rest of urban areas recorded 6.1 per cent and 8.0 per cent, respectively, in 2017.

Table 3.19: Annual Inflation, 2013 - 2017

Income Group	Per cent				
	2013	2014	2015	2016	2017
Nairobi Lower Income Inflation.....	5.9	5.8	6.9	6.8	8.6
Nairobi Middle Income Inflation	4.5	4.7	4.3	4.1	6.1
Nairobi Upper Income Inflation	3.4	6.0	2.6	4.6	3.4
Nairobi Inflation	5.5	5.6	6.1	6.1	7.9
Rest of Urban Towns Inflation	5.9	7.8	6.9	6.4	8.0
Overall Inflation	5.7	6.9	6.6	6.3	8.0

Note:

- 1: The lower income group comprises households with monthly expenditure below KSh 23,670 in October 2005
- 2: The middle income group comprises households with monthly expenditure between KSh 23,671 and KSh 119,999 in October 2005
- 3 The upper income group comprises households with monthly expenditure above KSh 120,000 in October 2005

3.30. Table 3.20 shows that the annual average CPI for Nairobi lower income group rose from 173.03 in 2016 to 187.94 in 2017. The highest index of 192.75 was recorded in May, while the lowest of 179.88 was recorded in January 2017.

Table 3.20: Consumer Price Indices, Nairobi Lower Income Group, 2013 - 2017

Month	February 2009=100				
	2013	2014	2015	2016	2017
January	138.55	148.47	155.65	167.60	179.88
February	139.72	148.75	156.51	167.38	183.80
March	141.17	149.36	158.81	169.19	188.07
April	142.91	150.57	161.85	170.86	191.95
May	142.84	151.51	162.09	171.89	192.75
June	142.68	151.39	162.47	174.08	189.69
July	142.94	151.71	162.74	174.51	187.45
August	142.82	153.51	162.78	174.40	188.90
September	146.54	153.64	163.13	174.60	188.23
October	146.18	153.18	164.26	176.05	188.21
November	146.29	152.88	166.02	177.67	187.64
December	146.93	154.08	167.48	178.10	188.73
Annual average	143.30	151.59	161.98	173.03	187.94

3.31. Tables 3.21, 3.22, 3.23, 3.24 and 3.25 present five years' series of CPI for the Nairobi Middle and Upper Income Groups, Overall Nairobi, Rest of Urban Areas and the aggregated national indices. The highest national index of 187.64 was recorded in May 2017 while the lowest index of 176.93 was recorded in January 2017.

Table 3.21: Consumer Price Indices, Nairobi Middle Income Group, 2013 - 2017

February 2009=100

Month	2013	2014	2015	2016	2017
January	125.13	131.93	136.19	144.24	150.25
February	125.79	131.99	136.25	143.39	151.94
March	126.89	132.79	137.09	143.78	153.20
April	127.57	133.22	137.74	143.97	155.28
May	127.08	133.91	138.95	144.59	155.81
June	126.80	134.48	140.70	145.59	154.29
July	127.56	135.45	141.17	146.18	154.19
August	127.61	135.76	141.66	146.76	155.14
September	131.11	135.48	142.04	147.19	155.36
October	130.91	135.33	141.93	147.22	156.04
November	130.66	134.97	141.75	147.61	156.27
December	130.88	135.60	145.22	148.37	157.44
Annual average	128.16	134.24	140.06	145.74	154.60

Table 3.22: Consumer Price Indices, Nairobi Upper Income Group, 2013 - 2017

February 2009=100

Month	2013	2014	2015	2016	2017
January	126.64	134.11	136.86	144.30	150.27
February	126.91	134.32	136.66	144.19	150.99
March	127.77	134.63	137.07	144.21	151.28
April	127.88	135.10	137.67	145.61	151.30
May	127.25	136.39	138.96	145.93	151.51
June	126.93	136.83	139.25	146.21	150.94
July	127.09	137.30	141.35	146.94	151.32
August	127.72	139.94	143.53	148.33	152.02
September	132.57	139.46	143.35	148.71	151.87
October	132.47	138.22	143.05	148.68	152.99
November	132.40	138.03	142.70	149.23	153.38
December	132.51	136.74	143.34	149.68	154.61
Annual average	129.01	136.76	140.32	146.84	151.87

Table 3.23: Consumer Price Indices, Overall Nairobi, 2013 – 2017

February 2009=100

Month	2013	2014	2015	2016	2017
January	134.86	143.94	150.24	161.09	171.62
February	135.88	144.16	150.87	160.72	174.88
March	137.22	144.81	152.75	162.12	178.27
April	138.64	145.80	155.12	163.42	181.57
May	138.45	146.69	155.63	164.32	182.28
June	138.26	146.76	156.34	166.15	179.69
July	138.63	147.25	156.72	166.64	178.06
August	138.58	148.72	156.96	166.75	179.36
September	142.29	148.72	157.30	167.01	178.93
October	141.98	148.31	158.07	168.06	179.12
November	142.00	148.00	159.29	169.35	178.78
December	142.51	148.97	161.20	169.85	179.89
Annual average	139.11	146.84	155.87	165.46	178.54

Table 3.24: Consumer Price Indices, the Rest of Urban Areas, 2013 - 2017

February 2009=100

Month	2013	2014	2015	2016	2017
January	136.15	146.42	155.67	168.36	180.65
February	137.08	147.21	156.42	168.11	183.55
March	138.48	147.87	158.04	168.58	186.28
April	139.72	149.88	161.20	169.62	189.52
May	140.27	151.81	163.03	170.55	191.38
June	140.53	152.12	163.34	172.29	189.38
July	140.73	152.95	163.26	173.78	187.48
August	141.49	154.33	163.66	173.92	188.48
September	143.19	154.71	164.15	174.74	186.98
October	143.28	154.45	164.98	175.82	184.87
November	143.94	154.55	165.55	177.01	184.38
December	144.79	154.99	167.18	178.91	185.27
Annual average	140.81	151.77	162.21	172.64	186.52

Table 3.25: Consumer Price Indices, Kenya, 2013 - 2017

February 2009=100

Month	2013	2014	2015	2016	2017
January	135.62	145.40	153.43	165.37	176.93
February	136.59	145.95	154.14	165.06	179.98
March	137.96	146.61	155.86	165.92	182.98
April	139.28	148.20	158.70	167.07	186.24
May	139.52	149.70	159.98	167.99	187.64
June	139.59	149.91	160.46	169.76	185.39
July	139.87	150.60	160.57	170.84	183.60
August	140.29	152.02	160.90	170.97	184.72
September	142.82	152.24	161.33	171.56	183.66
October	142.75	151.92	162.13	172.62	182.50
November	143.14	151.85	162.97	173.85	182.08
December	143.85	152.51	164.72	175.18	183.05
Annual average	140.11	149.74	159.60	169.68	183.23

Money, Banking and Finance

Chapter 04

Overview

Kenya's financial sector recorded a slowed growth of 3.1 per cent in 2017 compared to a growth of 6.7 per cent in 2016. The slowdown may be attributed low uptake of credit. In 2017, the monetary policy stance focused on maintaining inflation within the Government's target range of 2.5 per cent on either side of the 5.0 per cent medium-term target. In the first half of 2017, there was an inflation surge, which averaged 9.8 per cent mainly due to food shortages witnessed during the period.

4.2. During the review period, the Monetary Policy Committee (MPC) retained the Central Bank Rate (CBR) at 10.0 per cent to continue anchoring inflation expectations, capping lending rates at 4.0 basis points above the CBR. The 91-day Treasury Bill rate fell from 8.44 per cent in December 2016 to 8.42 per cent in June 2017 and further to 8.01 per cent in December 2017. The year-on-year inflation in December 2017 stood at 4.50 per cent, compared to 6.35 per cent in December 2016.

4.3. The annual growth rates of money supply and private sector credit were consistent with the developments in the financial sector, in particular, the enforcement of the Banking (Amendment) Act 2016. Money supply (M1) expanded by 6.7 per cent in December 2017. The extended broad money supply (M3) grew by 8.9 per cent to KSh 3,010.9 billion in December 2017. Credit to the private sector expanded by 2.4 per cent in 2017, compared to 4.1 per cent in 2016. Total domestic credit grew by 7.9 per cent to 3,252.2 billion in 2017.

4.4. Interest rates on average deposits increased to 8.22 per cent in December 2017 from 7.33 per cent in December 2016. On the other hand, commercial banks' average lending interest rates charged on loans and advances remained stable at 13.64 per cent in December 2017, owing to the prevailing monetary policy stance and interest rate capping requirements. The increase on average interest rates on deposits narrowed the loan-deposit interest spread to 5.41 per cent in December 2017.

4.5. In the equities market, the Nairobi Securities Exchange (NSE) 20-Share index rose to 3,712 points in December 2017 from 3,186 points in December 2016. However, noticeable volatility was recorded in the weeks before the election months of August and October 2017. In the pensions sub-sector, the retirement benefit assets grew to KSh 963.1 billion in June 2017 from KSh 831.8 billion in June 2016.

4.6. Table 4.1 shows selected monetary indicators from 2013 to 2017. The Net Foreign Assets (NFA) held by the banking system increased by 4.6 per cent to KSh 517.9 billion in December 2017 from KSh 495.2 billion in December 2016. Total domestic credit by the banking system grew by 7.9 per cent in December 2017 to KSh 3,252.2 billion. Domestic credit to private sector and other public bodies grew to KSh 2,496.5 billion in December 2017 from KSh 2,421.5 billion in December 2016. Credit to the National Government increased by 27.4 per cent to KSh 755.7 billion in December 2017. Extended broad money supply (M3) grew by 8.9 per cent to KSh 3,010.9 billion in 2017. The commercial banks liquidity ratio rose to 47.1 per cent in December 2017 from 45.8 per cent in December 2016. The advances to deposits ratio dropped from 88.6 per cent to 83.2 per cent over the same period, due to subdued economic activity that led to reduced borrowing and the rise in liquidity.

Selected Monetary Indicators

Table 4.1: Monetary Indicators, 2013-2017

As at end of:		Net Foreign Assets (KSh Million)	Domestic Credit (KSh million)			Extended Broad Money Supply (M3) (KSh Million)	Commercial Bank Liquidity Ratio ¹ (per cent)	Advances/Deposits Ratio (per cent)
			Private and other public bodies	National Government	Total			
2013	Dec	387,292	1,581,358	397,164	1,978,522	1,996,242	47.0	82.3
2014	Dec	479,654	1,932,862	379,316	2,312,178	2,329,979	45.1	83.0
2015	Dec	491,461	2,269,898	524,026	2,793,924	2,658,166	43.7	87.0
2016	Dec	495,165	2,421,506	592,770	3,014,276	2,764,507	45.8	88.6
2017*	Mar	602,976	2,415,662	583,476	2,999,137	2,846,634	46.2	87.3
	Jun	644,126	2,407,163	646,240	3,053,402	2,936,110	48.1	83.2
	Sep	611,627	2,450,910	674,324	3,125,234	2,986,352	49.1	83.2
	Dec	517,876	2,496,453	755,698	3,252,151	3,010,943	47.1	83.2

Source: Central Bank of Kenya

*Provisional

¹ Commercial Banks' liquid assets as per cent of deposit liabilities

4.7. Table 4.2 presents various money supply aggregates for the period 2013 to 2017. Money supply (M1) grew by 6.7 per cent in December 2017 compared to a growth of 28.0 per cent in December 2016. Quasi money deposits held by commercial banks and other deposit taking institutions increased by 8.6 per cent during the same period. Broad money supply (M2) and extended broad money supply (M3) grew by 7.5 per cent and 8.9 per cent, respectively. The overall liquidity grew by 10.1 per cent to KSh 4,085.1 billion during the period under review.

Table 4.2: Money and Quasi Money Supply, 2013-2017

		KSh Million				
		Money (M1)	Quasi-Money	M2	M3	L
2013	Dec	827,069	844,526	1,671,595	1,996,242	2,523,227
2014	Dec	936,440	1,045,421	1,981,860	2,329,979	2,949,057
2015	Dec	1,023,672	1,211,125	2,234,797	2,658,166	3,390,818
2016	Dec	1,310,016	1,050,186	2,360,202	2,764,507	3,708,694
2017*	Jan	1,272,950	1,063,206	2,336,156	2,759,198	3,702,755
	Feb	1,287,123	1,063,239	2,350,363	2,781,233	3,734,966
	Mar	1,317,184	1,094,919	2,412,103	2,846,634	3,816,679
	Apr	1,363,661	1,087,260	2,450,921	2,895,366	3,858,902
	May	1,359,121	1,102,098	2,461,219	2,902,854	3,873,754
	Jun	1,391,293	1,089,229	2,480,521	2,936,110	3,934,976
	Jul	1,382,374	1,113,649	2,496,023	2,957,939	3,958,719
	Aug	1,364,341	1,138,812	2,503,153	2,966,992	3,979,927
	Sep	1,382,674	1,132,413	2,515,087	2,986,352	4,012,345
	Oct	1,395,418	1,119,720	2,515,138	2,980,395	4,030,946
	Nov	1,387,745	1,133,240	2,520,985	2,995,206	4,070,168
	Dec	1,397,256	1,140,939	2,538,195	3,010,943	4,085,100

Source: Central Bank of Kenya.

* Provisional

Notes:

- (a) **M1** comprises of currency outside banks plus all demand deposits except; those of National Government, Commercial Banks, Non Residents deposits
- (b) **Quasi Money**: Refers to near money. It comprises of call plus 7 days deposits, savings and time deposits.
- (c) **M2**, Broad Money, comprise of M1 and Quasi money.
- (d) **M3**, Extended Broad Money, comprises M2 and foreign currency holdings by residents.
- (e) **L**, Overall Liquidity, comprises M3 and Treasury Bill holdings by the non-bank public.

Consolidated Accounts of the Banking System

4.8. Table 4.3 presents assets and liabilities of the banking system for the period 2013 to 2017. Assets and liabilities of the banking system increased by 7.4 per cent to KSh 3,770.0 billion in December 2017 from KSh 3,509.4 billion in December 2016. Demand deposits increased by 6.5 per cent from KSh 1,100.1 billion in December 2016 to KSh 1,171.8 billion in December 2017, while foreign currency deposits increased by 17.0 per cent to KSh 472.7 billion.

Table 4.3: Consolidated Accounts of the Banking System 2013-2017

KSh Million

	2013	2014	2015	2016	2017*			
LIABILITIES-	December	December	December	December	March	June	September	December
1. Money (M1):								
1.1 Demand Deposits	663,709	762,935	832,421	1,100,124	1,116,184	1,184,179	1,173,399	1,171,755
1.2 Currency outside banks	163,359	173,505	191,251	209,891	201,000	207,114	209,275	225,500
Sub-Total	827,069	936,440	1,023,672	1,310,016	1,317,184	1,391,293	1,382,674	1,397,256
2. Quasi-Money(MS):								
2.1 Call + 7 days Notice Deposits ...	81,889	101,141	117,048	162,345	169,260	168,381	175,056	176,374
2.2 Savings Deposits	230,358	286,860	333,265	105,594	110,092	109,520	113,862	114,719
2.3 Time Deposits	532,279	657,419	760,812	782,246	815,566	811,328	843,495	849,845
Sub-Total (quasi-money banks)	844,526	1,045,421	1,211,125	1,050,186	1,094,918	1,089,229	1,132,413	1,140,938
Broad Money Supply(M2)	1,671,594	1,981,860	2,234,797	2,360,201	2,412,102	2,480,522	2,515,087	2,538,194
3. Foreign Currency Deposits	324,647	348,119	423,369	404,305	434,531	455,588	471,265	472,749
Extended Broad Money Supply(M3)	1,996,241	2,329,979	2,658,166	2,764,506	2,846,634	2,936,110	2,986,352	3,010,943
5. Treasury Bill Holdings	526,985	619,078	732,652	944,187	970,045	998,867	1,025,993	1,074,156
Overall Liquidity(L)	2,523,227	2,949,057	3,390,818	3,708,694	3,816,679	3,934,977	4,012,345	4,085,099
6. Other Items Net(OIN)	369,572	461,854	627,219	703,830	708,934	710,253	694,932	705,218
Total Liabilities (M3+OIN)	2,365,813	2,791,833	3,285,385	3,468,336	3,555,568	3,646,363	3,681,284	3,716,161
ASSETS-								
7. Net Foreign Assets	387,292	479,654	491,461	495,164	602,976	644,126	611,627	517,876
8. Domestic Credit:								
8.1 National Govt.	397,164	379,316	524,026	592,770	583,476	646,240	674,324	755,698
8.2 Other Public Bodies	39,620	48,402	65,093	104,719	105,940	106,858	113,710	112,399
8.3 Private Sector (net)	1,541,738	1,884,460	2,204,805	2,275,683	2,263,176	2,249,139	2,281,624	2,330,188
Total Domestic Credit	1,978,522	2,312,178	2,793,924	2,973,172	2,952,592	3,002,237	3,069,658	3,198,285
TOTAL ASSETS	2,365,813	2,791,833	3,285,385	3,468,336	3,555,568	3,646,363	3,681,284	3,716,161

Source: Central Bank of Kenya.

* Provisional

Notes:

(a) Other Items Net Includes Special Drawing Rights (SDR) allocated by IMF.

(b) Net Foreign Assets includes Government reserve position in the IMF and deposits with Crown Agents.

(c) Treasury Bill holdings by the non-bank public is not included in total liabilities of the banking system.

Sources of Change in Money Supply 4.9. Changes in money supply and their sources for the period 2013 to 2017 are presented in Table 4.4. Changes in M3 are as a result of changes in net domestic assets of the banking system which comprise; net foreign assets, domestic credit and other items net. Change in extended broad money (M3) was KSh 246.4 billion in December 2017 compared to KSh 106.3 billion recorded in December 2016. During the same period, change in foreign currency deposits was KSh 68.4 billion in 2017 compared to a negative change of KSh 19.1 billion in 2016. The growth in M3 was mainly attributable to increase in credit advanced to the National Government and private sector.

Table 4.4: Changes in Money Supply and the Sources, 2013-2017

	KSh Million				
	2013	2014	2015	2016	2017*
MONEY SUPPLY CHANGES					
1 Currency plus demand deposits (M1) ..	116,185	109,371	87,232	286,344	87,240
2 Quasi-money	86,010	200,895	165,704	-160,939	90,752
3 Foreign Currency Deposits	66,360	23,472	75,250	-19,064	68,444
4 Extended Broad Money supply (M3) ..	268,556	333,738	328,187	106,341	246,437
SOURCES OF CHANGES					
5 Net foreign assets	61,299	92,363	11,806	3,703	22,712
6 All Domestic Credit					
(a) to National Government (net) ..	28,341	-17,848	144,710	68,744	162,927
(b) to other public sector	-10,195	8,782	16,691	39,626	7,680
(c) to private sector	257,865	342,722	320,345	70,878	54,505
7 Other Items (Net)	-68,755	-92,282	-165,366	-76,610	-1,388
8 Total sources of change (5+6+7) .. .	268,556	333,738	328,187	106,341	246,437

Note: Changes in Money Supply and the sources compares year-end values

* Provisional

Selected Financial Aggregates in Real Values

4.10. Selected financial aggregates in real values from 2013 to 2017 are shown in Table Commercial bank credit to private sector contracted by 1.4 per cent while overall liquidity grew by 5.4 per cent in 2017. Commercial banks deposit liabilities increased by 6.0 per cent from KSh1,582.2 billion in 2016 to KSh 1,676.4 billion in 2017. Extended broad money supply (M3) increased by 4.2 per cent to KSh 1,644.9 billion, while total liabilities of the banking system increased by 2.5 per cent to KSh 2,030.1 billion. The share of commercial banks deposit liabilities to the total liabilities increased from 79.9 per cent in 2016 to 82.6 per cent in 2017.

Table 4.5: Trends in the Real Values of Selected Financial Aggregates¹, 2013-2017

	KSh Million				
	2013	2014	2015	2016	2017*
1 Extended Broad Money Supply (M3)....	1,387,724	1,527,755	1,613,748	1,578,095	1,644,875
2 Overall Liquidity (L)....	1,754,068	1,933,681	2,058,534	2,117,076	2,231,685
3 Commercial bank credit to private sector ..	1,099,310	1,267,367	1,378,034	1,382,296	1,363,809
4 Total commercial bank credit ..	1,375,406	1,516,083	1,696,166	1,720,674	1,776,646
5 Commercial Banks' Deposit Liabilities ..	1,369,640	1,525,925	1,615,554	1,582,207	1,676,440
6 Total liabilities of banking system	1,644,639	1,830,590	1,994,507	1,979,870	2,030,134
Memorandum item:					
7 Line 5 as per cent of line 6	83.3	83.4	81.0	79.9	82.6

*Provisional

¹Selected financial aggregates values are deflated using December Consumer Price Indices

Nominal and Real Interest Rates

4.11. Nominal interest rates for the period 2013 to 2017 are presented in Table 4.6. Average deposit rates rose from 7.33 per cent in December 2016 to 8.22 per cent in December 2017. The commercial banks' average interest rates charged on loans and advances declined from 13.69 per cent in December 2016 to 13.64 per cent in December 2017. The CBR remained at the same rate of 10.00 per cent during the year under review. The 91-day Treasury Bills rate dropped to 8.01 per cent in December 2017 from 8.44 per cent in December 2016.

Table 4.6: Nominal Principal Interest Rates, 2013-2017

	Per cent					
	2013	2014	2015	2016	2017	
	December	December	December	December	June	December
CENTRAL BANK OF KENYA						
91- day Treasury Bills Rate.....	9.52	8.58	9.81	8.44	8.42	8.01
Central Bank Rate..	8.50	8.50	11.50	10.00	10.00	10.00
Repo rate.....	9.38	8.29	9.23		4.13	7.75
Inter-bank rate.....	8.98	6.91	7.27	5.92	3.99	7.27
COMMERCIAL BANKS¹						
Average deposits.....	6.65	6.81	8.02	7.33	7.15	8.22
Savings deposits.....	1.58	1.85	1.56	6.37	5.63	6.91
Loan and Advances (maximum).....	16.99	15.99	18.30	13.69	13.66	13.64
Overdraft.....	16.51	15.86	18.48	13.49	13.38	13.54
Loans-Deposits Spread.....	10.34	9.18	10.28	6.36	6.52	5.41

Source: Central Bank of Kenya.

¹Weighted average commercial bank interest rates

4.12. Selected real principal interest rates for the period 2013 to 2017 are presented in Table 4.7. Average real interest rates for the 91-day Treasury Bills rose from 2.09 per cent in 2016 to 3.51 per cent in 2017. In the same period, real interest rates for commercial bank average savings deposit rate rose from 0.98 per cent to 3.72 per cent, while the inter-bank rates rose from negative 0.43 per cent to 2.77 per cent. The real interest rate for loans and advances from commercial banks increased from 7.34 per cent in 2016 to 9.14 per cent in 2017.

Table 4.7: Selected Real Principal Interest Rates, 2013-2017

				Per cent
	Year	Nominal Interest	Inflation Rate	Real Interest ¹
Average Interest	2013	9.52	7.15	2.37
Rate for 91-day	2014	8.58	6.02	2.56
Treasury Bills	2015	9.81	8.01	1.80
	2016	8.44	6.35	2.09
	2017	8.01	4.50	3.51
Commercial bank deposits (average)	2013	1.58	7.15	-5.57
	2014	1.85	6.02	-4.17
	2015	1.56	8.01	-6.45
	2016	7.33	6.35	0.98
	2017	8.22	4.50	3.72
Commercial bank loans and advances (maximum)	2013	16.99	7.15	9.84
	2014	15.99	6.02	9.97
	2015	18.30	8.01	10.29
	2016	13.69	6.35	7.34
	2017	13.64	4.50	9.14
Inter-Bank Rate	2013	8.98	7.15	1.83
	2014	6.91	6.02	0.89
	2015	7.27	8.01	-0.74
	2016	5.92	6.35	-0.43
	2017	7.27	4.50	2.77

Note: Interest rates are as at December

¹ Real Interest Rate equals Nominal Rate minus Inflation Rate

4.13. The statement of financial position of the Central Bank of Kenya (CBK) from 2013 to 2017 is shown in Table 4.8. The total assets and liabilities of the Central Bank rose from KSh 866.5 billion in December 2016 to KSh 906.0 billion in December 2017. Other assets, including Treasury Bills and Bonds increased from KSh 37.9 billion in December 2016 to KSh 80.5 billion in December 2017. On the liabilities side, total deposits declined by 8.8 per cent from KSh 515.7 billion in December 2016 to KSh 473.6 billion in December 2017. Currency in circulation increased by 6.3 per cent from KSh 262.7 billion in December 2016 to KSh 279.2 billion in December 2017.

Table 4.8: Central Bank of Kenya Assets and Liabilities, 2013-2017

	KSh Million							
	2013	2014	2015	2016	2017*			
	Dec	Dec	Dec	Dec	March	June	September	December
ASSETS								
1. Foreign Exchange:-								
1.1 Balances with External Banks.....	462,378	608,203	585,544	580,215	656,693	685,954	602,741	485,322
1.2 Treasury Bills.....	77,496	81,195	133,828	131,717	135,334	140,164	178,765	229,344
1.3 Other Investments	29,413	32,641	44,204	36,166	45,080	46,094	49,010	40,180
1.4 Special Drawing Rights	2,682	1,241	1,551	3,813	1,199	1,877	253	1,487
TOTAL	571,969	723,279	765,127	751,911	837,107	872,212	830,516	754,846
2. Advances & Disc. to Banks	13,788	3,676	16,858	46,713	30,700	23,600	64,512	28,292
3. Direct Advances & Overdraft to the Government	34,187	30,929	45,233	29,956	30,298	43	24,739	42,335
4. Other Assets including T Bills & Bonds	40,703	28,325	71,277	37,914	80,537	81,239	80,560	80,507
TOTAL ASSETS	650,670	786,209	885,202	866,494	978,642	977,094	1,000,326	905,980
LIABILITIES :								
1. Capital	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
2. Currency:-								
2.1 Notes	203,988	215,272	233,703	254,784	237,389	245,487	242,510	270,593
2.2 Coins	6,008	6,658	7,228	7,951	8,124	8,300	8,185	8,566
TOTAL CURRENCY	209,990	221,930	240,931	262,734	245,513	253,787	250,695	279,159
3. Deposits								
3.1 To the Government	115,542	179,963	177,905	181,804	183,582	214,346	227,931	144,903
3.2 Local Banks ¹	110,773	158,111	151,499	148,411	204,334	145,815	173,826	159,619
3.3 External Banks	139,694	133,819	143,741	130,329	139,284	133,868	135,867	127,717
3.4 Other	30,948	26,729	29,634	55,129	53,498	81,243	59,704	41,389
TOTAL Deposits	396,957	498,622	502,778	515,673	580,697	575,272	597,328	473,628
4. Other Liabilities	38,723	60,658	136,493	83,087	147,432	143,034	147,303	148,194
TOTAL LIABILITIES	650,670	786,209	885,202	866,494	978,642	977,094	1,000,326	905,980

Source: Central Bank of Kenya

* Provisional

¹ Deposits from commercial banks excluding non-bank financial institutions (NBFIs)

T Bills are Treasury Bills

4.14. Table 4.9a presents credit advanced by commercial banks to various sectors from 2013 to 2017. Commercial banks' credit grew by 6.0 per cent from KSh 3,127.9 billion in December 2016 to KSh 3,316.6 billion in December 2017. Credit advanced to manufacturing sector increased by 13.0 per cent to KSh 310.6 billion in 2017. In the public sector, commercial banks credit to the National Government rose by 16.5 per cent to KSh 826.9 billion in December 2017. Credit advanced to the county governments declined by 52.8 per cent to KSh 1.8 billion while credit to enterprises, parastatal bodies and other public entities grew by 7.4 per cent to KSh 108.4 billion in December 2017.

Table 4.9a: Commercial Banks' Bills, Loans and Advances¹, 2013-2017

	KSh Million				
	2013 Dec	2014 Dec	2015 Dec	2016 Dec	2017* Dec
PUBLIC SECTOR:					
National Government (net) ²	464,475	518,729	583,727	709,866	826,900
County Government (net)	-228	278	1,149	3,807	1,797
Enterprises, Parastatal bodies and other Public entities	39,847	48,125	45,173	100,912	108,424
TOTAL PUBLIC SECTOR	504,095	567,131	630,049	814,585	937,122
PRIVATE ENTERPRISES:					
Agriculture	58,656	75,001	85,925	90,081	83,008
Mining and Quarrying	27,804	23,421	20,776	16,802	15,877
Manufacturing	181,687	237,422	290,069	275,018	310,633
Building and Construction	70,770	80,406	106,307	104,826	109,883
Transport, Storage and Communication	89,488	130,304	171,643	201,270	186,744
Wholesale and retail trade, hotels and restaurants	253,198	306,927	378,043	380,683	414,908
Real Estate	198,337	262,691	282,586	337,352	366,486
Financial Institutions	29,924	50,384	61,042	85,212	81,586
Other Business	231,631	306,165	402,179	356,304	345,757
TOTAL PRIVATE ENTERPRISES	1,141,496	1,472,721	1,798,569	1,847,548	1,914,883
Community and Personal Services (including Non-Profit Making Institutions)	226,200	316,187	360,292	389,591	383,598
Other Activities (nec)	183,594	108,696	84,890	79,886	83,304
TOTAL BILLS, LOANS AND ADVANCES	2,055,385	2,464,736	2,873,800	3,127,888	3,316,619

Source: Central Bank of Kenya

* Provisional

¹ Commercial Banks' bills, loans and advances excludes portfolio investment by private enterprises and bank deposits placed with non-bank financial institutions.² Credit to National Government includes investments in Government Securities

4.15. The sectoral shares of commercial banks credit for the period 2013 to 2017 are shown in Table 4.9b. The share of loans and advances to the public sector rose from 26.0 per cent in December 2016 to 28.3 per cent in December 2017. The share of credit to public enterprises, parastatal bodies and other public entities increased to 3.3 per cent in 2017 from 3.2 per cent in 2016. In 2017, transport, storage and communication, agriculture and other business sectors recorded marginal declines in credit. During the same period, manufacturing sector recorded a marginal increase in credit.

Table 4.9b: Commercial Banks' Bills, Loans and Advances Sector Shares¹ 2013–2017

	Per cent				
	2013 Dec	2014 Dec	2015 Dec	2016 Dec	2017* Dec
PUBLIC SECTOR					
National Government ¹	22.6	21.0	20.3	22.7	24.9
County Government	0.0	0.0	0.0	0.1	0.1
Enterprises, Parastatal bodies and other Public entities	1.9	2.0	1.6	3.2	3.3
TOTAL PUBLIC SECTOR	24.5	23.0	21.9	26.0	28.3
PRIVATE ENTERPRISES					
Agriculture	2.9	3.0	3.0	2.9	2.5
Mining and Quarrying	1.4	1.0	0.7	0.5	0.5
Manufacturing	8.8	9.6	10.1	8.8	9.4
Building and Construction	3.4	3.3	3.7	3.4	3.3
Transport, Storage and Communication	4.4	5.3	6.0	6.4	5.6
Wholesale and retail trade, hotels and restaurants	12.3	12.5	13.2	12.2	12.5
Real Estate	9.6	10.7	9.8	10.8	11.0
Financial Institutions	1.5	2.0	2.1	2.7	2.5
Other Business	11.3	12.4	14.0	11.4	10.4
TOTAL PRIVATE ENTERPRISES	55.5	59.8	62.6	59.1	57.7
Community and Personal Services (including Non-Profit Making Institutions)	11.0	12.8	12.5	12.5	11.6
Other Activities (nec)	8.9	4.4	3.0	2.6	2.5
TOTAL BILLS, LOANS AND ADVANCES	100.0	100.0	100.0	100.0	100.0

Source: Central Bank of Kenya

* Provisional

Note: Commercial banks, bills, loans and advances excludes portfolio deposits placed with non-bank financial institutions investment by private enterprises and bank

¹Credit to National Government includes investments in Government Securities

4.16. Deposit liabilities and liquid assets of commercial banks for the period 2013 to 2017 are presented in Table 4.10. Deposit liabilities held by commercial banks grew by 10.7 per cent to KSh 3,068.7 billion in December 2017 from KSh 2,771.7 billion in December 2016. Liquid assets increased by 13.8 per cent to KSh 1,444.2 billion in 2017. The overall liquidity ratio rose from 45.8 per cent in December 2016 to 47.1 per cent in December 2017.

Table 4.10: Commercial Banks' Deposit Liabilities and Liquid Assets, 2013-2017

	Deposit Liabilities ¹ (KSh Million)	Liquid Assets ^{1,2} (KSh Million)	Overall Liquidity Ratio (Per cent)
2013 December	1,970,227	925,443	47.0
2014 December	2,327,188	1,050,496	45.1
2015 December	2,661,140	1,162,557	43.7
2016 December	2,771,711	1,269,312	45.8
2017* January	2,774,513	1,269,254	45.7
February.....	2,802,035	1,275,379	45.5
March.....	2,857,127	1,321,215	46.2
April.....	2,929,283	1,373,858	46.9
May.....	2,949,869	1,401,673	47.5
June.....	2,971,434	1,429,483	48.1
July.....	3,003,284	1,457,788	48.5
August.....	3,011,002	1,464,545	48.6
September.....	3,016,446	1,481,195	49.1
October.....	3,029,319	1,463,610	48.3
November.....	3,022,727	1,435,421	47.5
December.....	3,068,724	1,444,155	47.1

Source: Central Bank of Kenya.

* Provisional

¹ Deposits and Liquid Assets are calculated as an average of three days balances.² Includes notes and coins, balances at Central Bank, net inter-bank balances in Kenya and Overseas (included only if positive) and Treasury Bills.

Deposit Taking Savings and Credit Cooperatives 4.17. Table 4.11 presents performance of Deposit Taking Savings and Credit cooperatives (DTSS). The assets of DTSS grew by 12.6 per cent to KSh 442.9 billion in 2017 from KSh 393.5 billion in 2016. Total deposits recorded a growth of 12.6 per cent to KSh 307.0 billion while loans and advances grew by 10.8 per cent to KSh 320.1 billion during the review period. Capital reserves increased by 46.5 per cent from KSh 61.3 billion in 2016 to KSh 89.8 billion in 2017.

Table 4.11: Performance of Deposit Taking Savings and Credit Cooperatives 2014-2017

	KSh Million			
Indicator	2014	2015	2016	2017*
Assets	301,537	342,848	393,499	442,919
Deposits	205,974	237,440	272,579	306,988
Loans and Advances	228,524	251,080	288,921	320,091
Capital Reserves	43,086	50,835	61,261	89,813

Source: Sacco Society Regulatory Authority

* Provisional

Capital Markets 4.18. Table 4.12 shows the performance of the secondary market for the period 2013 to 2017. The Nairobi Securities Exchange (NSE) 20-Share index rose to 3,712 points in December 2017 compared to 3,186 points recorded in December 2016. The total number of shares traded also increased from 5.8 billion in 2016 to 7.1 billion during the period under review. Total value of shares traded increased from KSh 147 billion in 2016 to KSh 172 billion during the period under review. Total bond turnover declined from KSh 433 billion in 2016 to KSh 429 billion in 2017. Market capitalization increased by 30.5 per cent from KSh 1,932 billion as at end of 2016 to KSh 2,522 billion as at end of 2017. The total number of licensed/approved institutions in the capital market reduced by 1 to 132 in 2017.

Table 4.12: Secondary Market Statistics, 2013-2017

	2013	2014	2015	2016	2017*
Equities Market					
Total No. of Shares Traded (million)	7,576	8,233	6,812	5,809	7,065
Total No. of Deals	426,327	548,991	406,632	300,183	284,982
Total Value of Shares Traded (KSh billion)	156	216	209	147	172
NSE 20 Share Index (Base Jan 1966=100)	4,927	5,113	4,040	3,186	3,712
Market Capitalization (KSh billion)	1,921	2,316	2,054	1,932	2,522
Fixed Income Securities Market					
Total bond Turnover (KSh billion)	452	506	305	433	429
Capital Markets, Licensed/approved Institutions					
Securities Exchange	1	1	1	1	1
Central Depositories	1	1	1	1	1
Investment Banks	10	13	14	14	14
Stockbrokers	11	10	9	10	10
Investment advisers	16	17	17	13	14
Fund Managers	20	24	25	28	26
Collective Investment Schemes	16	19	20	23	23
Authorized depositories /Custodians	15	14	14	14	14
Credit Rating Agencies	2	3	3	3	3
Venture Capital Companies	1	1	1	1	0
Real Estate Investment Trust Managers		2	6	8	8
Real Estate Investment Trust Trustees			3	3	3
Employee Share Ownership Plans (ESOPS)	10	10	11	11	14
Authorized Real Estate Investment Trusts				3	1
Total	103	115	125	133	132

Source: Capital Markets Authority

* Provisional

Insurance 4.19. Table 4.13 presents performance indicators for life insurance business from 2013 to 2017. The bulk of the life insurance business was life business, which stood at 97.3 per cent of the asset base. Total assets in life business grew by 15.8 per cent to KSh 353.6 billion in 2017. On the other hand, total liabilities increased by 18.3 per cent to stand at KSh 307.6 billion in 2017. Other indicators that recorded significant growth include; benefits payment, investments, net premium income and gross premium income that grew by 24.1, 17.3, 14.2 and 13.6 per cent, respectively. Commissions declined by 4.3 per cent in life business and grew by 10.8 per cent in life re-insurance to stand at KSh 5.4 billion and KSh 0.7 billion, respectively.

4.20. In 2017, assets in life re-insurance grew by 10.5 per cent to KSh 9.9 billion while liabilities rose to KSh 4.8 billion. Life re-insurance gross premium income increased by 15.8 per cent to KSh 2.8 billion in 2017. Investments in life re-insurance grew by 5.9 per cent compared to a rate of 17.3 per cent in life business segment in 2017.

Table 4.13: Performance of Life Insurance Business, 2013-2017

Indicator	KSh Million				
	2013	2014	2015	2016	2017*
Life Business					
Gross Premium Income.....	44,346	56,483	61,243	73,062	82,971
Net Premium Income.....	41,707	52,613	56,514	67,579	77,165
Benefits Payment	23,506	27,165	28,264	36,985	45,912
Commissions.....	3,659	4,380	5,078	5,598	5,357
Management Expenses.....	7,333	9,451	11,176	12,011	12,020
Shareholders' Funds	28,467	36,566	36,259	45,258	45,962
Assets	195,854	240,086	268,976	305,389	353,608
Liabilities	167,386	203,520	232,717	260,131	307,646
Investments	175,311	218,774	242,750	271,906	318,922
Re-insurance Life					
Gross Premium Income.....	1,425	1,622	2,087	2,393	2,771
Net Premium Income.....	1,270	1,424	1,813	2,069	2,445
Benefits Payment.....	530	537	767	1,038	1,208
Commissions.....	347	443	533	606	672
Management Expenses.....	154	198	249	291	313
Shareholders' Funds	3,482	4,366	4,124	4,643	5,164
Assets	6,210	6,812	8,044	8,983	9,923
Liabilities	2,728	2,446	3,920	4,340	4,759
Investments	6,025	6,494	7,713	8,529	9,029

Source: Insurance Regulatory Authority

* Provisional

4.21. Table 4.14 presents performance for general insurance business from 2013 to 2017. Assets of general insurance business increased by 3.6 per cent to KSh 179.0 billion while liabilities increased by 2.7 per cent to KSh 108.6 billion in 2017. Gross premium income increased by 2.5 per cent to KSh 124.7 billion in 2017.

4.22. Under the re-insurance general business segment, assets grew by 11.1 per cent to KSh 42.3 billion while liabilities increased by 6.5 per cent to KSh 15.7 billion in 2017. Gross premium income grew by 14.6 per cent to stand at KSh 17.5 billion in 2017.

Table 4.14: Performance for General Insurance Business, 2013– 2017

Indicator	KSh Million				
	2013	2014	2015	2016	2017*
General Business					
Gross Premium Income.....	86,656	101,297	112,134	121,674	124,709
Net Premium Income.....	63,241	74,023	82,986	89,213	87,552
Net Earned Premium Income	58,508	70,208	79,578	86,148	90,044
Claims Incurred	33,442	41,895	49,131	53,701	54,861
Commissions	3,785	4,877	5,986	6,718	6,819
Management Expenses	17,034	20,967	24,531	26,120	27,808
Shareholders' Funds	50,290	61,582	65,984	67,018	70,397
Assets	128,968	146,174	163,977	172,809	179,023
Liabilities	78,678	84,593	97,992	105,792	108,626
Investments	81,929	100,827	111,067	113,637	117,483
Re-insurance General business					
Gross Premium Income.....	11,021	14,752	16,357	15,267	17,494
Net Premium Income.....	10,629	14,160	15,728	14,498	16,778
Net Earned Premium Income	9,947	13,117	15,000	14,846	15,931
Claims Incurred	5,051	7,521	8,616	7,993	9,218
Commissions	2,920	3,833	4,186	4,167	4,560
Management Expenses	870	1,192	1,615	1,522	1,900
Shareholders' Funds	15,966	20,030	21,800	23,369	26,640
Assets	26,945	33,238	36,220	38,069	42,290
Liabilities	10,979	13,208	14,420	14,701	15,650
Investments	21,206	26,276	28,306	29,243	32,763

Source: Insurance Regulatory Authority

* Provisional

Developments in the financial sector

Capital Markets

4.23. In 2017, the Capital Markets Authority (CMA) published a Policy Guidance Note to facilitate the issuance, listing and trading of Global Depository Receipts and Notes. This is expected to raise the country's profile as an attractive investment destination by providing opportunities for international investors.

Pensions

4.24. In 2017, there were 21 fund managers, 30 administrators and 11 custodians registered by the Retirement Benefits Authority (RBA) to offer services to registered pension schemes. The retirement benefit assets grew by 5.2 per cent to KSh 963.0 billion in June 2017 from KSh 831.8 billion in June 2016.

Insurance

4.25. Policy initiatives advanced in 2017 include the Area Yield Index Insurance (AYII) and the Kenya Livestock Insurance Projects (KLIP). These products are meant to cushion farmers from unpredictable losses due to weather changes and disease outbreak.

Savings and Credit Cooperative Societies (SACCOs)

4.26. The Finance Act, 2017 amended the Cooperatives Societies Act and Sacco Societies Act, which recognized and introduced Islamic finance business practices and services in the societies. These changes take effect from 1st January 2018.

Public Finance

Chapter 05

Overview

The 2017/18 budget was guided by the Government's focus on establishing a sustainable fiscal position through a prudent course of fiscal consolidation and debt stabilization. The fiscal policy was aimed at enhancing revenue mobilization, re-orientation of public expenditure composition towards productive capital spending and priority commitments, and the gradual reduction of non-priority expenditures. The budgetary resource allocation prioritized spending on programmes aligned to the Government's economic transformation agenda.

5.2. Overall Fiscal Results: In 2017/18, National Government expenditure is expected to reach KSh 2,777.8 billion, an increase of 21.7 per cent, from an actual expenditure of KSh 2,283.0 billion in 2016/17. Recurrent and development expenditure are estimated at KSh 2,107.2 billion and KSh 670.6 billion respectively, during the review period. Total revenue is expected to grow by 19.6 per cent to KSh 1,710.2 billion in 2017/18. Ordinary revenue is expected to grow by 17.6 per cent to KSh 1,651.0 billion, of which tax revenue is estimated at KSh 1,466.2 billion. The total stock of public debt stood at KSh 3,971.4 billion as at end of June 2017, of which external debt position accounted for 57.8 per cent. In 2017/18, a total of KSh 623.1 billion is estimated to be spent on public debt servicing.

5.3. County governments budgeted KSh 395.9 billion, against an estimated total revenue of KSh 401.6 billion, during the review period. Current transfers from National Government to county governments, inclusive of conditional grants, is estimated to increase by 14.4 per cent to KSh 345.7 billion.

National Government

5.4. Details of the statement of operations for the National Government for the period 2013/14 to 2017/18 are given in Table 5.1. In 2017/18, total revenue is expected to grow by 19.6 per cent to KSh 1,710.2 billion. Over the same period, the expense is estimated to grow by 19.7 per cent to KSh 2,174.1 billion. Spending on acquisition of non-financial assets, less disposals, is expected to decline by 15.1 per cent to KSh 190.0 billion in the review period. Gross operating balance, is estimated to widen by 20.0 per cent to a deficit of KSh 463.9 billion in 2017/18. Similarly, net borrowing balance is estimated to expand by 7.1 per cent to a deficit of KSh 654.0 billion, over the same period. Similarly, net borrowing balance is estimated to expand by 7.1 per cent to a deficit of KSh 654.0 billion.

Table 5.1: Statement of National Government Operations, 2013/14 - 2017/18

	KSh Million				
	2013/14	2014/15	2015/16	2016/17*	2017/18 ⁺
1. Revenue ¹	1,001,374.83	1,141,155.05	1,265,441.90	1,429,595.63	1,710,234.99
2. Expense	1,173,854.87	1,363,664.25	1,591,959.31	1,816,187.99	2,174,149.32
2.1 Current Expenditure	1,004,233.89	1,178,256.45	1,372,253.58	1,462,394.12	1,828,255.53
2.2 Capital Transfers	169,620.98	185,407.80	219,705.73	353,793.87	345,893.79
3. Gross Operating Balance (1-2)	- 172,480.04	- 222,509.20	- 326,517.42	- 386,592.36	- 463,914.33
4. Acquisition of Non-Financial Assets(net) ²	135,008.60	312,101.47	174,078.54	223,827.45	190,049.70
5. Net lending/Borrowing (3-4)	- 307,488.64	- 534,610.67	- 500,595.96	- 610,419.81	- 653,964.03
FINANCING (6-7)	- 354,083.37	- 552,127.81	- 482,422.88	- 618,002.94	- 527,041.71
6. Net Acquisition of financial assets	21,189.02	55,045.81	180,977.17	43,894.49	26,351.00
6.1. Domestic	21,189.02	55,045.81	180,977.17	43,894.49	26,351.00
6.2. External	-	-	-	-	-
7. Net Incurrence of liabilities	332,894.35	607,173.62	663,400.05	661,897.43	553,392.71
7.1. Domestic	165,338.55	127,892.59	358,414.55	276,152.79	222,311.76
7.2. Foreign	167,555.79	479,281.03	304,985.50	385,744.64	331,080.94
MEMORANDUM ITEMS:					
8. Public debt redemption	213,953.00	232,950.71	222,896.68	216,943.22	342,332.24
8.1. External	85,253.00	82,949.81	35,633.36	44,839.00	150,334.29
8.2. Internal	128,700.00	150,000.90	187,263.32	172,104.23	191,997.95

* Provisional

⁺ Revised Budget estimates¹ includes grants² Acquisition of non financial assets(net) equals acquisition of non financial assets minus gross disposal of non financial assets

5.5. Table 5.2 presents the key fiscal ratios from 2013/14 to 2017/18. Gross operating balance as a percentage of revenue is estimated to worsen to negative 27.13 in 2017/18 from negative 27.04 in 2016/17, while it is expected to worsen significantly as a percentage of net acquisition of non-financial assets in the review period. In 2017/18, net borrowing position is estimated to register marginal improvement, as a percentage of both revenue and total expenditure. The ratio of net short-term borrowing to acquisition of non-financial assets is estimated to improve in the review period. The net borrowing to GDP ratio is estimated to worsen to negative 8.4 in the review period.

Table 5.2: Analysis of Key Fiscal Ratios, 2013/14 - 2017/18

	2013/14	2014/15	2015/16	2016/17*	2017/18 ⁺
Gross operating balance as a % of Revenue	-17.22	-19.50	-26.04	-27.04	-27.13
Gross operating balance as a % of Acquisition of Non financial assets (net)	-127.75	-71.29	-188.94	-172.72	-244.10
Ratio of Acquisition of Non financial assets (net) to Current Expenditure	13.44	26.49	12.69	15.31	10.40
Net lending/Borrowing as % of Revenue	-30.71	-46.85	-39.82	-42.70	-38.24
Net lending/Borrowing as % of Total Expenditure	-20.10	-27.74	-24.80	-26.83	-23.93
External Grants and Loans as % of Acquisition of Non financial assets (net)	117.89	104.03	192.20	183.91	205.38
Net Short-Term Borrowing as % of Acquisition of nonfinancial assets (net)	-0.64	4.10	143.50	47.79	32.97
Revenue as % of GDP at Current Market Prices	19.85	19.60	18.78	19.13	22.07
Total Government Expenditure as % of GDP at Current Market Prices	30.39	33.56	30.38	30.55	35.85
Net lending/Borrowing as % of GDP at Current Market Prices	-6.10	-9.18	-7.43	-8.17	-8.44

*Provisional

⁺ Revised Budget estimates

5.6. The comparison of National Government budgetary estimates and the actual out-turns from 2014/15 to 2016/17, and revised budget estimates for 2017/18, are presented in Table 5.3. In 2016/17, actual revenue collected was 92.7 per cent of the targeted amount of KSh 1,515.0 billion. The absorption of recurrent expenditure was 95.5 per cent of the budgeted amount in 2016/17, while that of development expenditure was 82.2 per cent. Over the same period, 86.2 per cent of the budgeted external financing was realized.

Table 5.3: Comparison of National Government Budget Estimates with Actual Out-turns, 2014/15 - 2017/18

	2014/15			2015/16		
	Budget	Actual	Difference	Budget	Actual	Difference
Total Ordinary Revenue	1,170,529.35	1,113,037.56	-57,491.79	1,299,912.13	1,235,845.21	-64,066.92
Recurrent Expenditure ¹	1,411,158.86	1,381,044.87	-30,113.99	1,583,822.92	1,564,285.53	-19,537.39
Recurrent Balance	-7,678.80	-268,007.31	-260,328.51	-61,014.11	-328,440.32	-267,426.21
Development Expenditure	684,360.29	572,464.57	-111,895.72	682,983.39	483,066.22	-199,917.17
External Financing (Net) ²	368,316.00	507,398.52	139,082.52	484,983.00	334,582.19	-150,400.81
Balance for Domestic Financing (Net) ..	-323,723.09	-333,073.36	-9,350.27	-259,014.50	-476,924.35	-217,909.85
	2016/17*			2017/18 ⁺		
	Budget	Actual	Difference	Printed Budget	Revised Budget	Difference
Total Ordinary Revenue	1,514,988.77	1,403,691.64	-111,297.12	1,704,503.02	1,650,989.40	-53,513.63
Recurrent Expenditure ¹	1,734,402.94	1,657,215.49	-77,187.45	1,697,960.80	2,107,177.12	409,216.31
Recurrent Balance	-219,414.18	-253,523.85	-34,109.68	6,542.22	-456,187.72	-462,729.94
Development Expenditure	761,705.00	625,780.13	-135,924.87	640,295.24	670,621.48	30,326.24
External Financing ² (Net)	477,762.82	411,648.62	-66,114.19	314,774.47	390,326.54	75,552.07
Balance for Domestic Financing (Net) ..	-503,356.35	-467,655.36	35,701.00	-318,978.56	-736,482.66	-417,504.11

Source: The National Treasury

* Provisional

⁺ Revised budget estimates

¹ Recurrent expenditure consists of current expenditure, acquisition of non financial assets (net), Consolidated Fund Services and current transfers to county governments

² Includes external grants

5.7. Table 5.4 details the National Government's gross receipts on the recurrent account from 2013/14 to 2017/18. Total ordinary revenue is estimated to grow by 17.6 per cent to KSh 1,651.0 billion in 2017/18. Total tax revenue is estimated to increase by 14.8 per cent to KSh 1,466.2 billion, over the same period. In 2017/18, Income tax and Value Added Tax (VAT) are estimated to grow by 15.4 per cent and 14.6 per cent, to KSh 724.0 billion and KSh 388.7 billion, respectively. Tax collection on Income Tax and VAT categories are expected to account for 49.4 per cent and 26.5 per cent of the total tax revenue, respectively, in the review period. The non-tax revenue is expected to account for 11.2 per cent of the total ordinary revenue in 2017/18. The government implemented the Finance Act, 2017 as from 1st January 2018, to provide for clear regulations on administration of Income Tax. The Act is expected to enhance tax revenue yields and compliance.

Table 5.4: National Government Gross Receipts on the Recurrent Account, 2013/14 - 2017/18

	KSh Million				
	2013/14	2014/15	2015/16	2016/17*	2017/18 ⁺
Taxes on income, profits and capital gains	449,590.07	509,159.84	569,811.18	627,469.00	723,953.07
Income tax from individuals (P.A.Y.E)	249,872.80	279,795.65	286,166.16	336,596.00	387,950.88
Income tax from corporations (other income tax)	199,717.27	228,785.25	279,834.49	288,454.00	331,183.29
Capital gains taxes .....	..	578.95	3,810.54	2,419.00	4,818.90
Taxes on property	-	-	88.26	-	112.97
Tax on property	-	-	88.26	-	112.97
Value Added Tax (VAT)	232,630.32	259,685.20	289,213.47	339,033.92	388,697.59
VAT on domestic goods and services	107,737.35	127,904.57	160,389.01	194,233.86	219,959.67
VAT on imported goods and services	124,892.97	131,780.63	128,824.45	144,800.06	168,737.91
Taxes on other goods and services	125,363.91	140,243.32	162,593.81	188,971.60	210,076.23
Excise taxes	102,029.10	115,871.72	139,540.34	165,473.91	183,661.37
Taxes on use of goods and on permission to use the goods or to perform services and activities	4,910.49	4,650.51	5,780.10	4,594.68	5,245.86
Taxes on goods and services collected as AIA	18,424.32	19,721.08	17,273.37	18,903.00	21,169.00
Taxes on international trade transactions	94,232.51	101,040.90	104,433.27	112,890.05	128,589.38
Custom duties	67,554.64	74,047.72	79,187.93	89,943.34	102,390.55
Other taxes on international trade and transactions	26,677.87	26,993.18	25,245.33	22,946.71	26,198.83
Other taxes not elsewhere classified	9,986.89	11,467.76	10,423.54	8,595.58	14,813.79
TOTAL TAX REVENUE	911,803.70	1,021,597.03	1,136,563.52	1,276,960.14	1,466,243.01
Social security contributions	203.85	871.04	461.91	485.00	167.81
Property income	10,767.53	15,290.28	21,324.81	31,112.40	25,142.83
Sale of goods and services	2,678.84	6,158.28	6,022.75	10,763.79	12,289.28
Fines penalties and forfeitures	1,442.62	2,490.95	2,278.34	1,518.21	2,733.38
Repayments from domestic lending and on-lending	1,618.36	2,897.37	2,389.30	2,628.80	3,808.81
Ministerial Appropriation in Aid	35,707.06	56,705.93	62,398.11	75,881.13	135,646.70
Other receipts not elsewhere classified	10,195.77	7,026.70	4,406.48	4,342.17	4,957.56
TOTAL NON-TAX REVENUE	62,614.02	91,440.53	99,281.70	126,731.50	184,746.38
TOTAL ORDINARY REVENUE	974,417.72	1,113,037.56	1,235,845.21	1,403,691.64	1,650,989.40

Source: The National Treasury

* Provisional

⁺ Revised budget estimates

P.A.Y.E - Pay As You Earn

AIA- Appropriation in Aid

5.8. The details of import duty levied on selected categories of commodities from 2013 to 2017 are shown in Table 5.5. In 2017, the import duty collected on selected categories of commodities grew by 5.9 per cent to KSh 84.2 billion. In the same period, the import duty collected from food drinks and tobacco registered a growth of 30.4 per cent to KSh 24.2 billion, while transport equipment category registered a growth of 2.1 per cent. Import duty collected from machinery and metals categories declined by 6.3 per cent and 25.7 per cent, respectively, during the review period.

Table 5.5: Import Duty Collections on Selected Categories of Commodities, 2013 - 2017

	KSh Million				
	2013	2014	2015	2016	2017*
End-Use Category					
Food, drinks and tobacco	11,207.96	13,823.42	16,163.83	18,540.89	24,184.56
Basic materials	2,887.86	3,312.82	3,710.74	5,203.49	5,241.91
Fuels	1,017.90	1,338.13	1,413.23	1,195.70	1,380.31
Chemicals	2,779.13	3,508.57	3,970.02	3,862.54	4,049.70
Textiles	1,607.42	1,814.36	1,638.48	2,288.59	2,652.28
Semi-manufactures ¹	4,412.02	4,615.17	4,772.37	4,994.29	5,126.57
Metals	3,679.55	5,116.45	5,315.61	8,594.05	6,385.71
Transport Equipment	15,148.74	17,576.28	19,310.19	16,252.85	16,597.56
Machinery	6,428.76	7,123.38	6,934.12	9,319.10	8,736.48
Miscellaneous commodities	6,062.88	7,179.58	7,924.10	9,246.60	9,833.76
TOTAL	55,232.22	65,408.16	71,152.69	79,498.09	84,188.84

Source: Kenya Revenue Authority

* Provisional

¹ Excludes non-metallic mineral manufactures

5.9. The excise revenue collected from domestically manufactured commodities and services from 2013 to 2017 is presented in Table 5.6. The excise revenue collected from domestically manufactured commodities and services amounted to KSh 82.8 billion in 2017, a growth of 3.1 per cent. Excise revenue from beer and cigarettes grew by 1.6 per cent and 4.9 per cent, respectively in 2017. Similarly, excise revenue from airtime and financial transactions registered growths of 3.8 per cent and 21.1 per cent, respectively. In the same period, excise revenue from the wines and spirits category declined by 17.9 per cent to KSh 8.8 billion.

Table 5.6: Excise Revenue Levied on Commodities and Services¹, 2013 - 2017

	KSh Million				
	2013	2014	2015	2016	2017*
Beer	16,886.17	18,996.80	19,525.74	24,443.46	24,842.54
Wines and Spirits	3,036.86	4,638.32	6,148.36	10,681.38	8,772.87
Mineral Water, Soft Drinks and Juices ...	2,252.14	2,474.05	2,514.64	3,318.56	3,464.11
Cigarettes	10,199.78	10,281.88	12,230.19	12,440.94	13,052.09
Airtime	-	-	14,138.80	15,540.89	16,129.29
Financial Transactions	-	-	7,222.07	11,312.92	13,701.09
Other commodities ²	787.01	2,719.59	902.15	2,642.24	2,881.04
TOTAL	33,161.96	36,881.95	62,681.94	80,380.39	82,843.03

Source: Kenya Revenue Authority

* Provisional

¹ Domestically manufactured commodities and services² Includes revenue from jewelry, cosmetics and locally assembled vehicles

5.10. Table 5.7 shows the financing of investment in non-financial assets by the National Government from 2013/14 to 2017/18. In 2017/18, external loan disbursements are expected to reach KSh 331.1 billion, a decline of 14.2 per cent. External grants disbursements are estimated to more than double to KSh 59.2 billion in the review period. The long-term and short-term domestic borrowing declined by 23.0 per cent to KSh 276.2 billion in 2016/17. Long-term and short-term domestic borrowing is expected to reach KSh 159.7 billion and KSh 62.7 billion, respectively in 2017/18.

Table 5.7: National Government Financing of Non-Financial Assets, 2013/14 - 2017/18

	KSh Million				
	2013/14	2014/15	2015/16	2016/17*	2017/18 ⁺
EXPENDITURE:					
Acquisition of Non financial Assets (Net)...	135,008.60	312,101.47	174,078.54	223,827.45	190,049.70
TOTAL	135,008.60	312,101.47	174,078.54	223,827.45	190,049.70
FINANCING:	359,851.45	635,291.11	692,996.73	687,801.41	612,638.30
External Grants	26,957.11	28,117.49	29,596.68	25,903.99	59,245.59
LONG TERM BORROWING:	333,764.46	594,392.31	413,598.42	554,928.58	490,734.25
External Borrowing	167,555.79	479,281.03	304,985.50	385,744.64	331,080.94
Long-Term Domestic Borrowing (Net).....	166,208.66	115,111.28	108,612.91	169,183.95	159,653.30
SHORT TERM BORROWING:	-870.11	12,781.31	249,801.64	106,968.84	62,658.46
Treasury Bills (Net)	32,811.90	12,947.02	242,092.15	151,172.51	16,450.61
Other Short-Term Borrowing (Net)	-33,682.01	-165.71	7,709.49	-44,203.67	46,207.85
CHANGE IN CASH BALANCES ¹ : Increase=(-)...	-224,842.85	-323,189.64	-518,918.19	-463,973.97	-422,588.60
TOTAL	135,008.60	312,101.47	174,078.54	223,827.45	190,049.70

Source: The National Treasury and Central Bank of Kenya

* Provisional.

⁺ Revised Budget Estimates

¹ Balancing item

5.11. Table 5.8 presents National Government expenditure classified by functions from 2014/15 to 2017/18. Total expenditure is expected to grow by 21.7 per cent to KSh 2,777.8 billion in 2017/18. Recurrent and development outlays are estimated to grow by 27.2 per cent and 7.2 per cent, to KSh 2,107.2 billion and KSh 670.6 billion, respectively. Expenditure on economic affairs is expected to decline by 1.2 per cent to KSh 481.0 billion. This is mainly attributable to reduced budget allocation to transport and general economic affairs functions, by 6.3 per cent and 15.2 per cent, respectively. Budgetary outlays on public order and safety, and fuel and energy are estimated to increase by 13.3 per cent and 20.7 per cent, to KSh 154.4 billion and KSh 100.3 billion, respectively. The design of the budget reflects the government's fiscal policy stance towards fiscal consolidation and reorientation of public expenditure composition, which aims at prioritizing capital spending and gradual reduction of non-priority expenditures.

5.12. Outlay on public debt transactions in 2017/18 is estimated at KSh 623.1 billion and accounts for 22.4 per cent of the total budgeted expenditure. Current transfers to county governments, inclusive of conditional grants, is estimated at KSh 345.7 billion, translating to 12.4 per cent of the total expenditure during the review period. Spending on education and general public services for the same period are estimated to grow by 27.6 per cent and 46.8 per cent, respectively. The expenditure on social protection is estimated to grow by 27.5 per cent to KSh 106.9 billion geared towards improving the welfare of the vulnerable groups.

Table 5.8: National Government Expenditure Classification by Functions of Government, 2014/15-2017/18

	2014/15			2015/16			2016/17*			2017/18*		
	Recurrent	Development	Total	Recurrent	Development	Total	Recurrent	Development	Total	Recurrent	Development	Total
General public services	94,317.30	37,822.98	132,140.28	143,067.52	73,842.45	216,909.96	145,684.37	83,510.92	229,195.29	223,997.72	112,416.60	336,414.32
Public debt transactions	400,323.71	-	400,323.71	438,225.22	-	438,225.22	450,654.10	-	450,654.10	623,052.04	-	623,052.04
Transfers of general character betw. levels of govt.	229,263.65	-	229,263.65	264,038.64	-	264,038.64	302,198.52	-	302,198.52	345,681.02	-	345,681.02
Defense	97,922.50	-	97,922.50	140,588.80	-	140,588.80	129,207.21	-	129,207.21	135,060.38	-	135,060.38
Public order and safety	130,774.44	11,020.28	141,794.72	110,563.98	15,709.62	126,273.60	118,800.70	17,431.71	136,232.41	134,414.72	19,973.46	154,388.18
Economic affairs	59,226.58	385,137.49	444,364.07	63,523.49	305,979.93	369,503.41	86,556.53	400,242.51	486,799.04	104,887.72	376,159.02	481,046.74
General economic, commercial & labour affairs ..	5,960.57	25,625.29	31,585.87	12,068.92	50,016.94	62,085.86	14,252.94	8,386.24	22,639.18	11,013.99	8,173.78	19,187.77
Agriculture, forestry, fishing, and hunting	16,490.69	33,951.54	50,442.23	9,956.39	21,587.48	31,543.87	19,624.08	20,718.25	40,342.33	23,968.36	28,548.56	52,516.93
Fuel and energy	2,016.40	62,673.56	64,689.96	1,707.49	71,506.88	73,214.37	2,179.19	80,950.85	83,130.04	2,316.09	98,014.97	100,331.06
Mining, manufacturing and construction	747.72	1,097.12	1,844.84	688.50	531.89	1,220.39	622.59	930.00	1,552.58	1,117.02	1,560.57	2,677.59
Transport	26,326.48	253,691.54	280,018.03	35,423.80	146,140.05	181,563.85	44,345.30	260,420.78	304,766.08	60,446.24	225,717.16	285,717.40
Communication	2,436.71	5,389.04	7,825.75	2,126.28	12,317.40	14,443.68	4,099.25	25,613.25	29,712.50	3,071.45	13,609.73	16,681.18
Other industries	5,248.00	2,709.39	7,957.40	1,552.11	3,879.29	5,431.40	1,433.17	3,223.14	4,656.32	2,954.56	980.25	3,934.81
Environmental protection	10,228.61	7,005.85	17,234.46	13,622.27	4,482.70	18,104.97	8,238.41	3,065.47	11,303.88	14,870.77	5,194.87	20,065.64
Housing and community amenities	3,786.11	71,463.92	75,250.03	5,887.59	37,296.89	43,184.48	7,026.65	55,524.63	62,551.28	11,394.90	72,719.11	84,114.02
Health	28,307.73	21,473.95	49,781.69	19,504.30	15,150.34	34,654.64	29,806.89	26,799.07	56,605.96	29,785.02	35,768.74	65,553.76
Outpatient services	1,531.53	5,251.48	6,783.01	1,464.21	4,978.63	6,442.84	1,308.66	10,319.44	11,628.10	811.63	8,412.43	9,224.06
Hospital services	13,766.20	802.00	14,568.20	11,897.10	5,476.58	17,373.68	13,159.55	5,725.14	18,884.69	15,139.27	1,538.02	16,677.29
Public health services	3,651.59	6,967.62	10,619.21	1,723.59	4,428.18	6,151.78	6,365.65	5,103.20	11,468.85	7,211.27	23,603.39	30,814.65
Health expenditure not elsewhere classified	9,358.42	8,452.85	17,811.27	4,419.39	2,66.95	4,686.34	8,973.02	5,651.28	14,624.31	6,622.85	2,214.91	8,837.75
Recreation, culture and religion	2,580.50	1,379.01	3,959.50	4,361.86	2,221.45	6,583.31	6,423.00	2,503.84	8,926.84	6,573.57	3,591.25	10,164.82
Education	281,802.51	22,446.22	304,248.74	298,768.91	14,608.41	313,377.32	302,428.82	23,048.12	325,476.95	385,265.12	30,129.95	415,395.07
Administration	16,063.46	6,732.61	22,796.07	11,236.48	2,735.11	13,971.58	13,676.43	307.69	13,984.12	18,157.34	251.39	18,408.73
Pre-primary and primary education	113,348.52	691.53	114,040.05	117,839.24	754.03	118,593.27	134,792.90	2,276.91	137,069.81	160,474.33	4,912.69	165,387.01
Secondary education	84,947.43	2,242.17	87,189.60	96,680.34	1,523.93	98,204.28	88,032.82	5,031.64	93,064.46	100,320.90	2,815.82	103,136.72
Tertiary education	65,783.00	12,599.52	78,382.52	70,526.79	5,271.38	75,798.18	65,042.47	15,403.77	80,446.24	103,171.81	21,982.15	125,153.96
Education expenditure not elsewhere classified	1,660.10	180.40	1,840.50	2,486.05	4,323.96	6,810.02	884.20	28.11	912.31	3,140.75	167.90	3,308.65
Social protection	42,511.22	14,714.86	57,226.09	62,132.96	13,774.43	75,907.39	70,190.30	13,653.85	83,844.15	92,194.13	14,668.48	106,862.61
TOTAL OUTLAYS¹	1,381,044.87	572,464.57	1,953,509.44	1,564,285.53	483,066.22	2,047,351.75	1,657,215.49	625,780.13	2,282,995.62	2,107,177.12	670,621.48	2,777,798.60

Source: The National Treasury

* Provisional

+ Revised estimates

¹ Total in this Table vary with that in Table 5.9 by disposal of non financial assets and disposal of financial assets

5.13. Table 5.9 details National Government expenditure by economic classification from 2013/14 to 2017/18. Total expense is estimated to reach KSh 2,174.1 billion, an increase of 19.7 per cent, in 2017/18. Collectively, compensation of employees and use of goods and services, are expected to grow by 23.5 per cent to KSh 773.8 billion in the review period. Current grants is estimated to increase by 24.9 per cent to KSh 625.2 billion. Interest payable on debt is expected to increase by 20.1 per cent to KSh 280.7 billion, which accounts for 10.3 per cent of the budget.

5.14. In the review period, KSh 190.0 billion, representing 7.0 per cent of the total budget, was earmarked to finance acquisition of non-financial assets, less disposals. Expenditure on acquisition of building and structures is expected to increase by 1.5 per cent to KSh 186.6 billion, accounting for 6.8 per cent of the total expenditure. To implement priority capital expenditure programmes, State Owned Enterprises (SOEs) are expected to receive KSh 345.9 billion as capital grants in the review period.

Table 5.9: Economic Analysis of National Government Expenditure, 2013/14-2017/18

	KSh Million				
	2013/14	2014/15	2015/16	2016/17*	2017/18 ⁺
Expense					
Consumption expenditure on goods and services:					
Compensation of employees	338,086.80	362,713.27	410,807.04	419,797.77	507,742.55
Use of Goods and Services	131,929.13	174,331.96	198,947.90	206,909.14	266,052.85
Total Consumption Expenditure.....	470,015.93	537,045.23	609,754.94	626,706.91	773,795.41
Subsidies	22,475.46	30,583.64	30,324.21	29,970.48	56,270.67
Interest:					
Domestic	119,065.03	137,635.27	172,857.04	171,323.40	210,147.72
External	12,761.23	29,737.73	42,471.50	62,387.48	70,572.08
Total Interest.....	131,826.26	167,372.99	215,328.54	233,710.88	280,719.80
Current Grants:					
International organisations	2,919.91	2,807.70	2,744.44	2,619.73	4,774.25
General Government units	123,653.05	163,618.06	174,424.02	192,267.13	261,358.85
County Governments	210,000.05	229,263.65	264,038.64	302,198.52	345,681.02
Other Grants	9,375.04	10,108.08	10,398.21	3,517.27	13,354.25
Total Current Grants.....	345,948.04	405,797.48	451,605.31	500,602.65	625,168.37
Social benefits	29,221.49	33,704.74	58,120.99	66,755.73	81,475.06
Other expense	4,746.71	3,752.36	7,119.59	4,647.47	10,826.22
Total Current Expenditure	1,004,233.89	1,178,256.45	1,372,253.58	1,462,394.12	1,828,255.53
Capital Grants (Transfers).....	169,620.98	185,407.80	219,705.73	353,793.87	345,893.79
1 Total Expense	1,173,854.87	1,363,664.25	1,591,959.31	1,816,187.99	2,174,149.32
2 Acquisition of Non Financial Assets(net)	135,008.60	312,101.47	174,078.54	223,827.45	190,049.70
Building and structures	107,939.30	295,659.70	151,974.19	183,762.76	186,565.66
Machinery and equipment	25,017.81	32,780.25	31,533.32	36,518.50	33,750.31
Inventories	3,917.78	5,714.44	1,735.19	6,294.56	8,804.98
Non-produced assets & Land	1,113.88	1,638.40	8,005.05	5,480.32	5,845.09
Less Disposal of Non financial assets	-2,980.17	-23,691.30	-19,169.21	-8,228.69	-44,916.34
3 Equity Participation and on-lending	7,196.46	18,301.32	39,248.00	17,808.26	26,351.00
4 Public Debt Redemption	213,953.00	232,950.71	222,896.68	216,943.22	342,332.24
Total Outlays (1+2+3+4)	1,530,012.93	1,927,017.76	2,028,182.54	2,274,766.93	2,732,882.26

Source: The National Treasury

* Provisional.

⁺ Revised Budget Estimates

5.15. Details of the National Government outstanding debt by source from 2013 to 2017 are presented in Table 5.10. The total stock of public debt rose by 24.0 per cent to KSh 3,971.4 billion as at end of June 2017. External debt accounted for 57.8 per cent of the total National Government debt position. External debt grew by 27.7 per cent to stand at KSh 2,294.2 billion, while internal debt rose by 19.2 per cent to KSh 1,677.2 billion, as at end of June 2017. In bilateral debt category, stock of debt from People's Republic of China grew by 52.8 per cent to KSh 478.6 billion, accounting for 12.1 per cent of the total National Government debt position.

5.16. In the multilateral debt category, stock of debt due from International Development Association/International Fund for Agricultural Development (IDA/IFAD) debt rose by 4.4 per cent to KSh 526.6 billion as at June, 2017. Stock of debt from African Development Bank (AfDB) grew by 10.2 per cent to KSh 197.5 billion. The outstanding debt due to commercial banks more than doubled to stand at KSh 426.7 billion as at end of June 2017. The stock of Treasury bonds and Treasury bills accounted for 33.5 per cent and 18.7 per cent respectively of the overall debt position. The Treasury bonds and bills rose by 15.6 per cent and 26.7 per cent to KSh 1,332.0 billion and KSh 744.2 billion, respectively.

Table 5.10: National Government Outstanding Debt by Source, 2013 - 2017

	KSh Million				
Outstanding as at 30 th June	2013	2014	2015	2016	2017*
EXTERNAL DEBT:					
Lending Countries:					
Germany.....	25,042.37	26,571.29	22,558.54	30,935.11	31,669.11
Japan.....	86,788.50	84,514.51	79,016.83	94,413.95	91,455.62
France.....	47,397.05	61,579.73	59,032.26	59,371.47	63,262.08
USA.....	4,816.04	4,542.27	4,461.92	4,035.13	3,497.23
Netherlands.....	2,599.67	2,701.91	1,960.29	2,349.99	1,752.72
Denmark.....	1,987.79	1,991.76	1,437.14	1,540.67	1,355.76
Finland.....	96.64	93.59	71.43	269.38	1,711.78
China.....	63,123.40	80,858.59	252,039.33	313,127.34	478,606.83
Belgium.....	7,607.22	8,096.36	6,141.68	7,468.84	9,938.02
Other.....	22,048.18	22,907.13	18,337.23	34,838.82	39,319.32
Total(bilateral).....	261,506.86	293,857.14	445,056.63	548,350.69	722,568.48
International Organisations:					
IDA/IFAD.....	328,753.29	378,282.41	418,596.27	504,490.39	526,579.50
EEC/EIB.....	15,769.40	20,657.26	20,624.97	21,073.19	20,399.45
IMF.....	73,779.44	83,282.16	86,149.90	84,847.00	77,637.37
ADF/AfDB.....	80,728.61	102,118.16	150,229.35	179,226.58	197,490.09
Other multilateral.....	8,889.77	9,056.67	9,030.22	9,204.40	22,282.33
Total(multilateral).....	507,920.51	593,396.67	684,630.72	798,841.56	844,388.74
Commercial Banks.....	58,927.52	59,545.24	5,678.32	154,346.23	426,685.45
International Sovereign Bond.....	0.00	175,253.80	271,258.35	278,031.05	285,207.18
Suppliers' Credit.....	15,207.35	16,451.86	16,628.21	16,628.00	15,303.14
TOTAL EXTERNAL.....	843,562.24	1,138,504.71	1,423,252.24	1,796,197.52	2,294,152.98
INTERNAL DEBT:					
Treasury Bills ¹	267,693.15	299,406.15	318,928.15	587,478.70	744,154.90
Treasury Bonds	744,174.06	914,762.09	1,035,706.68	1,152,041.17	1,331,975.09
Non Interest bearing debts ²	28,888.76	28,273.00	26,615.00	25,559.00	24,448.76
Others(includes stocks)	9,860.00	41,886.01	39,194.54	50,391.63	11,131.70
Less government deposits ³ & on-lending	-161,435.17	-205,520.00	-242,264.49	-408,389.00	-434,475.22
TOTAL INTERNAL (net)	889,180.80	1,078,807.25	1,178,179.89	1,407,081.50	1,677,235.21
TOTAL DEBT	1,732,743.04	2,217,311.96	2,601,432.13	3,203,279.02	3,971,388.20

Source: The National Treasury and Central Bank of Kenya

* Provisional

¹ Excludes Repo Bills

² Pre-1997 Government Overdraft debt (Repo T-bills)

³ Government deposits in Central Bank and Commercial Banks

5.17. National Government debt servicing, and receipts from interest and loan repayments from 2013 to 2017 are shown in Table 5.11. The net servicing charges, on internal and external debt, grew by 2.8 per cent to KSh 448.0 billion in 2017. In the same period, the receipts on interest and loan repayments rose by 10.0 per cent to KSh 2.6 billion. As at June 2017, net charges on external debt servicing grew by 37.3 per cent to KSh 107.2 billion, while the net domestic debt servicing charges declined by 4.7 per cent to KSh 340.8 billion.

Table 5.11: National Government Debt Servicing, 2013 - 2017

KSh Million

	Debt Servicing			Interest and Loan Repayment Receipts	Net Servicing Charges		
	External	Internal	Total	Internal	External	Internal	Total
2012/13.....	45,142.66	210,553.11	255,695.76	2,183.55	45,142.66	208,369.56	253,512.21
2013/14.....	98,014.23	247,765.03	345,779.26	1,618.36	98,014.23	246,146.67	344,160.90
2014/15.....	112,687.54	287,636.17	400,323.71	2,897.37	112,687.54	284,738.80	397,426.34
2015/16.....	78,104.86	360,120.36	438,225.22	2,389.30	78,104.86	357,731.06	435,835.92
2016/17*.....	107,226.48	343,427.63	450,654.10	2,628.80	107,226.48	340,798.83	448,025.30

Source: The National Treasury

* Provisional

5.18. Table 5.12 shows the ratio of National Government external public debt servicing charges to earnings from export of goods and services from 2013 to 2017. The ratio of external debt servicing charges to foreign exchange earnings from exports of goods and services is an indicator of the economy's ability to service external debt. In 2017/18, the percentage of debt servicing charges to export earnings was 9.9 per cent compared to 7.8 per cent recorded in 2016/17.

Table 5.12: National Government Debt Service Charges and Earnings from Export of Goods and Services¹, 2013-2017

	Debt Service Charges on 'External Debt' ¹	Exports of Goods and Services (Calendar Year)	External debt service Charges as a Percentage of Exports of Goods and Services
	KSh Million	KSh Million	%
2012/13.....	45,142.66	945,477.64	4.8
2013/14.....	98,014.23	988,521.37	9.9
2014/15.....	112,687.54	1,042,699.82	10.8
2015/16.....	78,104.86	1,005,109.95	7.8
2016/17*.....	107,226.48	1,079,589.25	9.9

* Provisional.

⁺ Revised

¹ Including debt redemption, however, interest payments on drawing on IMF are excluded.

County Governments 5.19. Table 5.13 presents the annual county governments revenue by source for 2016/17 and 2017/18. County governments revenue is estimated at KSh 401.6 billion in 2017/18, a growth of 20.0 per cent from actual receipts of KSh 334.7 billion in 2016/17. The allocations to county governments are contained in County Allocation of Revenue Act of 2017 and its subsequent amendment in 2017. County governments equitable share grant allocation grew by 7.7 per cent to KSh 302.0 billion, while conditional grants allocation are expected to more than double to KSh 43.7 billion in 2017/18. Total grants from National Government to county governments is estimated to grow by 14.4 per cent to KSh 345.7 billion during the same period. County governments targeted to collect KSh 55.9 billion as own source revenue in 2017/18, compared to KSh 32.5 billion collected in 2016/17.

Table 5.13: County Government revenue, 2016/17 – 2017/18⁺.

County	Equitable Share Grant		Conditional Grant ¹		Annual Local Revenue		Total Revenue	
	2016/17	2017/18 ⁺	2016/17	2017/18 ⁺	2016/17	2017/18 ⁺	2016/17	2017/18 ⁺
Baringo.....	4,791.44	4,983.00	338.14	633.20	288.52	450.00	5,418.10	6,066.20
Bomet.....	5,078.80	5,254.80	258.04	507.54	236.70	228.48	5,573.54	5,990.82
Bungoma.....	8,282.21	8,758.00	453.23	830.71	661.59	731.90	9,397.03	10,320.61
Busia.....	5,870.10	5,828.60	301.82	563.41	256.83	612.16	6,428.74	7,004.16
Elgeyo /Marakwet.....	3,528.85	3,624.00	276.48	424.19	97.32	160.29	3,902.65	4,208.48
Embu.....	4,141.19	4,107.20	518.72	749.03	416.27	839.78	5,076.17	5,696.01
Garissa.....	6,227.73	6,659.10	636.79	969.82	81.96	250.00	6,946.48	7,878.92
Homa Bay.....	6,080.19	6,523.20	352.91	658.74	144.14	209.46	6,577.24	7,391.40
Isiolo.....	3,298.07	3,775.00	198.35	505.24	94.99	182.86	3,591.41	4,463.11
Kajiado.....	4,761.28	5,768.20	389.50	510.52	557.09	990.79	5,707.87	7,269.51
Kakamega.....	9,612.09	9,935.80	917.92	1,227.61	443.18	952.57	10,973.20	12,115.98
Kericho.....	4,861.02	5,224.60	288.04	464.75	489.98	735.97	5,639.04	6,425.32
Kiambu.....	8,053.26	9,664.00	879.44	1,093.09	2,032.98	3,127.40	10,965.68	13,884.49
Kilifi.....	8,029.17	9,950.90	549.60	900.16	620.09	929.66	9,198.86	11,780.72
Kirinyaga.....	3,817.78	4,409.20	217.80	431.32	320.64	500.00	4,356.23	5,340.52
Kisii.....	7,654.11	7,429.20	817.59	1,143.79	271.64	850.00	8,743.35	9,422.99
Kisumu.....	6,130.16	6,553.40	719.54	961.75	1,004.04	1,395.26	7,853.74	8,910.40
Kitui.....	7,841.48	8,652.30	443.76	840.30	315.35	702.04	8,600.59	10,194.64
Kwale.....	5,530.69	7,248.00	404.48	694.69	221.01	833.37	6,156.19	8,776.06
Laikipia.....	3,722.11	4,499.80	290.03	498.22	462.72	700.00	4,474.86	5,698.02
Lamu.....	2,214.01	2,476.40	265.97	432.51	76.96	90.00	2,556.93	2,998.91
Machakos.....	7,303.46	7,399.00	716.87	1,033.39	1,259.30	1,557.79	9,279.63	9,990.18
Makueni.....	6,441.35	6,825.20	309.93	728.06	216.25	450.00	6,967.53	8,003.26
Mandera.....	9,663.32	9,739.50	364.87	815.81	55.84	231.00	10,084.02	10,786.31
Marsabit.....	5,599.50	6,583.60	256.05	668.84	128.73	130.00	5,984.28	7,382.44
Meru.....	7,006.68	7,701.00	2,416.57	4,928.99	552.67	801.78	9,975.92	13,431.76
Migori.....	6,298.04	6,462.80	535.19	746.90	290.82	450.00	7,124.04	7,659.70
Mombasa.....	5,608.59	8,154.00	720.25	867.05	3,166.24	3,500.00	9,495.08	12,521.05
Murang'a.....	5,779.19	6,191.00	296.52	603.20	506.69	1,100.99	6,582.40	7,895.19
Nairobi City.....	14,023.51	15,402.00	964.89	3,050.07	10,929.83	20,178.00	25,918.23	38,630.07
Nakuru.....	8,757.62	9,271.40	853.50	1,127.24	1,548.29	2,500.00	11,159.42	12,898.64
Nandi.....	5,130.82	5,103.80	269.99	555.83	244.74	419.78	5,645.55	6,079.41
Narok.....	5,705.71	6,523.20	363.82	655.98	1,533.93	4,014.37	7,603.46	11,193.54
Nyamira.....	4,482.80	4,620.60	270.34	519.20	93.92	272.46	4,847.06	5,412.25
Nyan darua.....	4,647.38	4,771.60	236.22	626.08	296.77	371.00	5,180.37	5,768.68
Nyeri.....	4,800.76	4,952.80	652.98	841.85	643.14	1,000.00	6,096.88	6,794.65
Samburu.....	3,832.96	3,805.20	212.26	596.60	187.66	301.23	4,232.87	4,703.03
Siaya.....	5,389.99	5,526.60	323.94	527.57	172.84	270.00	5,886.77	6,324.17
Taita/Taveta.....	3,571.07	3,895.80	238.34	488.70	172.02	338.47	3,981.43	4,722.96
Tana River.....	4,299.40	5,345.40	321.55	672.81	27.42	60.00	4,648.38	6,078.21
Tharaka -Nithi.....	3,385.47	3,684.40	236.85	497.56	78.57	179.92	3,700.90	4,361.88
Trans Nzoia.....	5,502.55	5,647.40	282.46	603.57	217.89	600.00	6,002.90	6,850.97
Turkana.....	11,307.01	10,071.70	400.86	936.43	186.32	200.00	11,894.19	11,208.13
Uasin Gishu.....	5,601.03	5,707.80	253.41	587.97	663.83	1,000.00	6,518.27	7,295.77
Vihiga.....	4,177.30	4,409.20	246.49	520.87	96.03	220.00	4,519.82	5,150.07
Wajir.....	7,804.22	8,138.90	343.45	801.28	75.91	200.00	8,223.58	9,140.18
West Pokot.....	4,654.53	4,741.40	292.77	638.61	83.22	105.32	5,030.52	5,485.33
Total²	280,300.00	302,000.00	21,898.52	43,681.02	32,522.87	55,924.08	334,721.39	401,605.10

Source: County Allocation of Revenue Act 2017 and Office of the Controller of Budget

+ Approved Estimates

¹ Includes Conditional Additional Allocations to County Governments from National Government Revenue & Conditional Additional Allocations to County Governments from Loans and Grants² The FY 2017/18 Total Includes Ksh 4.0 Billion allocated to County Governments as Conditional Grant Under The KDSP (Level 2) Grant. There is no Information on how it has been distributed to the respective County Governments as at the date of Print.

5.20. County governments expenditure by economic classification are shown in Table 5.14 from 2013/14 to 2017/18. In 2017/18 county governments budgeted expenditure amount to KSh 395.9 billion, a growth of 13.0 per cent from an actual expenditure of KSh 350.4 billion in 2016/17. Compensation of employees is estimated to increase by 26.5 per cent to KSh 149.0 billion, accounting for 37.6 per cent of the total expenditure in 2017/18. Over the same period, outlay on use of goods and services is expected to grow by 25.6 per cent to KSh 89.0 billion. Spending on acquisition of non-financial assets, is estimated at KSh 104.3 billion, which, the building and structures category is estimated to rise by 13.3 per cent to KSh 79.0 billion.

Table 5.14: Economic classification of County Governments Expenditure, 2013/14 - 2017/18

	2013/14	2014/15	2015/16	2016/17*	2017/18 ⁺
Compensation of Employees.....	64,262.36	96,212.69	114,943.30	117,767.64	148,972.40
Salaries.....	51,487.67	71,168.66	83,398.01	87,233.99	106,275.50
Allowances.....	11,407.41	23,277.19	28,342.60	28,673.89	38,255.50
Social contributions.....	1,367.28	1,766.85	3,202.70	1,859.76	4,441.30
Use of goods and services.....	35,353.92	55,465.22	67,370.85	70,879.15	89,028.14
Utilities, Supplies and Services.....	895.72	2,457.71	2,984.93	2,073.12	2,783.90
Printing, Advertising and Information Supplies and Services	1,895.56	3,109.46	2,985.69	2,813.14	3,893.30
Rentals.....	897.73	1,120.94	1,617.53	1,657.73	2,034.30
Communication, Supplies and Services	503.53	686.40	787.93	721.81	1,284.20
Transportation costs.....	6,520.28	8,955.77	11,745.81	13,309.25	13,260.70
Training Expenses	2,413.92	2,968.22	3,505.32	3,854.77	5,345.70
Hospitality Supplies and Services.....	2,158.33	3,349.47	4,172.83	5,097.58	5,184.60
Insurance.....	1,564.41	2,476.30	4,490.18	5,359.23	7,502.60
Specialised Materials.....	4,744.72	9,979.71	11,649.31	11,450.18	15,403.50
Office and General Supplies and Services and ma	1,507.25	1,959.27	1,995.40	1,774.43	2,727.70
Fuel Oil and Lubricants	1,930.10	2,403.35	2,833.50	2,740.61	3,653.70
Other Operating Expenses.....	6,047.14	12,286.95	14,473.83	14,750.40	17,090.00
Routine Maintenance.....	4,275.24	3,711.65	4,128.60	5,276.91	8,863.50
Subsidies.....	330.78	569.82	701.93	387.09	883.20
Interest.....	4,723.25	5,188.24	7,121.41	6,819.50	4,294.00
Grants.....	6,708.38	5,715.38	8,215.42	12,454.56	20,408.50
Other expense.....	1,971.43	7,012.16	8,259.41	40,356.44	607.50
Social benefits	-	6,228.52	7,812.17	10,282.42	9,765.70
Acquisition of Non-financial Assets.....	42,423.74	91,217.78	97,579.77	84,887.80	104,286.40
Building and Structures.....	26,428.02	69,270.39	78,728.22	70,374.24	79,732.30
Plant and Machinery.....	9,748.19	20,457.73	13,718.62	10,420.25	16,826.90
Inventories	-	318.46	1,498.95	1,336.22	2,193.80
Non-produced assets & Land.....	6,247.53	1,171.20	3,633.99	2,757.08	5,533.20
Acquisition of Financial Assets.....	1,912.56	3,700.17	5,001.42	6,612.00	17,668.30
Memo Item					
Debt repayment and pending bills.....	3,711.04	..	..	..	..
Total.....	161,397.47	271,309.98	317,005.69	350,446.59	395,914.50

Source: The National Treasury

* Provisional.

⁺Printed estimates

5.21. Table 5.15 details the classification of county governments expenditure by function from 2013/14 to 2017/18. Expenditure on general public services is estimated to decrease by 3.0 per cent to KSh 141.4 billion in 2017/18 accounting for 35.7 per cent of the total expenditure. Spending on economic affairs function is expected to grow by 13.5 per cent to KSh 76.4 billion. Spending on health is estimated to grow by 35.2 per cent to KSh 95.7 billion to account for 24.2 per cent of the total budget in the review period. Expenditure on education is estimated to grow by 27.6 per cent to KSh 31.4 billion.

Table 5.15: Expenditure of County Governments Classified by Functions, 2013/14 - 2017/18

	KSh Million				
	2013/14	2014/15	2015/16	2016/17*	2017/18 ⁺
General Public Services.....	135,187.04	136,218.19	119,555.49	145,768.03	141,350.62
Economic Affairs.....	11,086.63	40,167.19	67,052.61	67,319.94	76,421.22
General economic affairs.....	1,312.91	6,286.50	18,547.94	13,331.83	16,443.34
Agriculture.....	2,876.45	14,199.56	11,169.44	12,963.41	18,297.70
Transport.....	5,930.08	18,854.74	21,404.53	38,407.28	35,636.82
Other economic Affairs.....	967.19	826.39	15,930.70	2,617.42	6,043.36
Environmental Protection.....	873.72	5,277.16	13,724.13	10,164.82	13,758.65
Housing and Community Ammenities.....	3,532.56	6,997.36	16,749.80	24,814.79	29,449.41
Health.....	8,492.22	54,671.70	70,732.25	70,774.35	95,666.84
Recreation, Culture and Religion.....	924.64	7,849.29	6,527.41	6,454.43	7,441.71
Education.....	1,228.71	19,952.39	21,685.06	24,609.43	31,402.50
Social Protection.....	71.95	176.70	978.95	540.80	423.58
Total	161,397.47	271,309.98	317,005.69	350,446.59	395,914.54

Source: The National Treasury

* Provisional.

+ Printed estimates

General Government

5.22. Table 5.16 details the consolidated General Government statement of operations from 2013/14 to 2016/17. General Government total revenue amounted to KSh 1,852.3 billion in 2016/17, of which tax revenue accounted for 69.5 per cent. Sale of goods and services, property income, and ministerial appropriation-in-aid accounted for 10.2, 3.7 and 4.1 per cent of the total revenue, respectively. Expense grew by 29.6 per cent to KSh 2,092.8 billion in 2016/17. Compensation of employees and use of goods and services accounted for 31.7 per cent and 28.9 per cent of the total expense, respectively. Interest, grants and social benefit expenses accounted for 11.7, 17.2, and 5.1 per cent, respectively of the General Government total expense. Spending on net acquisition of non-financial assets grew by 55.6 per cent to KSh 630.6 billion in 2016/17. General Government net borrowing position rose to KSh 871.1 billion, attributable to the significant increase in the spending on acquisition of non-financial assets.

Table 5.16: General Government Consolidated Statement of Operations, 2013/14 – 2016/17

	KSh Million			
	2013/14	2014/15	2015/16	2016/17*
Revenue.....	1,225,962.31	1,396,517.75	1,512,511.60	1,852,314.93
Tax revenue.....	911,803.70	1,021,597.03	1,146,919.50	1,286,570.08
Social contributions.....	18,641.02	24,327.98	41,551.71	40,229.48
Grants:				
International organisation.....	26,957.11	28,117.49	29,596.68	25,903.99
Other revenue.....	268,560.49	322,475.25	294,443.71	499,611.39
Sale of Goods & Services.....	115,138.26	130,735.55	119,079.23	188,998.66
Property in come.....	26,732.09	36,115.03	45,873.89	69,129.44
Ministerial AIA.....	35,707.06	56,705.93	62,398.11	75,881.13
Fines, Penalties & Forfeits.....	42,937.85	47,223.77	12,443.68	120,959.95
Other transfers NEC.....	48,045.23	51,694.96	54,648.79	44,642.20
Expense	1,138,323.36	1,374,151.43	1,615,033.25	2,092,767.13
Compensation of employees.....	502,780.39	565,049.02	622,268.55	662,755.98
Use of goods and services.....	315,788.63	385,918.19	415,166.74	603,833.68
CFC/Depreciation.....	10,586.23	12,553.52	13,914.36	17,316.18
Interest.....	136,549.51	173,186.76	225,287.27	244,399.66
Subsidies.....	22,806.24	31,153.46	42,568.02	30,357.58
Grants:				
International Organisation.....	2,919.91	2,807.70	2,744.44	2,619.73
Other General Government.....	110,059.16	145,439.43	188,534.89	358,176.38
Social benefits.....	29,621.71	46,681.82	87,974.91	105,772.67
Other expense.....	7,211.58	11,361.54	16,574.08	67,535.26
Net Operating Balance	87,638.95	22,366.32	-102,521.65	-240,452.20
Acquisition of Non-Financial Assets.....	332,831.65	545,267.39	405,355.54	630,618.77
Building and Structures.....	277,905.47	477,866.97	353,524.46	395,147.32
Machinery and equipment	25,241.26	62,972.48	46,433.17	71,308.81
Inventories.....	4,927.51	9,806.33	6,185.47	4,966.99
Non-produced Assets and Land.....	27,737.59	18,312.92	18,381.65	167,424.35
Disposal of non-financial assets.....	-2,980.17	-23,691.30	-19,169.21	-8,228.69
Net lending/Borrowing.....	-245,192.70	-522,901.08	-507,877.19	-871,070.97
Net Financial Worth.....	-231,391.88	-515,293.04	-436,194.06	-685,213.76
Transactions in Financial assets	103,254.34	84,156.71	264,618.14	217,011.06
Currency and deposits.....	18,991.13	37,385.83	189,861.24	97,284.15
Debt securities.....	-4,435.56	9,271.23	21,484.01	9,351.67
Loans.....	50,462.99	30,636.93	41,784.49	25,289.28
Equity and investment fund shares	69,576.36	859.40	-5.88	24,650.21
Accounts receivable	-31,340.58	6,003.32	11,494.28	60,435.74
Transactions in Liabilities	334,646.21	599,449.75	700,812.20	902,224.82
Debt securities.....	200,690.15	310,666.87	350,705.06	320,356.46
Domestic.....	165,338.55	127,892.59	350,705.06	320,356.46
Foreign.....	35,351.60	182,706.78	0.00	0.00
Loans.....	143,800.77	304,943.23	322,550.71	500,233.55
Equity and investment fund shares	0.00	0.00	0.00	33,321.86
Accounts payable	-9,844.71	-16,160.35	27,556.43	48,312.95

*Provisional

International Trade and Balance of Payments

Chapter 06

Overview

During the review period, the Government launched a National Trade Policy, aimed at spurring economic growth. The policy targets to enhance export growth through value addition in export oriented manufactures and in the services sector, as well as pursuing diversification to fully exploit the export opportunities in the emerging markets. Consequently, a Trade Remedies Bill was developed and approved by Parliament, and assented into law, by the President. The implementation of the law will address unfair trade practices from imports which adversely affects the Country's domestic industries, and widens the trade deficit.

6.2. In 2017, merchandise trade deficit continued to widen from KSh 853.7 billion in 2016 to KSh 1,131.5 billion. This was mainly driven by high import bill which grew by 20.5 per cent from KSh 1,431.8 billion to KSh 1,725.6 billion, over the same period. The main drivers of the import bill were industrial machinery; petroleum products; road motor vehicles; iron and steel; animal and vegetable fats and oils; and sugar. Total exports increased by 2.8 per cent from KSh 578.1 billion in 2016 to KSh 594.1 billion in 2017. The major foreign exchange earners in the review period were tea; horticulture; articles of apparel and clothing accessories; coffee; and titanium ores and concentrates, collectively accounting for 64.8 per cent of total domestic export earnings, during the review period. The volume of trade expanded by 15.4 per cent to KSh 2,319.8 billion in 2017 compared to a 6.9 per cent decline in 2016. The ratio of export to import deteriorated from 40.4 per cent in 2016 to 34.4 per cent in 2017.

6.3. The current account balance widened by 38.3 per cent to a deficit of KSh 518.9 billion in 2017 from a deficit of KSh 375.3 billion in 2016. Net international services increased by 11.4 per cent from a surplus of KSh 144.4 billion in 2016 to a surplus of KSh 160.9 billion in 2017. Receipts from international services increased by 14.0 per cent while payments for international services rendered grew by 15.3 per cent in 2017. Receipts from international travel partly contributed to the increase in services inflows. Net financial inflows increased by 13.4 per cent from a surplus of KSh 420.0 billion in 2016 to a surplus of KSh 476.1 billion in 2017. Other investment net inflows increased by 18.0 per cent to a surplus of KSh 513.4 billion in 2017 compared to an increase of 20.2 per cent in 2016. During the review period, the overall Balance of Payments worsened to a deficit of KSh 16.9 billion from a surplus of KSh 13.1 billion in 2016.

Balance of Trade

6.4. The balance of trade deficit widened from KSh 853.7 billion in 2016 to KSh 1,131.5 billion in 2017, as shown in Table 6.1. This was occasioned by a 20.5 per cent increase in imports from KSh 1,431.8 billion in 2016 to KSh 1,725.6 billion in 2017.

6.5. Total exports increased by 2.8 per cent from KSh 578.1 billion in 2016 to KSh 594.1 billion in 2017 on account of increase in domestic exports. Domestic exports increased from KSh 506.5 billion in 2016 to KSh 530.6 billion in 2017, representing an increase of 4.8 per cent. Re-exports registered a decline of 11.2 per cent to KSh 63.5 billion in 2017. The ratio of export to import deteriorated from 40.4 per cent in 2016 to 34.4 per cent in 2017, as a result of faster growth in imports relative to exports.

Table 6.1: Balance of Trade, 2013-2017

	KSh Million				
DESCRIPTION	2013	2014	2015	2016	2017*
EXPORTS¹ (f.o.b) :					
Domestic Exports	455,689	460,572	499,708	506,548	530,617
Re-exports	46,598	76,664	81,337	71,519	63,511
Total	502,287	537,236	581,045	578,067	594,128
IMPORTS¹ (c.i.f) :					
Commercial	1,403,225	1,599,619	1,540,731	1,389,741	1,671,724
Government	10,091	18,702	36,826	42,014	53,899
Total	1,413,316	1,618,321	1,577,557	1,431,755	1,725,623
BALANCE OF TRADE	(911,029)	(1,081,085)	(996,512)	(853,688)	(1,131,494)
TOTAL TRADE	1,915,602	2,155,557	2,158,602	2,009,821	2,319,751
COVER RATIO² (in percentage) ..	35.5	33.2	36.8	40.4	34.4

Source: Kenya National Bureau of Statistics/Kenya Revenue Authority

*Provisional

¹Excludes data on Informal Cross Border Trade and Electricity²COVER RATIO = (Total Exports/Total Imports)*100

f.o.b: free on board

c.i.f: cost, insurance and freight

Price changes

6.6. Table 6.2(a) presents export and import unit price indices by commodity groups of Standard International Trade Classification (SITC) for the period 2013 to 2017. The unit price indices for all exports and non-oil exports increased by 5.6 per cent each, in 2017. This was mainly on account of an increase in the unit prices of commodities broadly classified under sections of manufactured goods; food and live animals; and inedible crude materials. On the other hand, the export unit price indices for chemicals; and animal and vegetable oil and fats reduced by 40.0 per cent and 19.2 per cent, respectively. The contraction in the unit price index for chemicals was occasioned by decline in export prices of medicaments.

6.7. During the review period, the unit price indices for all imports and non-oil imports rose by 10.5 per cent and 6.7 per cent, respectively. The increase was mainly attributed to the growth in unit price indices of mineral fuels (31.6%), inedible crude materials (20.4%), and machinery and transport equipment (13.4%). However, import unit price index for beverages and tobacco declined by 16.7 per cent. The decline was partly as a result of the decline in import prices of alcoholic beverages.

Table 6.2(a): Export and Import Price Indices, 2013-2017

	2009=100				
	2013	2014	2015	2016	2017*
EXPORTS:					
Food and live animals	133	121	155	146	170
Beverages and tobacco	133	142	126	161	168
Crude materials, (inedible)	126	125	124	103	114
Mineral fuels	150	219	193	115	108
Animal and vegetable oils and fats	125	128	136	156	126
Chemicals	114	134	155	185	111
Manufactured goods	113	112	117	108	132
Machinery and transport equipment	286	246	225	244	213
Miscellaneous manufactured articles	188	165	183	184	191
All Exports	136	132	149	142	150
Non-oil Exports	136	131	148	143	151
IMPORTS:					
Food and live animals	174	170	176	169	191
Beverages and tobacco	172	136	133	150	125
Crude materials, (inedible)	126	139	152	157	189
Mineral fuels	200	187	134	95	125
Animals and vegetable oils and fats	140	145	124	135	149
Chemicals	158	147	145	143	161
Manufactured goods	140	126	150	145	147
Machinery and transport equipment	181	227	275	292	331
Miscellaneous manufactured articles	164	189	169	150	167
All imports	168	180	196	181	200
Non-oil Imports	160	178	214	209	223

* Provisional

Terms of Trade 6.8. The ratio of export price index to import price index for the period 2013 to 2017 is presented in Table 6.2(b). Terms of trade for all items worsened by 3.5 percentage points to 75.0 per cent in 2017. The terms of trade for non-oil items deteriorated marginally from 68.4 per cent in 2016 to 67.7 per cent in 2017, continuing the four year downward trend.

Table 6.2(b): Terms of Trade, 2013-2017

	2009=100				
DESCRIPTION	2013	2014	2015	2016	2017*
All Items	81.0	73.3	76.0	78.5	75.0
Non-oil Items	85.0	73.6	69.2	68.4	67.7

* Provisional

Volume changes 6.9. Quantum indices for exports and imports are shown in Table 6.2(c). Overall, the export quantum indices for non-oil items and all items declined by 2.7 per cent and 1.8 per cent to 110, respectively, in 2017. This was mainly driven by a decline in the export quantum indices of most of the categories except chemicals and mineral fuels. Notably, the decline was recorded in machinery and transport equipment; manufactured goods; and animal and vegetable oil and fats which reduced by 37.7, 25.0 and 12.1 per cent, respectively, in the review period.

6.10. The overall import quantum indices for non-oil items and all imports increased by 10.6 per cent and 7.9 per cent, to 104 and 109, respectively, during the review period. This was mainly occasioned by substantial increases in import quantum indices for the broad categories of food and live animals (96.1%), animal and vegetable oils and fats (16.8%), and beverages and tobacco (10.1%). However, import quantum indices declined for inedible crude materials (22.1%), chemicals (7.1%), and machinery and transport equipment (3.1%) in 2017.

Table 6.2(c): Quantum Indices¹, 2013-2017

	2009=100				
	2013	2014	2015	2016	2017*
EXPORTS:					
Food and live animals	110	116	109	120	114
Beverages and tobacco	105	111	124	85	75
Crude materials, (inedible)	103	135	138	183	179
Mineral fuels	41	42	49	64	70
Animal and vegetable oils and fats	112	80	58	66	58
Chemicals	115	97	89	74	120
Manufactured goods	132	120	107	100	75
Machinery and transport equipment	48	45	55	61	38
Miscellaneous manufactured articles	84	108	100	98	96
All Exports	104	110	105	112	110
Non-oil Exports	105	112	107	113	110
IMPORTS:					
Food and live animals	64	73	78	76	149
Beverages and tobacco	141	158	143	149	164
Crude materials, (inedible)	117	118	122	113	88
Mineral fuels	99	112	108	132	133
Animals and vegetable oils and fats	125	125	138	143	167
Chemicals	122	139	157	155	144
Manufactured goods	149	171	162	162	164
Machinery and transport equipment	92	100	82	64	62
Miscellaneous manufactured articles	134	126	164	174	185
All imports	107	114	102	101	109
Non-oil Imports	109	114	101	94	104

* Provisional

¹ Measures changes in volume of trade

Quantities of Principal Domestic Exports

6.11. The quantity of principal exports for the period 2013 to 2017 is presented in Table 6.3(a). The quantity of exported titanium ores and concentrates declined by 13.2 per cent to 533.8 thousand tonnes in 2017. The quantity of exported cement decreased further from 420.2 thousand tonnes in 2016 to 387.6 thousand tonnes in the review period. Similarly, the quantity of exported fluorspar declined drastically from 48.7 thousand tonnes to 8.9 thousand tonnes over the same period, mainly due to the suspension of mining operations over low demand. The quantity of soda ash exported rose from 258.7 thousand tonnes in 2016 to 342.6 thousand tonnes in 2017 while quantity of salt exported rose from 306.3 thousand tonnes in 2016 to 320.4 thousand tonnes in 2017. Quantity of exported tea and horticulture declined by 2.7 per cent and 8.8 per cent to 467.0 thousand tonnes and 457.2 thousand tonnes, respectively, in 2017. The quantity of articles of plastic decreased by 9.4 per cent to 43.3 thousand tonnes due to the ban on the use of plastics paper ban. Other commodities that exhibited notable decline in quantities exported in 2017 included: tobacco and tobacco manufactures (15.5%); iron and steel (21.8 %); and paper and paperboard (47.5 %). The quantity of exported edible products and preparations (28.7%), glassware (24.8%) and leather (12.1%) increased during the review period.

Table 6.3(a): Quantities of Principal Domestic Exports, 2013-2017

Commodity	Unit of Quantity	2013	2014	2015	2016	2017*
Fish and fish preparations	Tonne	11,712	15,213	10,801	5,995	5,321
Maize(unmilled,excluding sweet corn)	Tonne	1,236	1,678	2,007	3,191	5,420
Meals and flours of wheat	Tonne	3,076	2,308	3,250	1,479	1,648
Horticulture	Tonne	394,387	434,950	443,076	501,573	457,201
Sugar confectionery	Tonne	30,159	28,986	29,988	28,836	31,064
Coffee, unroasted	Tonne	48,890	47,438	43,600	45,303	43,469
Tea	Tonne	446,033	456,492	420,527	479,969	467,033
Margarine and shortening	Tonne	15,924	17,097	18,397	17,787	18,102
Edible products and preparations, n.e.s.	Tonne	13,561	14,751	18,399	19,789	25,463
Beer made from malt	000 Lt.	48,166	65,572	64,565	31,332	28,594
Tobacco and tobacco manufactures	Tonne	23,466	21,016	15,961	25,367	21,439
Hides and Skins	Tonne	2,832	2,560	2,272	2,777	1,105
Sisal	Tonne	10,010	10,093	9,015	9,595	7,441
Stone, sand and gravel	Tonne	29,632	45,460	38,678	104,493	92,408
Fluorspar	Tonne	78,002	94,021	70,096	48,662	8,926
Salt	Tonne	289,487	269,111	303,452	306,324	320,442
Soda Ash	Tonne	478,822	396,095	272,520	258,703	342,639
Titanium ores and concentrates ¹	Tonne		360,525	493,201	614,609	533,762
Metal scrap	Tonne	4,478	5,091	5,814	10,657	12,647
Animal and Vegetable oils	Tonne	70,339	49,827	37,357	57,275	36,059
Alcohols and derivatives thereof	000 Lt.	18,558	15,033	19,246	17,456	5,407
Pigments, paints, varnishes and related materials	Tonne	11,949	12,886	14,733	13,204	14,338
Medicinal and pharmaceutical products	Tonne	12,419	13,285	13,095	13,379	13,877
Essential oils	Tonne	94,157	87,779	78,356	81,769	88,158
Plates, sheets, film, foil and strip, of plastics	Tonne	7,927	8,479	7,247	5,309	5,194
Insecticides and fungicides	Tonne	1,416	1,597	2,209	2,314	2,455
Leather	Tonne	26,542	26,213	23,329	21,657	24,271
Wood manufactures n.e.s.	Tonne	468	401	529	309	263
Paper and paperboard	Tonne	41,760	34,043	33,208	62,374	32,770
Textile yarn	Tonne	2,046	1,601	1,648	1,553	1,921
Made-up articles, wholly or chiefly of textile materials, n.e.s.	Tonne	11,464	16,619	16,679	11,018	7,764
Glassware	Tonne	22,693	13,411	13,106	11,373	14,193
Cement	Tonne	826,941	720,465	681,665	420,157	387,593
Iron and steel	Tonne	155,442	137,561	124,190	139,019	108,717
Metal containers	Tonne	2,831	3,162	2,542	3,569	2,456
Wire products: nails screws, nuts, etc.	Tonne	9,232	8,265	6,585	4,581	7,212
Household equipment of base metal, n.e.s.	Tonne	10,401	9,841	7,614	9,690	6,225
Manufactures of base metal, n.e.s.	Tonne	7,572	8,217	11,889	10,741	11,480
Automatic data processing machines and units thereof;	No's	45,737	106,895	76,375	25,031	33,050
Footwear	'000' Pairs	52,021	40,092	32,634	37,176	34,480
Printed matter	Tonne	6,553	9,006	6,854	6,724	4,909
Articles of plastic	Tonne	48,370	58,488	52,629	47,382	43,307

Source: Kenya National Bureau of Statistics/Kenya Revenue Authority

* Provisional.

¹ The first batch of Titanium ores was exported in 2014

Quantities of Principal Imports

6.12. The quantity of principal imports for the period 2013 to 2017 is presented in Table 6.3(b). There was a marked increase in the quantities of imported wheat, maize and sugar in 2017, as a result of the drought experienced in the country. The quantity of unmilled wheat imported rose from 1,362.3 thousand tonnes in 2016 to 1,855.0 thousand tonnes in 2017. During the review period, the quantity of maize imported increased almost nine times due to reduced production of maize, in the country. Imports of rice rose from 508.0 thousand tonnes in 2016 to 625.1 thousand tonnes in 2017. Quantity of sugar imports, which include molasses and honey tripled from 377.3 thousand tonnes in 2016 to 1,119.6 thousand tonnes in 2017, mainly due to reduced production of sugarcane. Quantities of imported chemical fertilizers rose by 27.0 per cent to 853.1 thousand tonnes in 2017. Similarly, quantities of imported animal and vegetable fats and oils rose from 750.5 thousand tonnes in 2016 to 850.5 thousand tonnes in 2017. The number of imported road motor vehicles increased by 11.0 per cent to 94,464, in the review period. The quantity of cement clinker imported reduced by 24.9 per cent to 1,504.6 thousand tonnes in 2017 while that of imported iron and steel declined by 4.8 per cent to 1,374.7 thousand tonnes, in the same period.

Table 6.3(b): Quantities of Principal Imports, 2013-2017

Commodity	Unit of Quantity	2013	2014	2015	2016	2017*
Wheat, unmilled ...	Tonne	1,033,054	1,225,690	1,421,785	1,362,309	1,854,954
Rice ...	Tonne	409,576	459,165	442,736	507,999	625,143
Maize (unmilled, excluding sweet corn) ...	Tonne	93,473	458,940	490,024	148,558	1,327,972
Wheat flour ...	Tonne	30,853	33,178	16,306	15,925	13,951
Sugars, Molasses and Honey ...	Tonne	276,542	228,834	286,732	377,334	1,119,609
Edible products and preparations, n.e.s. ...	Tonne	48,347	54,264	93,869	93,952	104,973
Textile fibres and their waste ...	Tonne	18,183	20,051	21,459	21,452	20,125
Second-hand clothing ...	Tonne	101,066	106,974	110,659	131,941	135,868
Petroleum products ...	Mn. Lt.	3,760	4,645	5,120	5,478	5,542
Residual petroleum products, n.e.s. and related materials ...	Tonne	71,863	72,684	116,450	71,781	87,124
Liquefied propane and butane ...	Tonne	55,874	111,933	129,395	167,057	198,482
Animal/vegetable fats and oils ...	Tonne	636,120	622,343	683,490	750,512	850,497
Organic and inorganic chemicals ...	Tonne	256,736	389,311	268,454	279,396	279,540
Pigments, paints, varnishes and related materials ...	Tonne	27,718	28,932	34,410	38,004	43,331
Medicinal and pharmaceutical products ...	Tonne	17,187	20,713	24,954	25,873	24,791
Essential oils and perfumes ...	Tonne	46,097	55,425	55,321	56,046	64,353
Chemical fertilizers ...	Tonne	688,436	496,057	568,600	671,781	853,113
Plastics in primary and non-primary forms ...	Tonne	377,340	400,188	455,432	469,426	453,784
Insecticides and fungicides ...	Tonne	14,761	15,232	15,342	16,781	17,986
Miscellaneous chemical products, n.e.s. ...	Tonne	37,245	38,880	52,804	49,767	50,076
Rubber tyres and inner tubes, for wheels of all kinds ...	"000" No	5,718	6,104	6,429	7,757	8,124
Paper and Paperboard ...	Tonne	305,869	351,174	331,136	348,685	365,371
Textile yarn ...	Tonne	20,173	22,814	21,734	23,572	19,696
Cement Clinkers ...	Tonne	1,427,115	1,307,225	1,973,231	2,002,865	1,504,627
Iron and steel ...	Tonne	1,217,865	1,196,273	1,530,606	1,443,869	1,374,713
Non-ferrous metals ...	Tonne	52,588	53,315	51,010	51,397	46,036
Structures and parts of structures of iron, steel or aluminium ...	Tonne	52,612	66,405	95,065	103,981	69,821
Hand and machine tools ...	Tonne	10,682	11,382	11,337	11,649	9,472
Manufactures of base metal, n.e.s. ...	Tonne	33,046	32,747	66,069	60,270	45,873
Industrial Machinery ¹ ...						
Agricultural Machinery and Tractors ¹ ...						
Automatic data processing machines and units thereof; ...	"000" No	1,618	405	538	1,025	1,245
Telecommunications equipment, n.e.s., and parts, n.e.s. ¹						
Parts, n.e.s. and accessories of the motor vehicles ¹						
Motorcycles and cycles fitted with an auxiliary motor ...	"000" No	165	148	182	146	200
Bicycles, assembled or partly assembled ...	"000" No	166	140	162	108	151
Road Motor Vehicles ...	Nos.	92,270	103,517	109,781	85,067	94,464
Aircraft and associated equipment ¹ ...						
Prefabricated buildings ...	Tonne	22,136	27,280	30,010	18,205	19,263
Furniture and parts thereof ¹ ...						
Quality control instruments and apparatus, n.e.s. ¹ ...						
Printed matter ...	Tonne	9,402	10,218	13,318	11,373	8,876
Articles, n.e.s., of plastics ...	Tonne	37,770	49,786	46,138	50,649	42,346

Source: Kenya National Bureau of Statistics/Kenya Revenue Authority

* Provisional.

¹ Items have different units of measurements

Values of Principal Domestic Exports

6.13. Table 6.4(a) presents the values of principal domestic exports from 2013 to 2017. Earnings from domestic exports of commodities rose by 4.8 per cent from KSh 506.5 billion in 2016 to KSh 530.6 billion in 2017. Tea remained the leading export earner with earnings increasing by 18.3 per cent to KSh 147.3 billion during the same period. In 2017, horticultural export earnings maintained an upward trend at KSh 113.3 billion, accounting for 21.4 per cent of the total value of domestic exports. The value of domestic exports of articles of apparel and clothing accessories; coffee; and titanium ores and concentrates, also registered remarkable increase. Earnings from domestic exports of soda ash rose for the first time in five years to KSh 7.1 billion in 2017.

6.14. Earnings from domestic exports of tobacco and tobacco manufactures declined by 5.8 per cent to KSh 13.7 billion in 2017. Other commodities that recorded reduced earnings in 2017 included iron and steel (11.1%); medicinal and pharmaceutical products (17.0%); articles of plastic (11.2%); animal and vegetable oils (27.9%); salt (6.8%) and cement (19.6%).

Table 6.4(a): Values of Principal Domestic Exports, 2013-2017

Commodity	KSh Million				
	2013	2014	2015	2016	2017*
Fish and fish preparations	3,362	4,266	3,287	1,899	2,125
Maize(unmilled,excluding sweet corn)	192	324	312	511	766
Meals and flours of wheat	145	87	138	65	72
Horticulture	89,339	97,105	100,963	110,338	113,349
Sugar confectionery	5,401	5,345	5,475	4,895	5,073
Coffee, unroasted	16,328	19,913	20,580	21,371	23,453
Tea	104,648	93,996	123,025	124,497	147,251
Margarine and shortening	2,245	2,349	2,307	2,126	2,368
Edible products and preparations, n.e.s.	2,573	2,637	4,048	4,329	5,985
Beer made from malt	3,636	3,416	3,630	2,316	2,521
Tobacco and tobacco manufactures	13,709	16,827	15,757	14,574	13,736
Hides and skins (undressed)	134	126	124	171	51
Sisal	1,020	1,325	1,517	1,762	1,220
Stone, sand and gravel	389	643	444	726	579
Fluorspar	1,714	1,883	1,428	843	159
Salt	2,978	3,881	4,694	4,337	4,040
Soda ash	8,997	7,832	6,247	5,432	7,091
Titanium ores and concentrates ¹		7,282	9,420	11,043	13,793
Metal scrap	2,498	3,403	2,598	2,490	3,328
Animal and Vegetable oils	8,156	6,036	4,650	6,040	4,356
Alcohols, phenols, phenol-alcohols, and their halogens	1,758	1,447	2,059	1,605	405
Pigments, paints, varnishes and related materials	1,628	1,894	2,271	1,818	2,172
Medicinal and pharmaceutical products	7,068	8,296	11,199	13,190	10,952
Essential oils	11,172	10,854	9,822	9,139	10,113
Plates, sheets, film, foil and strip, of plastics	2,415	2,641	2,419	1,995	1,637
Insecticides and fungicides	771	805	1,546	2,034	1,716
Leather	8,491	7,597	6,222	4,605	5,088
Wood manufactures n.e.s.	159	146	124	107	135
Paper and paperboard	5,342	4,406	4,773	4,994	4,855
Textile yarn	885	721	721	637	859
Made-up articles, wholly or chiefly of textile materials, n.e.s.	2,881	3,772	3,400	3,018	2,081
Glassware	1,855	840	910	607	924
Cement	8,292	7,541	7,721	4,360	3,505
Iron and steel	15,560	13,443	12,290	13,183	11,717
Metal containers.	500	556	575	575	512
Wire products: nails screws, nuts, etc.	1,036	1,295	992	646	1,077
Household equipment of base metal, n.e.s.	3,392	3,508	2,659	2,709	1,907
Manufactures of base metal, n.e.s.	1,948	1,938	2,633	2,553	2,562
Automatic data processing machines and units thereof	980	331	236	337	167
Electrical machinery and apparatus, n.e.s.	2,706	2,025	2,022	6,285	1,518
Trailers and semi-trailers; other vehicles	2,597	2,041	1,624	1,494	948
Furniture and parts thereof; bedding, mattresses	1,922	1,697	1,421	1,215	1,068
Footwear	3,992	3,569	3,694	3,473	3,229
Printed matter	3,442	4,271	6,363	5,205	5,683
Articles of plastics	10,263	10,995	11,174	9,907	8,801
Articles of apparel and clothing accessories.	24,379	28,948	28,226	30,741	32,448
All other Commodities	62,789	56,319	61,964	60,351	63,222
GRAND TOTAL	455,689	460,572	499,708	506,548	530,617

Source: Kenya National Bureau of Statistics/ Kenya Revenue Authority

* Provisional

¹The first Batch of Titanium ores was exported in 2014

Values of Principal Imports 6.15. Import bill rose by 20.5 per cent from KSh 1,431.8 billion in 2016 to KSh 1,725.6 billion in 2017, as shown in Table 6.4(b). The increase in imports of petroleum products partly contributed to the increase in the total value of imports, with their import value rising by 27.8 per cent to KSh 234.9 billion in 2017. Expenditure on sugar more than doubled during the review period from KSh 22.0 billion in 2016 to KSh 61.5 billion in 2017. In the review period, the value of maize imported increased more than tenfold to KSh 40.3 billion from KSh 3.6 billion in 2016. Substantial increase in import value was also recorded in wheat (46.8%), rice (88.6%), iron and steel (10.7%), animal and vegetable fats and oils (28.7%), chemical fertilizers (26.4%), and organic and inorganic chemicals (14.9%) in 2017. Expenditure on automatic data processing machines and motorcycles also rose by 33.1 per cent and 38.6 per

cent to KSh 25.2 billion and KSh 11.4 billion, respectively, over the same period.

6.16. The value of imports of industrial machinery decreased by 6.0 per cent from KSh 253.5 billion in 2016 to KSh 238.4 billion in 2017. Likewise, the value of imports of agricultural machinery and tractors declined by 4.9 per cent to KSh 8.5 billion during the same period. Import expenditure on medicinal and pharmaceutical products further declined from KSh 60.5 billion in 2016 to KSh 55.6 billion in 2017. There was a marginal decline in total expenditure on imports of motor vehicles from KSh 85.8 billion in 2016 to KSh 85.2 billion in 2017. Similarly, import bill on rubber tyres declined from KSh 14.3 billion to KSh 14.0 billion over the same period. The value of imported cement clinkers declined for the second consecutive year to KSh 6.5 billion in 2017.

Table 6.4(b): Values of Principal Imports, 2013-2017

Commodity	KSh Million				
	2013	2014	2015	2016	2017*
Wheat, unmilled	30,189	33,831	35,663	28,883	42,400
Rice	14,111	15,305	13,370	14,200	26,782
Maize(unmilled,excluding sweet corn)	2,291	9,308	8,378	3,637	40,265
Wheat flour	1,964	1,712	902	767	618
Sugars, Mollases and Honey	16,770	12,009	15,503	21,953	61,530
Edible products and preparations, n.e.s.	7,402	7,463	10,646	12,461	11,942
Textile fibres and their waste.	5,099	5,792	6,623	6,365	5,387
Second - hand clothing	8,345	8,815	10,151	12,859	13,061
Petroleum Products	252,673	292,643	214,695	183,842	234,896
Residual petroleum products, n.e.s. and related materials ...	5,379	5,362	6,635	3,979	4,781
Liquefied propane and butane	5,515	10,834	7,879	7,895	11,749
Animal/vegetable fats and oils	48,371	50,044	47,038	53,285	68,553
Organic & inorganic chemicals	22,303	21,856	22,560	22,677	26,047
Pigments, paints, varnishes and related materials	5,608	6,369	6,872	7,080	7,671
Medicinal & Pharmaceuticals Products	40,114	52,088	61,513	60,455	55,623
Essential oils and perfumes	16,935	18,445	20,901	19,413	21,927
Chemical Fertilizers	27,957	19,331	23,468	23,064	29,159
Plastics in primary & non-primary forms	55,182	60,217	62,724	59,319	61,308
Insecticides and fungicides..	10,879	10,797	11,335	11,381	11,892
Miscellaneous chemical products, n.e.s.	10,781	12,958	14,417	14,062	15,873
Rubber tyres and inner tubes, for wheels of all kinds	13,189	12,406	13,343	14,270	14,028
Paper and Paperboard	26,864	29,948	29,316	30,065	33,010
Textile yarn.....	4,106	4,421	4,332	4,137	3,882
Cement Clinkers	7,187	6,563	9,548	8,365	6,545
Iron and Steel	80,749	75,526	88,153	75,469	83,580
Non-ferrous metals	14,626	14,704	14,672	14,353	16,902
Structures and parts of structures, n.e.s., of iron, steel or aluminium	10,011	11,211	14,338	17,141	13,437
Hand and machine tools	3,265	4,082	3,267	2,848	2,626
Manufactures of base metal, n.e.s.	8,938	8,459	10,967	11,916	9,258
Industrial Machinery	231,440	256,672	211,724	253,541	238,366
Agricultural Machinery and Tractors	7,802	7,925	8,664	8,918	8,478
Automatic data processing machines and units thereof	15,019	9,720	11,212	18,959	25,233
Telecommunications equipment, n.e.s., and parts, n.e.s.	24,160	23,622	29,444	28,694	32,015
Parts, n.e.s. and accessories of the motor vehicles	7,440	8,105	9,674	9,078	9,017
Motorcycles and cycles fitted with an auxilliary motor	8,306	8,002	10,177	8,247	11,432
Bicycles, assembled or partly assembled	429	392	498	357	434
Road Motor Vehicles	83,330	101,792	117,637	85,840	85,220
Aircraft and associated equipment	21,308	129,589	83,094	7,753	11,312
Prefabricated buildings	4,980	6,702	7,000	4,641	4,112
Furniture and parts thereof	5,842	6,325	7,161	7,132	7,965
Quality control instruments and apparatus, n.e.s.	12,231	12,110	9,651	9,590	12,692
Printed matter	4,022	4,822	5,060	5,707	8,877
Articles, n.e.s., of plastics	5,623	6,846	8,556	7,802	8,248
All other Commodities	224,583	213,194	268,794	229,352	327,491
GRAND TOTAL	1,413,316	1,618,321	1,577,557	1,431,755	1,725,623

Source: Kenya National Bureau of Statistics/ Kenya Revenue Authority

* Provisional

Prices of Principal Domestic Exports and Imports

6.17. Tables 6.5(a) and 6.5(b) present the average unit prices of selected domestic exports and imports, respectively. The price of one kilogramme of tea rose by 21.6 per cent in 2017 to KSh 315 up from KSh 259 the previous year. Similarly, the price for one kilogramme of coffee rose by 14.4 per cent to KSh 540 in 2017. Unit price of exported fish and fish preparations also recorded an increase with one kilogramme selling at KSh 399 in 2017 from KSh 317 in 2016. Similarly, unit price of exported titanium ores and concentrates increased by 43.8 per cent to sell at KSh 25,840 per tonne in 2017. The trend was similar in domestic exports of iron and steel with one tonne selling for KSh 107,772 in 2017 from KSh 94,828 the previous year.

6.18. The average price of one tonne of soda ash continued to exhibit a downward trend from KSh 20,998 in 2016 to KSh 20,694 in 2017. Similarly, unit price of exported cement declined from KSh 10,377 per tonne in 2016 to KSh 9,043 per tonne in 2017.

Table 6.5(a): Average Prices of Principal Domestic Exports, 2013-2017

KSh/Unit						
Commodity	Unit	2013	2014	2015	2016	2017*
DOMESTIC EXPORTS						
Fish and fish preparations .. .						

Source: Kenya National Bureau of Statistics/Kenya Revenue Authority

¹ first batch of Titanium ores was exported in 2014

* Provisional.

6.19. On average, the price of one tonne of imported maize rose by 23.9 per cent from KSh 24,480 in 2016 to KSh 30,321 in 2017. A similar trend was observed in the wheat imports, with a tonne exchanging for KSh 22,858 in 2017 from KSh 21,201 in 2016. One tonne of rice nearly doubled from KSh 27,953 in 2016 to KSh 42,841 in 2017. On the contrary, the unit price of one tonne of sugar declined by 5.5 per cent during the review period to KSh 54,957.

6.20. The unit price of one litre of petroleum products imports increased by 26.5 per cent from KSh 34 in 2016 to KSh 42 in 2017. The average price of one tonne of imported chemical fertilizers declined, albeit marginally, for the second consecutive year to exchange for KSh 34,180. A marginal increase in the unit price of a tonne of imported clinker was registered in 2017 with the commodity exchanging for KSh 4,350. A tonne of imported iron and steel recorded a 16.3 per cent increase to KSh 60,798 in 2017 from KSh 52,269 in 2016.

Table 6.5(b): Average Prices of Principal Imports, 2013- 2017

Commodity	Unit	KSh/Unit				
		2013	2014	2015	2016	2017*
Wheat, unmilled	Tonne	29,223	27,601	25,083	21,201	22,858
Rice	Tonne	34,453	33,331	30,198	27,953	42,841
Maize, unmilled	Tonne	24,506	20,283	17,098	24,480	30,321
Wheat flour	Tonne	63,660	51,590	55,294	48,143	44,313
Sugars, Mollases and Honey	Tonne	60,642	52,478	54,070	58,179	54,957
Edible products and preparations, n.e.s.	Tonne	153,102	137,528	113,411	132,632	113,760
Textile fibres and their waste	Tonne	280,434	288,866	308,641	296,716	267,671
Second - hand clothing	Tonne	82,574	82,402	91,735	97,463	96,132
Petroleum products	Lt.	67	63	42	34	42
Residual petroleum products, n.e.s. and related materials ...	Kg	75	74	57	55	55
Liquefied propane and butane	Kg	99	97	61	47	59
Animal and vegetable oils	Kg	76	80	69	71	81
Organic & inorganic chemicals	Kg	87	56	84	81	93
Pigments, paints, varnishes and related materials	Kg	202	220	200	186	177
Medicinal & Pharmaceuticals Products	Kg	2,334	2,515	2,465	2,337	2,244
Essential oils & pefumes	Kg	367	333	378	346	341
Chemical fertilizers	Tonne	40,609	38,969	41,273	34,333	34,180
Plastics in primary & non-primary forms	Tonne	146,241	150,473	137,724	126,365	135,104
Insecticides and fungicides	Tonne	737,003	708,822	738,833	678,209	661,190
Miscellaneous chemical products, n.e.s.	Tonne	289,454	333,286	273,018	282,553	316,984
Rubber tyres and inner tubes, for wheels of all kinds	No.	2,307	2,033	2,075	1,840	1,727
Paper and Paperboard	Tonne	87,829	85,281	88,532	86,224	90,346
Cement Clinkers	Tonne	5,036	5,021	4,839	4,177	4,350
Iron and steel	Tonne	66,304	63,135	57,594	52,269	60,798
Non-ferrous metals	Tonne	278,116	275,797	287,634	279,256	367,154
Structures and parts of structures of iron, steel or aluminium	Tonne	190,280	168,826	150,822	164,846	192,442
Hand & machine tools	Kg	306	359	288	245	277
Manufactures of base metal, n.e.s.	Tonne	270,469	258,327	165,995	197,718	201,823
Automatic data processing machines and units thereof; ...	No.	9,285	24,024	20,831	18,491	20,263
Motorcycles and cycles fitted with an auxilliary motor	No.	50,253	53,953	55,888	56,510	57,241
Bicycles, assembled or partly assembled	No.	2,583	2,801	3,083	3,302	2,870
Road Motor Vehicles	No.	903,108	983,339	1,071,563	1,009,082	902,141
Prefabricated buldings	Tonne	224,952	245,686	233,249	254,944	213,480
Printed matter	Tonne	427,753	471,934	379,909	501,803	1,000,032
Articles, n.e.s., of plastics	Tonne	148,883	137,511	185,452	154,050	194,780

Source: Kenya National Bureau of Statistics/ Kenya Revenue Authority

* Provisional.

Composition of Exports

6.21. Table 6.6 shows the composition of domestic exports by Broad Economic Category for 2013 to 2017. Domestic exports of food and beverages increased by 11.3 per cent to KSh 254.7 billion and accounted for 48.0 per cent of all the domestic exports in 2017. Domestic exports of primary food and beverages for household consumption constituted the bulk of exports within this category at 72.7 per cent. The category of consumer goods not elsewhere specified continued to be the second leading source of export earnings amounting to KSh 133.7 billion, with a share of 25.2 per cent of the total domestic exports. There was a marginal increase in the value of domestic exports of non-food industrial supplies during the review period.

Table 6.6: Domestic Exports by Broad Economic Category, 2013-2017

	KSh Million				
DESCRIPTION	2013	2014	2015	2016	2017*
FOOD AND BEVERAGES	195,094	188,094	223,281	228,789	254,686
Primary	153,613	147,099	182,774	187,837	211,355
For Industry	18,982	22,101	22,630	23,471	26,255
For Household Consumption	134,631	124,998	160,145	164,366	185,100
Processed	41,482	40,995	40,507	40,952	43,331
For Industry	5,256	4,312	2,478	3,516	3,209
For Household Consumption	36,226	36,683	38,029	37,436	40,122
INDUSTRIAL SUPPLIES (Non-Food)	126,192	124,452	129,288	124,176	125,402
Primary	24,669	39,428	40,896	44,739	48,247
Processed	101,523	85,024	88,392	79,437	77,155
FUEL AND LUBRICANTS	1,610	3,281	6,288	4,546	5,253
Primary	8	5	9	13	48
Processed	1,602	3,275	6,279	4,533	5,205
Motor Spirit	190	60	38	125	45
Other	1,412	3,215	6,240	4,407	5,160
MACHINERY & OTHER CAPITAL EQUIPMENT	9,736	7,503	9,522	13,257	7,086
Machinery & Other Capital Equipment	7,867	6,116	7,565	11,845	5,860
Parts and Accessories	1,868	1,387	1,957	1,412	1,225
TRANSPORT EQUIPMENT	8,130	7,235	7,118	5,826	4,431
Passenger Motor Vehicles	122	92	454	516	259
Other	4,522	3,505	3,744	3,551	2,100
For Industry	4,402	3,250	3,571	3,474	2,012
Non-Industrial	120	255	173	77	88
Parts and Accessories	3,487	3,638	2,921	1,759	2,073
CONSUMER GOODS NOT ELSEWHERE	113,537	128,463	124,180	129,879	133,744
Durable	3,819	4,503	1,449	1,258	1,407
Semi-Durable	31,404	35,417	35,088	35,462	35,388
Non-Durable	78,314	88,544	87,643	93,159	96,949
GOODS NOT ELSEWHERE SPECIFIED	1,390	1,544	31	77	16
TOTAL	455,689	460,572	499,708	506,548	530,617
SHARES:					
Food and Beverages	42.81	40.84	44.68	45.17	48.00
Industrial Supplies (Non-Food)	27.69	27.02	25.87	24.51	23.63
Fuel and Lubricants	0.35	0.71	1.26	0.90	0.99
Machinery and other Capital Equipment	2.14	1.63	1.91	2.62	1.34
Transport Equipment	1.78	1.57	1.42	1.15	0.84
Consumer Goods not elsewhere specified	24.92	27.89	24.85	25.64	25.21
Goods not elsewhere specified	0.31	0.34	0.01	0.02	0.00
TOTAL	100.00	100.00	100.00	100.00	100.00

* Provisional

Composition of Imports

6.22. The composition of imports by Broad Economic Category for 2013 to 2017 is presented in Table 6.7. Non-food industrial supplies remained the dominant category of imports with a share of 31.9 per cent of the total imports in 2017. Imports of processed non-food industrial supplies which constitute the bulk of imports in this category increased by 6.9 per cent to KSh 521.9 billion in 2017. Imports of machinery and other capital equipment declined marginally from KSh 312.1 billion in 2016 to KSh 310.8 billion in 2017 but emerged the second leading category of imports in 2017, and accounted for 18.0 per cent of the total imports. Expenditure on fuels and lubricants accounted for 16.1 per cent of the total import expenditure in 2017, up from a share of 14.5 per cent in 2016. This was largely driven by imports of processed fuels and lubricants which rose from KSh 204.3 billion in 2016 to KSh 272.9 billion in 2017. Expenditure on imports of food and beverages more than doubled from KSh 114.6 billion in 2016 to KSh 245.3 billion in 2017, in a bid to cushion against the food shortage as a result of the drought experienced in the country. The surge in imports within this category was observed for both imports of primary and processed food and beverages. This resulted in an increase of 6.2 percentage points in the contribution of imports of food and beverages to the total imports in 2017. Imports of other industrial transport equipment were the main drivers of growth in imports of transport equipment which rose from KSh 147.5 billion in 2016 to KSh 197.4 billion in 2017.

Table 6.7: Total Imports by Broad Economic Category, 2013-2017

	KSh Million				
	2013	2014	2015	2016	2017*
FOOD AND BEVERAGES	101,590	111,838	123,444	114,560	245,280
Primary	48,048	59,437	66,528	48,528	114,010
For Industry	39,624	50,767	53,985	37,677	90,909
For Household Consumption	8,425	8,670	12,543	10,850	23,101
Processed	53,542	52,401	56,915	66,033	131,270
For Industry	8,933	8,981	10,934	15,125	57,459
For Household Consumption	44,609	43,420	45,981	50,907	73,810
INDUSTRIAL SUPPLIES (Non-Food)	450,479	462,172	524,556	518,672	551,065
Primary	25,862	26,051	29,318	30,389	29,144
Processed	424,617	436,121	495,238	488,283	521,921
FUEL AND LUBRICANTS	326,305	346,745	237,295	208,055	277,653
Primary	43,940	3,998	3,789	3,797	4,783
Processed	282,365	342,747	233,506	204,258	272,870
Motor Spirit	58,685	70,683	57,035	53,148	70,873
Other	223,680	272,064	176,471	151,109	201,996
MACHINERY AND OTHER CAPITAL EQUIPMENT ..	250,873	278,709	287,544	312,076	310,772
Machinery and Other Capital Equipment	200,349	225,337	242,172	251,200	260,182
Parts and Accessories	50,524	53,372	45,372	60,876	50,590
TRANSPORT EQUIPMENT	160,841	278,706	266,874	147,466	197,402
Passenger Motor Vehicles	44,604	51,430	56,138	50,047	53,894
Other	72,054	191,815	170,092	58,736	103,199
Industrial	61,998	181,963	158,164	48,951	90,422
Non-Industrial	10,055	9,853	11,928	9,786	12,777
Parts and Accessories	44,183	35,461	40,645	38,682	40,309
CONSUMER GOODS NOT ELSEWHERE SPECIFIED	96,299	113,537	125,884	126,668	138,256
Durable	24,386	22,469	23,899	23,736	25,779
Semi-Durable	20,738	27,853	32,100	30,795	39,025
Non-Durable	51,175	63,215	69,884	72,137	73,452
GOODS NOT ELSEWHERE SPECIFIED	26,927	26,616	11,960	4,257	5,194
TOTAL	1,413,316	1,618,321	1,577,557	1,431,755	1,725,623
SHARES:					
Food and Beverages	7.19	6.91	7.82	8.00	14.21
Industrial Supplies (Non-Food)	31.87	28.56	33.25	36.23	31.93
Fuel and Lubricants	23.09	21.43	15.04	14.53	16.09
Machinery and other Capital Equipment	17.75	17.22	18.23	21.80	18.01
Transport Equipment	11.38	17.22	16.92	10.30	11.44
Consumer Goods not elsewhere specified	6.81	7.02	7.98	8.85	8.01
Goods not elsewhere specified	1.91	1.64	0.76	0.30	0.30
TOTAL	100.00	100.00	100.00	100.00	100.00

* Provisional

Direction of Trade

6.23. The values of total export earnings rose from KSh 578.1 billion in 2016 to KSh 594.1 billion in 2017 as presented in Table 6.8. Total exports to Africa accounted for 37.7 per cent of total exports in 2017, down from 40.6 per cent the previous year. The region remained the leading destination of Kenya's exports despite a 4.6 per cent decline in the value of total exports, during the year under review. The decline in total export earnings from the East African Community (EAC) region is partly attributed to a reduction in the value of total exports to Africa, since the region accounts for more than half of total exports to the continent.

6.24. Total export earnings from Asia continued to rise for the third year in a row to KSh 162.5 billion in 2017. The growth in total export earnings from the region was largely in earnings from exports to the Far East which grew by 23.5 per cent to KSh 111.1 billion in 2017. Total exports to Pakistan rose from KSh 40.3 billion in 2016 to KSh 64.1 billion in 2017, mainly on account of a 59.1 per cent increase in domestic exports of tea which accounted for 95.9 per cent of domestic exports to this destination.

6.25. The value of total exports to the European Union (EU) rose by 3.6 per cent to KSh 125.6 billion in 2017 and constituted 21.1 per cent of total exports. The value of total exports to Netherlands, United Kingdom, France and Belgium went up, jointly amounting to KSh 96.2 billion in 2017, up from KSh 92.9 billion in 2016. The value of total exports to Germany, however, continued to decline, amounting to KSh 11.7 billion in 2017.

6.26. Total export earnings from America continued to exhibit an upward trend during the review period. The sustained growth in total exports to the region is largely attributable to growth in total exports to the USA which accounts for more than 80.0 per cent of total exports to the region. The main export commodities to the United States are articles of apparel and clothing accessories which constitute more than 60 per cent of total domestic exports to the country. In 2017, domestic exports of articles of apparels rose by 5.9 per cent to KSh 30.2 billion. Other commodities that recorded increased earnings from this destination included; coffee (59.5%), edible nuts (42.3%) and tea (8.0%).

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Table 6.8: Values of Total Exports by Destination, 2013-2017

	KSh Million				
	2013	2014	2015	2016	2017*
EUROPE					
WESTERN EUROPE:					
European Union					
Belgium	6,193	6,730	4,540	5,395	6,025
Finland	1,106	1,514	1,973	1,412	1,030
France	5,379	5,689	6,074	6,412	7,773
Germany	8,244	10,786	12,508	11,864	11,741
Italy	4,541	6,960	5,248	3,733	3,409
Netherlands	32,578	40,614	42,041	43,492	43,892
Spain	2,018	2,627	3,239	2,302	2,963
Sweden	2,503	2,731	2,510	3,066	2,863
United Kingdom	37,613	35,868	40,668	37,581	38,553
Poland	1,630	1,847	2,263	1,804	2,214
Other	2,840	4,591	4,867	4,205	5,153
Total	104,645	119,958	125,932	121,267	125,615
Other Western Europe	6,948	8,080	8,527	9,631	8,946
Total Western Europe	111,594	128,038	134,460	130,899	134,561
EASTERN EUROPE:					
Russia Federation	6,831	7,124	8,065	6,996	7,997
Kazakhstan	4,346	3,267	2,855	3,028	3,433
Other	528	536	565	611	995
Total Eastern Europe	11,705	10,927	11,484	10,635	12,425
TOTAL EUROPE	123,299	138,965	145,944	141,534	146,986
AMERICA					
United States of America	29,936	38,290	40,725	43,354	47,270
Canada	1,297	1,690	2,289	5,729	3,634
Other	2,533	5,684	7,575	3,808	3,861
TOTAL AMERICA	33,765	45,664	50,589	52,891	54,765
AFRICA					
EAC					
Uganda	65,362	60,783	68,574	62,163	61,814
Tanzania	40,496	42,725	33,663	34,797	28,521
Rwanda	13,500	14,441	17,950	17,500	17,124
Burundi	5,599	7,849	6,595	7,242	7,382
Total EAC	124,957	125,798	126,782	121,702	114,841
Rest of Africa					
South Africa	3,277	5,936	4,338	4,149	2,759
Egypt	17,001	17,509	20,166	20,619	19,005
Somalia	16,940	13,202	15,210	17,932	19,661
Ethiopia	4,885	6,919	7,154	8,053	6,982
Sudan	6,425	6,241	5,967	5,361	6,907
South Sudan	16,680	19,823	17,065	16,326	16,752
Democratic Republic of Congo	18,437	21,052	20,673	20,035	18,879
Zambia	6,288	6,668	5,909	5,172	3,869
Other1	16,584	18,215	18,921	15,325	14,210
TOTAL AFRICA	231,474	241,363	242,187	234,673	223,865
ASIA					
MIDDLE EAST:					
Iran	2,798	2,283	1,152	1,757	1,524
Israel	1,126	1,337	1,449	1,064	747
Jordan	260	309	853	1,059	1,594
Saudi Arabia	3,190	4,879	5,551	6,727	7,846
United Arab Emirates	25,144	20,198	29,239	30,974	26,370
Yemen Arab Republic	5,044	4,356	4,023	4,803	6,387
Other	1,941	2,445	2,941	4,140	6,907
Total Middle East	39,502	35,806	45,207	50,525	51,375
FAR EAST					
China(Mainland)	4,199	6,597	8,471	10,061	9,998
India	9,475	8,753	8,954	11,919	5,982
Indonesia	1,252	885	1,323	934	1,191
Japan	2,711	3,526	4,054	4,071	4,505
Korea Republic (South Korea)	1,077	2,532	1,734	1,869	2,353
Pakistan	24,130	22,022	35,250	40,254	64,058
Singapore	1,679	1,169	1,404	357	375
Afghanistan	15,861	10,373	14,502	10,686	3,147
Thailand	1,620	1,657	2,071	1,727	5,001
Other	6,052	6,700	7,782	8,132	14,477
Total Far East	68,056	64,212	85,545	90,011	111,086
TOTAL, ASIA	107,558	100,018	130,752	140,536	162,460
AUSTRALIA & OCEANIC					
Australia	2,663	3,029	2,313	2,203	2,285
Other	195	436	1,089	3,920	1,292
TOTAL Australia & Oceania	2,858	3,465	3,402	6,123	3,577
All Other Countries	1,456	1,166	800	1,045	1,213
Aircraft and Ships Stores	1,876	6,595	7,372	1,265	1,263
Total All Other Countries	3,332	7,761	8,172	2,310	2,476
GRAND TOTAL EXPORTS	502,286	537,236	581,045	578,067	594,128

Source: Kenya National Bureau of Statistics/ Kenya Revenue Authority

Total Exports= Domestic Exports plus Re-Exports

*Provisional

1See Table 710 for details

6.27. Total expenditure on imports rose by 20.5 per cent in 2017 to KSh 1,725.6 billion as shown in Table 6.9. The value of imports from the Far East and Middle East Asia rose by 6.8 per cent and 50.7 per cent, respectively, in 2017. This resulted in a 15.8 per cent increase in the value of imports from Asia which amounted to KSh 1,107.6 billion during the review period. Consequently, the value of imports from Asia accounted for 64.2 per cent of total imports in 2017. Imports from China which have been growing steadily over time amounted to KSh 390.6 billion in 2017, representing an increase of 15.8 per cent. The value of imports from the United Arab Emirates (UAE) and Saudi Arabia also registered significant increase of 51.2 per cent and 65.5 per cent to KSh 138.4 billion and KSh 114.6 billion, respectively, in 2017. Other countries within Asia that registered increase in the value of imports included; Indonesia (25.3%), Pakistan (40.3%), Thailand (74.2%), Malaysia (45.0%) and South Korea (23.8%). On the contrary, value of imports from India which have been on a downward trend since 2014, declined to KSh 170.4 billion in 2017.

6.28. In 2017, the value imports from America nearly doubled in 2017, accounting for 7.5 per cent of total value of imports. Increase in import expenditure within the region were recorded for Brazil, Mexico and Argentina which jointly rose from KSh 7.5 billion in 2016 to KSh 58.5 billion in 2017. The increase in import expenditure from Brazil was on account of a substantial increase in sugar imports. Maize imports which accounted for 90.4 per cent of total imports from Mexico contributed to the surge in imports from the country in 2017.

6.29. The value of imports from the European Union (EU) continued to decline for the second consecutive year and amounted to KSh 206.5 billion in 2017. The value imports from the two leading source countries; Germany and the United Kingdom, jointly declined by 5.0 per cent to KSh 73.0 billion in 2017. A notable decline was also recorded in value of imports from Italy (5.7%), Spain (3.0%), Denmark (11.5%) and Ireland (53.1%). However, the situation was different for France, Netherlands and Belgium which recorded an increase in the value of imports during the review period, from a combined expenditure of KSh 51.5 billion in 2016 to KSh 61.7 billion in 2017.

Table 6.9: Values of Imports by Origin, 2013-2017

	KSh Million				
DESCRIPTION	2013	2014	2015	2016	2017*
EUROPE					
WESTERNEUROPE					
European Union					
Belgium	13,059	13,159	14,966	13,496	15,364
Finland	3,665	3,840	5,415	3,339	2,123
France	20,666	22,447	21,066	21,534	26,835
Germany	37,488	47,409	47,381	43,353	42,989
Italy	20,324	19,946	22,722	23,738	22,388
Netherlands	24,788	18,792	20,527	16,510	19,539
Spain	8,365	12,516	11,376	11,023	10,696
Sweden	7,091	6,233	6,364	5,844	6,256
United Kingdom	49,020	47,037	42,970	33,487	30,050
Denmark	4,633	4,223	4,097	4,252	3,764
Ireland	4,383	5,689	7,525	6,949	3,256
Czech Republic	2,073	1,959	1,929	3,300	4,443
Austria	1,843	2,635	2,680	2,707	2,344
Poland	2,290	4,720	8,643	6,020	6,354
Hungary	1,627	1,449	2,565	2,494	1,253
Other	6,313	13,363	12,494	14,519	8,881
Total	207,628	225,416	232,720	212,567	206,534
Other Western Europe	23,969	20,235	27,112	23,836	29,696
Total Western Europe	231,597	245,651	259,832	236,402	236,230
EASTERN EUROPE					
Russian Federation	23,182	23,118	28,583	24,260	36,179
Ukraine	13,708	15,008	6,118	3,819	9,517
Other	2,148	2,168	1,059	842	789
Total	39,039	40,294	35,759	28,921	46,485
TOTAL, EUROPE	270,635	285,945	295,592	265,324	282,715
AMERICA					
United States of America	57,412	168,720	126,041	47,819	57,377
Canada	6,525	7,886	7,754	7,807	9,902
Brazil	15,603	6,094	6,968	4,370	27,819
Mexico	1,650	1,576	2,377	2,308	21,140
Argentina	1,152	1,960	1,545	852	9,536
Other	2,134	1,239	1,371	2,035	2,772
TOTAL AMERICA	84,477	187,476	146,056	65,190	128,547
AFRICA					
South Africa	70,724	63,893	61,311	49,857	61,880
Tanzania	11,666	18,364	16,906	12,806	17,180
Uganda	16,086	17,549	22,284	19,276	42,041
Swaziland	5,436	5,594	7,162	6,398	11,231
Mauritius	2,011	2,794	2,713	5,174	7,318
Rwanda	1,006	716	790	775	1,684
Zambia	2,894	4,380	3,895	4,201	7,739
Other ¹	38,016	32,851	34,037	41,755	51,472
TOTAL AFRICA	147,839	146,141	149,097	140,241	200,544
ASIA					
MIDDLE EAST					
Iran	2,434	3,788	3,808	6,134	13,169
Israel	9,437	5,659	10,410	5,027	6,293
Jordan	799	789	945	806	3,198
Saudi Arabia	41,423	56,565	55,306	69,259	114,607
United Arab Emirates	117,360	103,255	90,573	91,482	138,359
Bahrain	34,977	41,367	5,759	8,095	8,845
Oman	3,819	10,518	5,942	5,697	5,107
Other	9,631	6,028	5,775	8,186	3,823
Total Middle East	219,880	227,969	178,517	194,687	293,400
FAREAST					
China	182,356	248,648	320,816	337,450	390,622
India	258,230	264,536	252,523	205,499	170,410
Indonesia	45,041	48,598	45,939	45,372	56,862
Japan	83,720	86,554	88,239	82,410	81,663
Korea South	24,471	29,105	18,822	14,211	17,595
Pakistan	15,647	18,020	18,347	18,175	25,497
Singapore	19,437	14,624	9,612	6,795	5,829
Taiwan	12,304	15,541	12,391	12,296	11,814
Malaysia	9,349	11,066	10,556	12,321	17,868
Thailand	12,673	12,527	12,913	12,059	21,007
Other	13,593	12,984	12,976	15,406	15,016
Total Far East	676,820	762,204	803,133	761,993	814,182
TOTAL, ASIA	896,700	990,173	981,650	956,680	1,107,583
AUSTRALIA & OCEANIA					
Australia	12,422	7,069	4,032	2,878	4,934
Other	618	431	787	1,190	1,093
TOTAL AUSTRALIA & OCEANIA	13,040	7,500	4,820	4,068	6,027
All Other Countries N.E.S.	624	1,086	342	250	206
Total All Other Counties n.e.s	624	1,086	342	250	206
GRAND TOTAL	1,413,316	1,618,321	1,577,557	1,431,753	1,725,622

Source: Kenya National Bureau of Statistics / Kenya Revenue Authority

*Provisional

¹See table 7.10 for details

6.30. As presented in Table 6.10, the value of imports from Africa accounted for 11.6 per cent of the total import bill in 2017 at KSh 200.5 billion, representing 43.0 per cent increase. Imports from Common Market for Eastern and Southern Africa (COMESA) accounted for 57.5 per cent of total value of imports from Africa in 2017. Uganda and Egypt were the dominant sources of imports with a combined value of KSh 77.4 billion. Imports from Uganda more than doubled from KSh 19.3 billion in 2016 to KSh 42.0 billion in 2017 on account of increased imports of; milk and milk products (excluding butter and cheese), beans, animal feeds, maize, and other unmilled cereals (excluding wheat and rice). The value of imports of these commodities accounted for 66.2 per cent of the total imports from Uganda in 2017. The increase in imports from Egypt was partly attributable to increase in the value of imports of soap and other cleansing preparations; paintings and drawings; paper and paperboard; and computer monitors and projectors. Imports of sorghum from Sudan caused the significant increase in imports from this origin in 2017.

6.31. Imports from South Africa rose from KSh 49.9 billion in 2016 to KSh 61.9 billion in 2017, largely driven by an increase in the value of imported maize; iron and steel; road motor vehicles; and coal. The value of maize imports from South Africa was KSh 7.7 billion and accounted for 19.1 per cent of the total import expenditure, in 2017.

6.32. Total exports to Africa continued on a downward trend for the second year to KSh 223.9 billion in 2017, with a share of 37.7 per cent of the total export earnings during the year. The trend in total exports to Africa was consistent with the performance of total exports to the COMESA region which declined by 2.2 per cent to KSh 166.4 billion in 2017. The value of total exports to COMESA accounted for 74.3 per cent of the value of total exports to Africa. Destinations that recorded reduced earnings from exports within the region included; Egypt (7.8%), Democratic Republic of Congo (5.8%), Ethiopia (13.3%), Zambia (25.2%), Djibouti (40.9%) and the Comoros (50.4%). The decline in the value of domestic exports of key commodities to Egypt such as tea; tobacco and tobacco manufactures; and paper and paperboard, resulted to the decrease in the value of export earnings from this destination in 2017. Similarly, the value of domestic exports of assorted commodities including; insecticides, rubber tyres, sugar confectionery, prefabricated buildings, stoppers, caps and lids of containers drove the decline in earnings from exports to Ethiopia.

6.33. Total export earnings from the EAC decreased by 5.6 per cent in 2017 to KSh 114.8 billion. This was partly as a result of reduction in the value of total exports to Uganda from KSh 62.2 billion to KSh 61.8 billion, Tanzania from KSh 34.8 billion to KSh 28.5 billion and Rwanda from KSh 17.5 billion to KSh 17.1 billion in 2017. Earnings from domestic exports of cement to Uganda fell by a further 21.7 per cent in 2017. Other commodity exports to Uganda that showed decline in earnings during the year included: alcohols; phenols and their derivatives (81.7%); salt (10.2%); medicinal and pharmaceutical products (26.6%); and products of iron and steel (13.4%).

Table 6.10: Trade with African Countries, 2013-2017

ZONES/COUNTRIES	TOTAL EXPORTS					IMPORTS					KSh '000
	2013	2014	2015	2016	2017*	2013	2014	2015	2016	2017*	
EAST AFRICAN COMMUNITY (EAC)											
Tanzania	40,496,493	42,724,911	33,663,396	34,796,571	28,521,064	11,666,407	18,364,083	16,906,157	12,806,098	17,179,556	
Uganda	65,361,907	60,782,664	68,573,904	62,163,383	61,814,032	16,085,806	17,549,421	22,283,692	19,275,753	42,041,347	
Rwanda	13,499,695	14,440,844	17,949,831	17,499,630	17,124,028	1,005,755	715,591	789,704	774,593	1,683,596	
Burundi	5,598,956	7,849,463	6,594,983	7,242,223	7,381,994	52,577	29,446	223,663	68,353	59,481	
Total, EAC¹	124,957,051	125,797,882	126,782,115	121,701,806	114,841,119	28,810,546	36,658,542	40,203,215	32,924,797	60,963,980	
COMESA²											
Comoros	880,126	478,664	1,103,877	1,127,582	559,762	63	-	8	1,247	788	
Congo, DR	18,436,875	21,052,099	20,673,353	20,035,483	18,879,330	561,648	259,805	127,763	208,300	504,619	
Djibouti	1,227,723	1,011,457	1,110,081	1,318,178	779,675	2,020	3,486	15,328	3,010	47,184	
Egypt	17,001,458	17,509,233	20,166,293	20,618,514	19,005,228	25,602,868	25,532,067	25,816,669	30,042,739	35,382,586	
Eritrea	306,469	396,846	449,632	117,935	175,703	4,578	19	68	-	3,035	
Ethiopia	4,885,115	6,918,973	7,154,246	8,052,619	6,982,230	278,631	424,764	501,056	531,602	2,106,353	
Libya	112,165	128,998	131,594	126,330	47,493	6,472	8,591	181,901	-	-	
Madagascar	312,625	429,997	449,833	205,535	328,854	790,495	590,369	2,433,745	801,749	1,644,846	
Malawi	3,497,283	3,326,340	3,047,465	2,791,807	2,972,319	1,041,386	302,633	249,795	377,281	402,119	
Mauritius	956,755	1,060,761	1,083,200	976,999	1,111,361	2,011,224	2,793,710	2,713,035	5,173,580	7,317,990	
Seychelles	379,669	177,399	321,581	161,718	174,562	290,695	470,097	64,171	236	-	
Sudan	6,424,532	6,241,153	5,966,860	5,360,749	6,906,507	1,359,591	1,327	454,834	479,445	2,186,197	
South Sudan	16,680,368	19,822,572	17,065,487	16,326,135	16,752,051	21,304	1,210,699	8,709	6,200	25,204	
Swaziland	11,741	17,929	103,827	24,154	56,431	5,436,480	5,594,274	7,161,711	6,397,800	11,230,575	
Zambia	6,287,696	6,667,898	5,909,279	5,171,559	3,868,968	2,893,584	4,380,297	3,894,811	4,200,643	7,739,372	
Zimbabwe	1,809,563	1,663,268	1,217,307	914,062	1,506,220	819,548	494,674	224,209	1,256,194	2,946,018	
Sub-Total, COMESA	79,210,163	86,903,585	85,953,916	83,329,358	80,106,696	41,120,587	42,066,812	43,847,812	49,480,027	71,536,888	
Total, COMESA	163,670,721	169,976,556	179,072,634	170,234,594	166,426,751	58,264,726	60,361,271	67,144,871	69,598,727	115,321,312	
OTHER COUNTRIES											
Algeria	545,188	108,318	361,859	122,583	30,196	13,650	857,743	799,089	300,993	8,679	
Angola	178,648	108,415	102,377	74,733	39,138	132,449	116,955	24,676	59,990	161,828	
Ghana	631,527	478,990	490,556	534,359	542,357	254,505	368,916	121,385	205,283	202,174	
Nigeria	2,350,105	2,429,578	3,659,278	2,559,422	2,649,019	1,596,189	698,214	205,491	459,985	425,429	
Lesotho	33,351	47,556	61,418	28,801	325,832	79,011	10,165	2,191	1,829	1,173	
Mozambique	1,407,050	1,809,120	1,292,855	2,358,730	1,215,776	1,833,139	734,959	1,412,850	2,363,997	3,173,284	
Reunion	126,331	127,782	127,091	160,438	149,490	6,595	2,516	3,561	1,561	-	
Somalia	16,940,454	13,201,901	15,209,983	17,931,907	19,661,489	293,755	150,268	28,698	52,823	94,168	
South Africa	3,276,892	5,936,345	4,338,440	4,149,033	2,758,621	70,724,146	63,893,353	61,311,246	49,857,194	61,879,611	
All Other African Countries	1,817,737	4,413,643	3,806,935	1,721,975	1,545,464	2,974,601	582,942	1,136,711	4,532,170	2,096,910.29	
Sub-Total	27,307,284	28,661,648	29,450,792	29,641,979	28,917,383	77,908,040	67,416,032	65,045,898	57,835,825	68,043,257	
TOTAL AFRICA	231,474,498	241,363,115	242,186,823	234,673,144	223,865,198	147,839,173	146,141,386	149,096,925	140,240,649	200,544,125	
Percentage of all Exports/Imports	46.1	44.9	41.7	40.6	37.7	10.5	9.0	9.5	9.8	11.6	

Source: Kenya National Bureau of Statistics/Kenya Revenue Authority

* Provisional

¹ Does not include South Sudan² EAC Partner States are also members of COMESA except Tanzania

Balance of Payments 6.34. Table 6.11 presents Balance of Payments statistics that summarises the country's cross border transactions from 2013 to 2017. During the review period, the overall Balance of Payments worsened to a deficit of KSh 16.9 billion from a surplus of KSh 13.1 billion in 2016. The current account balance widened by 38.3 per cent to a deficit of KSh 518.9 billion in 2017 from a deficit of KSh 375.3 billion in 2016. This was mainly driven by the widening of merchandise trade deficit that grew by 35.6 per cent in the review period. Exports of goods went up by 2.7 per cent to KSh 599.0 billion in 2017 while imports of goods valued on free on board basis increased by 21.5 per cent to KSh 1,653.9 billion in the same period. The significant growth in the value of imports was mainly as a result of increased imports of food and petroleum products. The current account balance was 6.7 per cent of the GDP in 2017.

6.35. Net international services increased by 11.4 per cent from a surplus of KSh 144.4 billion in 2016 to a surplus of KSh 160.9 billion in 2017. Receipts from international services increased by 14.0 per cent while payments for international services rendered grew by 15.3 per cent in 2017. Receipts from international travel partly contributed to the increase in services inflows. Diaspora remittances remained buoyant, increasing by 14.6 per cent, and contributed to increased secondary income net inflows from a surplus of KSh 327.8 billion in 2016 to a surplus of KSh 460.0 billion in 2017.

6.36. Total net financial inflows increased by 13.4 per cent from a surplus KSh 420.0 billion in 2016 to a surplus of KSh 476.1 billion in 2017. Other investment which include loan disbursements net inflows increased by 18.0 per cent to a surplus of KSh 513.4 billion in 2017 compared to an increase of 20.2 per cent in 2016. Similarly, net foreign direct investment inflows increased by 79.2 per cent from a surplus KSh 23.9 billion in 2016 to a surplus of KSh 42.9 billion in the review period.

Table 6.11: Balance of Payments, 2013-2017

	KSh Million				
	2013	2014	2015	2016	2017*
A. Current Account .	-417,019.6	-560,761.1	-421,082.1	-375,295.9	-518,943.6
Goods: exports f.o.b.	503,491.1	546,781.5	587,330.0	583,378.1	598,967.1
Goods: imports f.o.b.	1,385,669.8	1,488,446.8	1,409,606.4	1,361,483.4	1,653,935.8
Services: credit	441,986.5	441,739.9	455,369.8	421,731.9	480,622.1
<i>of which Travel...</i>	75,843.8	71,277.6	71,081.1	83,614.2	94,705.3
Services: debit.	190,061.0	294,498.4	326,014.9	277,354.2	319,742.2
<i>Balance on goods and services.</i>	-630,253.1	-794,423.8	-692,921.5	-633,727.7	-894,088.8
Primary income: credit.	28,712.4	43,643.4	48,298.1	43,991.1	41,208.1
Primary income: debit.	80,383.9	119,981.0	115,459.3	113,406.5	126,038.2
<i>Balance on goods, services, and primary income.</i>	-681,924.6	-870,761.4	-760,082.7	-703,143.0	-978,918.9
Secondary income ¹ : credit.	268,925.2	327,853.4	345,217.9	333,039.1	465,762.6
<i>of which Diaspora Remittances...</i>	112,328.1	126,682.3	154,068.3	177,088.5	202,918.7
Secondary income ¹ : debit.	4,020.2	17,853.1	6,217.3	5,191.9	5,787.4
B. Capital Account ..	13,644.0	24,204.0	25,718.0	20,878.0	19,046.0
Capital account: credit.	13,644.0	24,204.0	25,718.0	20,878.0	19,046.0
Capital account: debit.	-	-	-	-	-
C. Financial Account ..	-448,096.6	-650,365.7	-383,721.0	-419,998.1	-476,118.7
Direct investment: assets.	17,105.0	6,604.6	23,758.5	16,008.5	26,585.8
Direct investment: liabilities ..	96,356.4	72,178.6	60,843.6	39,927.7	69,439.2
Portfolio investment: assets..	3,285.4	4,869.6	18,722.0	42,939.3	68,791.9
Equity and investment fund shares.	1,016.3	310.0	996.0	41,283.6	68,077.3
Debt securities.	2,269.1	4,559.6	17,726.0	1,655.7	714.6
Portfolio investment: liabilities ..	26,581.6	331,663.4	3,499.1	4,050.4	-11,358.2
Equity and investment fund shares.	25,563.0	83,907.5	1,061.1	2,295.6	-11,583.0
Debt securities.	1,018.6	247,755.9	2,438.0	1,754.9	224.8
Financial derivatives: net.	..	..	..	..	..
Other investment: assets.	56,268.7	-505.0	49,206.0	-19,542.1	35,489.4
Other equity.	-	-	-	-	-
Other debt instruments.	56,268.7	-505.0	49,206.0	-19,542.1	35,489.4
Central bank.	-	-	-	-	-
Deposit-taking corporations, except the central bank	40,048.0	-7,067.2	40,885.7	-24,812.7	30,938.5
General government.	-	-	-	-	-
Other sectors.	16,220.7	6,562.2	8,320.3	5,270.7	4,550.9
Other financial corporations.	-	-	-	-	-
Nonfinancial corporations, households ..	16,220.7	6,562.2	8,320.3	5,270.7	4,550.9
Other investment: liabilities ..	401,817.7	257,492.8	411,064.8	415,425.6	548,904.7
Other equity.	1,859.1	-1,380.1	-274.6	-827.4	-744.6
Special Drawing Rights.	-	-	-	-	-
Other debt instruments.	399,958.6	258,872.9	411,339.4	416,253.0	549,649.3
Central bank.	-1,433.9	6,910.7	-217.0	-3,646.0	1,521.2
Deposit-taking corporations, except the central bank..	44,300.8	51,500.4	47,241.8	-28,732.8	-7,402.2
General government.	71,353.7	-21,877.9	202,052.1	200,165.0	297,287.9
Other sectors.	285,738.1	222,339.8	162,262.4	248,466.8	258,242.4
Other financial corporations.	-	-	-	-	-
Nonfinancial corporations, households....	285,738.1	222,339.8	162,262.4	248,466.8	258,242.4
D. Net Errors and Omissions.	-12,955.5	14,033.7	-13,262.0	-52,484.1	6,858.8
E. Overall Balance.	-31,765.5	-127,842.3	24,905.1	-13,096.1	16,920.1
F. Reserves and Related Items.	31,765.5	127,842.3	-24,905.1	13,096.1	-16,920.1
Reserve assets.	73,921.9	117,353.1	-35,386.7	3,894.7	-24,917.9
Credit and loans from the IMF.	15,252.4	-10,489.1	-10,481.6	-9,201.4	-7,997.8
Exceptional financing.	26,904.0	-	-	-	-
<i>Current Account balance as % of GDP</i>	-8.8	-10.4	-6.7	-5.2	-6.7

* Provisional

¹ Includes current transfers

- Data not available

f.o.b is free on board

International Liquidity 6.37. Foreign reserves held by the Central Monetary Authorities from 2013 to 2017 are presented in Table 6.12. Gross stock of official foreign reserves grew marginally to KSh 738.8 billion as at December 2017 compared to KSh 736.5 billion in the corresponding period of 2016. Net foreign assets of CBK increased from KSh 643.1 billion as at December 2016 to KSh 649.6 billion as at December 2017. Foreign liabilities, comprising external banks' deposits and use of fund credit, which may directly affect the stock of foreign reserves reduced, by 4.7 per cent in the review period.

Table 6.12: Central Monetary Authorities: Foreign Exchange reserves, 2013-2017

KSh Million									
As at end of	Official Foreign Assets and Liabilities								Gross Foreign Reserves ¹ of Central Monetary Authorities
	Central Bank Of Kenya					Government			
	S.D.R.'s	Foreign Exchange (cash + gold)	External Banks' Deposits	Use of Fund Credit	Net Foreign Assets of Central Bank	Reserve Position in IMF	Other Holdings	Reserves of Government	
2013.. .. .	1,369	532,041	10,377	92,333	430,700	1,765	127	1,892	535,302
2014.. .. .	1,179	701,390	10,602	86,159	605,808	1,743	118	1,861	704,430
2015.. .. .	1,489	739,257	17,876	86,288	636,583	1,936	134	2,070	742,816
2016.. .. .									
January	2,049	734,346	17,701	86,012	632,682	1,875	122	1,997	738,392
February .. .	2,024	744,106	18,953	85,581	641,596	1,865	118	1,983	748,114
March	1,958	769,025	20,959	86,961	663,063	1,896	121	2,017	773,000
April	1,429	785,325	12,895	86,828	687,031	1,904	123	2,027	788,781
May	3,853	779,935	10,654	85,492	687,643	1,875	123	1,998	785,786
June	1,923	814,419	14,169	83,172	719,001	1,878	114	1,992	818,334
July	1,914	801,097	14,782	83,085	705,144	1,876	111	1,987	804,998
August	4,044	790,845	15,652	83,109	696,127	1,876	111	1,987	796,876
September	4,028	796,847	14,623	82,203	704,048	1,877	110	1,987	802,862
October	3,438	784,913	12,027	80,548	695,776	1,851	103	1,954	790,305
November	2,886	757,420	16,439	79,182	664,685	1,831	106	1,937	762,243
December	3,747	730,784	14,210	77,196	643,125	1,843	104	1,947	736,479
2017.. .. .									
January	2,322	745,918	19,608	78,567	650,065	1,890	93	1,983	750,223
February .. .	1,374	740,303	17,759	76,912	647,007	1,872	107	1,979	743,657
March	1,199	819,596	23,116	76,826	720,852	1,870	107	1,978	822,772
April	680	876,944	19,930	77,264	780,430	1,894	111	2,005	879,629
May	118	870,437	16,759	77,389	776,406	1,910	111	2,021	872,576
June	1,877	851,017	18,743	74,916	759,235	1,930	112	2,043	854,937
July	1,267	822,485	23,325	75,232	725,196	1,955	114	2,068	825,821
August	265	787,525	15,797	74,397	697,595	1,958	103	2,060	789,850
September	253	806,078	21,207	74,210	710,914	1,953	116	2,068	808,399
October	3,932	755,523	20,069	72,972	666,414	1,948	114	2,062	761,517
November	3,352	742,944	17,586	72,731	655,979	1,956	115	2,071	748,367
December	1,487	735,262	17,301	69,816	649,632	1,975	116	2,090	738,839

Source: Central Bank of Kenya

¹ Reserves constitute foreign assets which are readily available for meeting external financial needs

Gross Foreign Reserves of Central Monetary Authorities comprise: S.D.R.s; Cash and Gold Foreign Exchange of Central Bank Plus Reserves of Government

Foreign Exchange Rates 6.38. The Kenya Shilling remained resilient against the currencies of major trading partners in 2017. The overall Trade Weighted Index reduced by 1.5 per cent to 116.5 in 2017 from 114.8 in 2016, as presented in Table 6.13. This was mainly due to weakening slightly of the Kenya Shilling against currencies of Kenya's key trading partners during the period under review. The Kenya Shilling depreciated against the US Dollar, Chinese Yuan and Euro by 1.9, 3.9 and 0.1 per cent, respectively, in 2017. Other currencies which gained against the Kenya Shilling during the review period were Indian Rupee, SA Rand, UAE Dirham and Saudi Riyal. However, the Kenya Shilling gained against the Sterling Pound and Japanese Yen by 3.2 per cent and 1.4

per cent, respectively, in 2017. The Kenya Shilling strengthened against the Rwandese Francs, Ugandan Shilling and Tanzanian Shilling by 7.7, 3.7 and 0.4 per cent during the review period.

Table 6.13: Average Foreign Exchange Rates of Kenya Shilling for Selected Currencies, 2013-2017

	2013	2014	2015	2016	2017
1 Euro ¹	114.41	116.84	108.96	112.33	116.73
1 US Dollar	86.12	87.92	98.18	101.50	103.41
1 Pound Sterling	134.75	144.88	150.17	137.66	133.20
1 UAE Dirham	23.45	23.94	26.73	27.64	28.15
1 Indian Rupee	1.48	1.44	1.53	1.51	1.59
1 Chinese Yuan	14.01	14.27	15.62	15.29	15.30
1 SA Rand	8.95	8.10	7.72	6.93	7.77
100 Japanese Yen	88.43	83.26	81.12	93.55	92.22
1 Saudi Riyal	22.97	23.44	26.17	27.06	27.57
1 Egyptian Pound ²	12.53	12.41	12.77	10.14	5.80
TSh/KSh ³	18.79	18.93	20.73	21.54	21.63
1 Pakistan Rupee ²	0.85	0.87	0.96	0.98	0.98
1 Swedish Kroner	13.22	12.88	11.65	11.87	12.12
1 Swiss Franc	92.96	96.18	102.04	103.04	105.04
USh/KSh ³	30.06	29.55	32.94	33.68	34.92
1 Congolese Franc	0.09	0.10	0.11	0.11	0.07
100 Rwanda Francs ²	7.55	7.79	7.09	7.53	8.11
Overall Trade Weighted Index 2009=100 ..	107.12	108.10	114.30	114.83	116.52

Source: Central Bank of Kenya

¹ Countries in the Euro area included in the computation of Trade Weighted Fisher's Ideal Index are:

Germany, France, Switzerland, Netherlands, Belgium and Italy.

² Via US \$ Exchange Rates (DR Congo, Egypt, Pakistan, and Rwanda)

³ Calculated as Uganda/Tanzania shilling to Kenya Shilling

Developments in the External Sector 6.39. During the review period, the Government launched a National Trade Policy, aimed at spurring economic growth. The policy targets to enhance export growth through value addition in export oriented manufactures and in the services sector, as well as pursuing diversification to fully exploit the export opportunities in the emerging markets. Consequently, a Trade Remedies Bill was developed and approved by Parliament, and assented into law, by the President. The implementation of the law will address unfair trade practices from imports which adversely affects the Country's domestic industries, and widens the trade deficit.

6.40. In 2017, Trade Remedies Law was passed by parliament and assented to by the President. The Law aims protecting domestic producers from unfair trade practices such as dumping and subsidization, thereby making them more competitive. In addition, a Trade Remedy Agency is expected to be established within the state Department for Trade to undertake investigations and recommend remedial measures including imposition of extra duties and quotas.

6.41. In 2017, Kenya's exports to the USA increased, particularly, articles of apparel and clothing accessories, which remain the leading export products to the USA. This was largely on account of the African Growth and Opportunity Act, 2000 (AGOA). The main objectives of AGOA are to stimulate economic growth, encourage economic integration and facilitate Sub-Saharan African (SSA) integration into the global economy. The Act, through legislative amendments has been further extended by 10 years to 2025.

Agriculture Sector Review

Chapter
07

Overview Real Gross Value Added in the agricultural sector grew at a decelerated rate of 1.6 per cent from KSh 879.6 billion in 2016 to KSh 893.3 billion in 2017. This was occasioned by drought, pests and disease incidence which resulted in reduced crop and livestock production. Maize production declined from 37.8 million bags in 2016 to 35.4 million bags in 2017. Tea and coffee production decreased by 7.0 per cent and 11.5 per cent to 439.8 thousand tonnes and 40.8 thousand tonnes, respectively in 2017. A reduction in cane production resulted in sugarcane deliveries to factories reducing drastically from 7.2 million tonnes in 2016 to 4.8 million tonnes in 2017. The volume of horticultural exports increased by 16.4 per cent from 261.2 thousand tonnes in 2016 to 304.1 thousand tonnes in 2017. The volume of marketed milk decreased by 17.4 per cent from 648.2 million litres in 2016 to 535.7 million litres in 2017.

7.2 The dry weather conditions led to a decline in production of most agricultural commodities during the year. Overall, marketed agricultural production registered a decelerated growth of 8.1 per cent in 2017, from the 10.8 per cent growth reported in 2016. Earnings from horticulture exports rose by 13.6 per cent during the review period to KSh 115.3 billion in 2017. The value of marketed tea increased by 15.7 per cent from KSh 116.5 billion in 2016 to KSh 134.8 billion in 2017. The increase is attributed to the effect of favourable market prices for the crop. Earnings from marketed maize increased by 7.6 per cent from KSh 7.9 billion in 2016 to KSh 8.5 billion in 2017. Earnings from marketed wheat reduced by 33.8 per cent from KSh 8.0 billion in 2016 to KSh 5.3 billion in 2017. The value of marketed coffee decreased marginally from KSh 16.2 billion in 2016 to KSh 16.0 billion in 2017. The value of marketed milk declined by 8.7 per cent from KSh 22.9 billion in 2016 to KSh 20.9 billion in 2017.

Agricultural Output and Input Table 7.1 and Figure 7.1 show agriculture output, intermediate consumption and value added at current and constant prices from 2013 to 2017. Output and intermediate consumption at current prices increased by 6.5 per cent and 13.1 per cent, to KSh 2,695.2 billion and KSh 389.0 billion, respectively in 2017. Value added at current prices increased by 5.5 per cent from KSh 2,185.7 billion in 2016 to KSh 2,306.2 billion in 2017. Output and intermediate consumption at constant prices increased by 2.2 per cent and 4.8 per cent to KSh 1,123.2 billion and KSh 230.0 billion, respectively in 2017. Value added at constant prices increased by 1.6 per cent from KSh 879.6 billion in 2015 to KSh 893.3 billion in 2017.

Table 7.1: Agricultural Output and Input¹, 2013 - 2017

	KSh Million				
	2013*	2014*	2015*	2016*	2017*
PRODUCTION AT CURRENT PRICES					
Output at basic prices.....	1,389,005	1,639,767	2,083,490	2,529,583	2,695,208
Intermediate consumption.....	235,791	267,570	306,140	343,837	388,995
Value added at basic prices, gross.....	1,153,215	1,372,197	1,777,350	2,185,746	2,306,213
PRODUCTION CONSTANT PRICES					
Output.....	936,891	983,330	1,045,269	1,098,986	1,123,247
Intermediate consumption.....	181,027	193,542	208,362	219,428	229,985
Gross Value Added.....	755,864	789,788	836,907	879,558	893,262

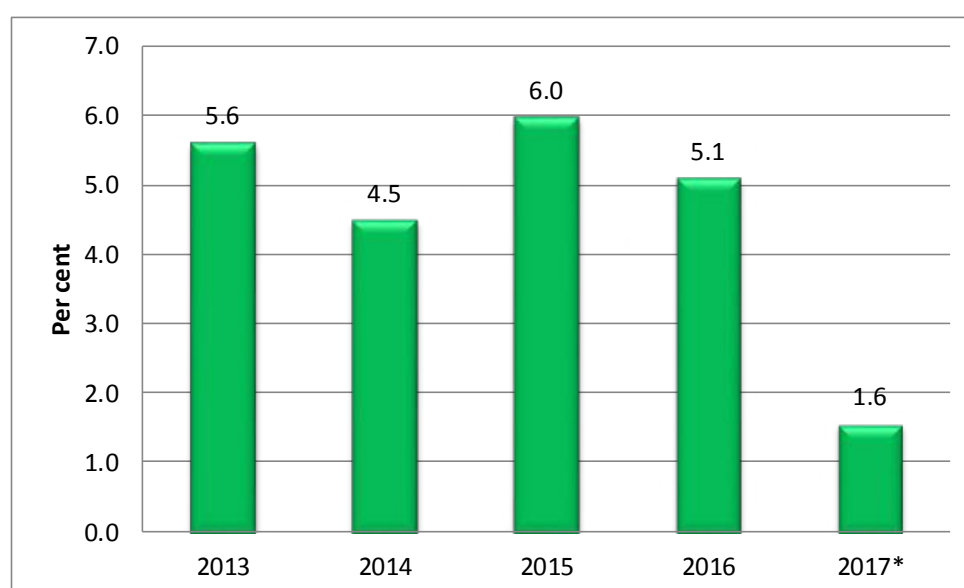
Source: Kenya National Bureau of Statistics

* Provisional

* Revised

¹Excludes Forestry and Fishing

Figure 7.1: Growth Rate in Real Agricultural Gross Value Added, 2013 - 2017



Marketed Production

7.4 Overall marketed production increased by 8.2 per cent from KSh 413.2 billion in 2016 to KSh 446.9 billion in 2017 with marketed crops accounting for 69.7 per cent of the overall marketed agricultural production as shown in Table 7.2. Although there was low volume and uneven distribution of rainfall during the year 2017, aggregate earnings from agricultural production increased.

7.5 The value of horticulture exports increased by 13.6 per cent from KSh 101.5 billion in 2016 to KSh 115.3 billion in 2017. Cut flowers accounted for 71.3 per cent of the value of horticulture exports. Earnings from marketed maize increased from KSh 7.9 billion in 2016 to KSh 8.5 billion in 2017. Similarly, the value of marketed tea increased by 15.7 per cent from KSh 116.5 billion in 2016 to KSh 134.8 billion in 2017. Despite the decreased volumes of marketed maize and tea, the higher prices offered more than offset the effect of lower volumes marketed. A drastic reduction in sugarcane production resulted in a 16.9 per cent decline in the value of marketed sugarcane from KSh 24.2 billion in 2016 to KSh 20.1 billion in 2017. In addition, the value of marketed coffee decreased marginally from KSh 16.2 billion in 2016 to KSh 16.0 billion in 2017. Improved prices offered for sugarcane and coffee could not offset the dampening effect of the reduced marketed volumes for the crops during the review period. The value of marketed wheat declined from KSh 8.0 billion in 2016 to KSh 5.3 billion in 2017.

Table 7.2: Recorded Marketed Agricultural Production at Current Prices, 2013-2017

	KSh Million				
	2013	2014	2015	2016	2017*
CEREALS-					
Maize	10,121.1	9,604.4	8,506.0	7,891.2	8,478.7
Wheat	6,926.1	7,618.0	8,198.2	8,028.1	5,283.1
Others	7,555.3	7,720.8	7,488.5	7,266.2	5,965.1
Total	24,602.6	24,943.2	24,192.7	23,185.4	19,726.9
HORTICULTURE ¹ -					
Cut flowers	55,975.7	59,893.1	62,937.5	70,829.5	82,248.9
Vegetables	22,923.3	18,780.6	20,939.5	23,366.8	24,064.6
Fruits	4,482.5	5,410.6	6,561.8	7,317.3	9,009.3
Total	83,381.5	84,084.3	90,438.8	101,513.5	115,322.8
TEMPORARY INDUSTRIAL CROPS-					
Sugar-cane	24,583.4	20,294.5	22,397.1	24,221.3	20,133.8
Pyrethrum	52.6	61.1	51.0	37.9	26.5
Others	952.7	1,438.9	1,516.8	1,470.4	1,689.7
Total	25,588.7	21,794.5	23,964.9	25,729.6	21,850.0
PERMANENT CROPS-					
Coffee	10,910.2	16,634.4	12,074.7	16,192.3	16,037.1
Tea	94,722.0	84,854.6	118,391.2	116,547.3	134,826.0
Sisal	2,810.8	2,944.8	3,595.0	4,729.6	3,557.8
Total	108,443.0	104,433.7	134,060.8	137,469.1	154,420.9
TOTAL CROPS..	242,015.7	235,255.7	272,657.3	287,897.7	311,320.6
LIVESTOCK AND PRODUCTS-					
Cattle and Calves	58,237.0	59,272.8	66,216.7	84,701.2	93,630.2
Goats and Sheep	7,531.8	4,249.8	4,854.7	5,767.4	6,782.4
Milk	16,213.0	18,785.0	21,205.4	23,020.1	20,878.2
Chicken and eggs	7,086.4	7,440.7	6,005.9	8,788.4	10,674.8
Others	5,004.8	2,124.7	2,562.1	3,124.9	3,634.9
Total	94,072.9	91,873.0	100,844.7	125,401.9	135,600.5
GRAND TOTAL	336,088.7	327,128.7	373,502.1	413,299.6	446,921.2

* Provisional.

¹Data refers to fresh Horticultural exports only

7.6 Table 7.3 shows the quantum and price indices for marketed agricultural produce for the period 2013 to 2017. The quantum index for cereals declined from 95.8 in 2016 to 73.0 in 2017 in tandem with the observed decline in overall production. The drought experienced during the year coupled with the fall army worm infestation in some areas resulted in lower production of maize leading to decreased volumes of marketed maize. The price index for cereals increased from 213.4 in 2016 to 255.6 in 2017. The increase was mainly attributed to the reduced supply of the commodity in the market. Maize imports increased more than eight fold from 149 thousand tonnes in 2016 to 1,328 thousand tonnes in 2017. Rice imports increased by 23.1 per cent from 508.0 thousand tonnes in 2016 to 625.1 thousand tonnes in 2017. The quantum index for temporary industrial crops declined from 172.4 in 2016 to 116.9 in 2017. This was mainly due to the sharp decline in sugar cane production occasioned by shortage of mature sugarcane and the prolonged dry weather conditions that affected the growth of cane. Improved prices offered for sugarcane resulted in the price index for temporary industrial crops increasing from 169.7 in 2016 to 210.9 in 2017.

7.7 The quantum index for permanent crops declined from 146.6 in 2016 to 136.0 in 2017. This is consistent with decreased marketed volumes of coffee and tea. The decline in marketed coffee is attributed to adverse weather conditions such as cold which affected the flowering of the coffee trees as well as incidences of Coffee Berry Disease and Leaf Rust in the main production areas. The decline in the volume of marketed tea was mainly as a result of hot and dry weather conditions in the first quarter of the year 2017. The price index for permanent crops however, increased from 216.9 in 2016 to 261.9 in 2017 due to improved prices offered for marketed coffee and tea.

Table 7.3: Volume and Price Indices of Recorded Sales of Agricultural Production, 2013 - 2017

Base: 2001=100

		2013*	2014	2015	2016	2017*
QUANTUM INDICES	Cereals	98.7	100.4	103.5	95.8	73.0
	Temporary Industrial Crops ..	160.9	157.9	165.9	172.4	116.9
	Horticulture	230.7	237.6	251.8	277.1	323.8
	Permanent Crops	135.4	140.1	123.9	146.6	136.0
	TOTAL CROPS	145.7	146.4	143.5	160.3	158.7
	Livestock and Products	262.5	263.3	293.5	328.2	308.3
	TOTAL	201.6	203.5	216.8	242.3	230.1
PRICE INDICES	Cereals	224.1	228.6	209.3	213.4	255.6
	Temporary Industrial Crops ..	179.5	161.3	159.7	169.7	210.9
	Horticulture	151.3	146.3	148.9	151.7	146.6
	Permanent Crops	179.7	174.4	243.2	216.9	261.9
	TOTAL CROPS	166.7	163.0	197.9	184.1	245.5
	Livestock and Products	279.5	297.5	298.3	321.7	331.2
	TOTAL ...	212.9	228.7	246.9	252.2	272.9

* Provisional.

7.8 Table 7.4 details the average gross commodity prices paid to farmers for various commodities for the period 2013 to 2017. Tea prices increased by 23.9 per cent from KSh 24,732.35 per 100 kilogram in 2016 to KSh 30,652.18 per 100 kilogram in 2017. Coffee prices paid to farmers improved by 16.5 per cent from KSh 40,815.54 per 100 kilogram in 2016 to KSh 47,547.71 per 100 kilogram in 2017. Favourable prices were also realized for maize, sugarcane, milk, beef and pork.

Table 7.4: Average Gross Commodity Prices¹ to Farmers, 2013 - 2017

						KSh per Unit
	Unit	2013	2014	2015	2016	2017*
Coffee	100 Kg	28,409.58	39,185.89	37,480.02	40,815.54	47,547.71
Tea	100 Kg	21,903.43	19,063.96	29,656.27	24,732.35	30,652.18
Sisal	100 Kg	10,817.84	11,122.13	16,924.71	19,463.35	16,121.73
Sugar-cane	Tonne	3,685.00	3,133.00	3,125.00	3,386.81	4,237.25
Pyrethrum (Pyrethrin equivalent)	Kg	12,626.17	16,871.76	12,570.82	12,906.70	12,625.00
Seed Cotton	100 Kg	4,200.00	4,200.00	4,200.00	4,200.00	4,600.00
Maize	100 Kg	3,133.16	3,318.49	2,870.08	2,968.80	3,987.33
Wheat	100 Kg	3,744.85	3,495.34	3,561.62	3,718.40	3,197.99
Beef (third grade)	100 Kg	26,000.00	27,500.00	30,510.49	35,904.54	38,090.90
Pig meat	100 Kg	18,427.38	20,268.93	21,266.71	22,666.04	23,172.37
Milk	100 Litres	3,100.00	3,470.00	3,443.00	3,543.00	3,897.30

* Provisional.

¹ Prices refer to the calendar year and may differ from those based on crop years. For tea and coffee, the prices are for black tea and coffee beans, respectively.

7.9. Table 7.5 shows the aggregate value of sales of agricultural produce from large and small farms for the last five years. Total value of sales increased by 8.2 per cent from KSh 413.2 billion in 2016 to KSh 446.9 billion in 2017. The value of output from small farms increased by 8.2 per cent from KSh 301.7 billion in 2016 to KSh 326.3 billion in 2017. Sales from large farms similarly increased from KSh 111.6 billion in 2016 to KSh 120.7 billion in 2017. The share of sales from small farms to total marketed production remained the same at 73.0 per cent in 2017.

Table 7.5: Recorded Sale of Produce from Large and Small Farms, 2013 - 2017

Year	Large Farms		Small Farms		Total		Percentage Share of Small Farms
	KSh Mn.	Annual Percentage change	KSh Mn.	Annual Percentage change	KSh Mn.	Annual Percentage change	
2012	93,866.7	0.7	250,755.4	5.1	344,612.4	3.9	72.8
2013	90,711.3	(3.4)	245,377.4	(2.1)	336,088.7	(2.5)	73.0
2014	87,997.6	(3.0)	239,131.1	2.5	327,128.7	(2.7)	73.1
2015	101,219.1	15.0	272,283.0	13.9	373,502.1	14.2	72.9
2016	111,590.9	10.2	301,708.7	10.8	413,299.6	10.7	73.0
2017*	120,668.7	8.1	326,252.4	8.1	446,921.2	8.1	73.0

* Provisional.

7.10. The overall price index increased from 196.6 in 2016 to 225.9 in 2017 as shown in Table 7.6. The price indices for most of the inputs increased in 2017 with the largest increase recorded for fuel and power. However, the price index for bags recorded a 6.6 per cent decline during the year under review. The price index of service inputs rose by 8.6 per cent in 2017. The quantum index has been increasing over the last five years and stood at 368.2 in 2017. The largest increase in the quantum index was recorded for manufactured feeds. On the contrary, the quantum index on bags and other material inputs recorded a 21.0 per cent and 14.2 per cent decline, respectively over the same period.

Table 7.6: Quantum and Price indices for Purchased Inputs, 2013 - 2017

Base: 2001=100

	2013	2014	2015	2016	2017*
Quantum Indices					
Fertilizers	114.5	180.1	245.0	280.4	304.9
Fuel and Power	84.1	101.1	106.2	123.6	145.2
Bags	72.7	54.2	54.7	55.2	43.6
Manufactured Feeds	364.8	381.6	398.5	415.3	538.5
Seeds	118.7	206.3	210.5	158.9	183.6
Other Material Inputs	149.3	152.7	151.5	179.0	153.6
Total Material Inputs ..	181.7	176.7	177.5	179.0	230.3
Service Inputs	217.2	369.5	320.5	373.0	320.1
TOTAL INPUTS	167.4	253.4	302.6	304.7	368.2
Price Indices-					
Fertilizers	250.5	230.7	231.1	197.8	230.1
Fuel and Power	232.0	179.2	126.3	123.3	147.3
Bags	187.2	228.4	241.4	277.6	259.4
Manufactured Feeds	260.4	226.9	244.3	252.7	279.2
Seeds	116.4	131.5	146.1	159.4	177.5
Other Material Inputs	166.0	173.4	201.3	196.5	225.2
Total Material Inputs ..	208.1	189.4	185.9	184.7	192.4
Service Inputs	216.4	206.3	234.7	241.8	262.6
TOTAL INPUTS	212.5	191.3	198.9	196.6	225.9

* Provisional

7.11. During the year under review, expenditure on farm inputs increased by 14.0 per cent from KSh 58.0 billion in 2016 to KSh 66.1 billion in 2017 as shown in Table 7.7. Expenditure on fertilizers, fuel and power accounted for more than half of the total expenditure on agricultural inputs during the review period. Purchases of seeds and manufactured feeds increased by 23.9 per cent and 10.3 per cent, respectively in 2017.

Table 7.7: Value of Purchased Agricultural Inputs¹, 2013-2017

KSh Million

	2013	2014	2015	2016	2017*
MATERIAL INPUTS-					
Fertilizers	8,898.2	11,817.9	12,172.4	13,930.7	17,612.1
Crop chemicals.. .. .	4,477.8	4,337.6	4,771.4	5,572.3	7,044.8
Livestock drugs and medicines.. .. .	2,988.4	2,688.3	3,606.6	4,179.2	4,610.7
Fuel and power.. .. .	12,204.7	15,115.1	14,414.7	17,170.3	17,630.4
Bags	110.6	121.9	128.8	130.2	135.2
Manufactured feeds.. .. .	6,192.2	7,073.2	7,983.5	8,628.3	9,519.1
Seeds	3,704.2	4,395.2	4,483.1	3,384.9	4,194.7
Other material inputs	924.8	1,030.8	1,197.0	1,414.0	1,560.0
Total	39,501.1	46,580.0	48,757.5	54,409.8	62,307.0
SERVICE INPUTS	2,158.1	2,709.7	3,082.6	3,588.0	3,793.4
TOTAL INPUTS	41,659.1	49,289.7	51,840.1	57,997.8	66,100.4

*Provisional.

¹Excluding labour.

7.12. Table 7.8 shows price indices and terms of trade for the period 2013 to 2017. The general index of agricultural output prices increased from 166.4 in 2016 to 180.1 in 2017 due to higher prices for most agricultural commodities. The indices of prices paid also increased from 337.6 in 2016 to 369.5 in 2017. This was largely attributable to an increase in the index of purchased consumer goods in rural areas which rose from 478.6 in 2016 to 513.1 in 2017. The index of prices paid increased relatively faster than the index of agricultural output prices. The overall terms of trade in agriculture decreased from 49.3 in 2016 to 48.7 in 2017, continuing the decline observed from 2015.

Table 7.8: Price Indices and Terms of Trade for Agriculture, 2013 – 2017

Base: 2001=100					
	2013	2014	2015	2016	2017*
General Index of Agricultural Output Prices	140.4	150.9	162.9	166.4	180.1
PRICE PAID					
Purchased Inputs	212.5	191.3	198.9	196.6	225.9
Index of Purchased Consumer Goods-Rural Areas	390.3	420.7	449.7	478.6	513.1
INDICES OF PRICES PAID	301.4	306.0	324.3	337.6	369.5
Agricultural Sector Terms of Trade	46.6	49.3	50.2	49.3	48.7

* Provisional

Crops 7.13. Maize production decreased by 6.3 per cent from 37.8 million bags in 2016 to 35.4 million bags in 2017 as shown in Table 7.9. This was mainly attributed to drought experienced in most parts of the country which resulted in lower yields. However, production of beans increased by 16.0 per cent from 8.1 million bags in 2016 to 9.4 million bags in 2017 while production of sorghum increased by 23.1 per cent.

Table 7.9: Estimated Production of Selected Agricultural Commodities, 2013 – 2017

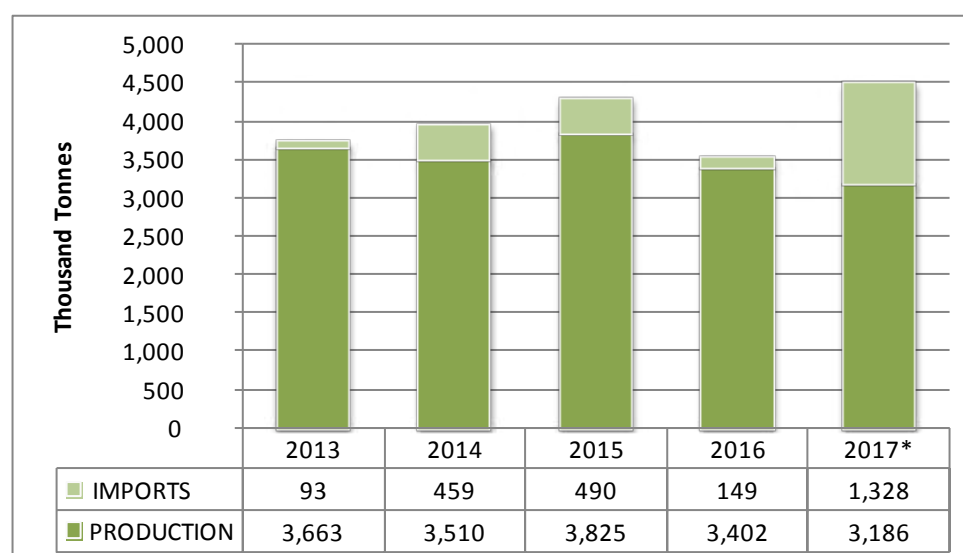
Crop	Unit	2013	2014	2015	2016	2017*
Maize	Million bags	40.7	39.0	42.5	37.8	35.4
Beans	Million bags	7.9	6.8	8.5	8.1	9.4
Potatoes	Million tonnes	2.1	2.3	2.0	1.3	1.5
Sorghum	Million bags	1.7	1.9	2.1	1.3	1.6
Millet	Million bags	1.4	1.4	1.1	0.6	0.6

Source: Ministry of Agriculture and Irrigation

* Provisional

7.14. **Maize:** Figure 7.2 presents annual maize production and imports from 2013 to 2017. During the period under review, maize imports increased more than eight fold to 1,328 thousand tonnes. This was necessitated by the 6.3 per cent reduction in maize production from 3,402 thousand tonnes in 2016 to 3,186 thousand tonnes in 2017.

Figure 7.2: Maize Production and Imports, 2013-2017



7.15. Retail market prices for selected food crops for the months of March and September from 2013 to 2017 are shown in Table 7.10. Prices of all the selected crops increased during the month of March 2017 compared to prices in the same period in 2016. The price of potatoes and cabbages decreased by 21.2 per cent and 6.1 per cent, respectively in the month of September 2017 compared to the same period in 2016.

Table 7.10: Retail Market Prices for Selected Food Crops, 2013 – 2017

CROP	KSh per Kg									
	2013		2014		2015		2016		2017	
	Mar	Sept	Mar	Sept	Mar	Sept	Mar	Sept	Mar	Sept
Maize...	38.01	35.38	38.24	35.47	33.19	33.77	33.92	35.10	48.02	43.86
Beans...	74.11	68.18	77.16	74.67	77.56	77.08	76.74	74.36	93.96	87.46
Finger Millet...	76.06	75.96	78.90	79.29	83.71	88.86	84.03	84.62	108.59	105.20
Sorghum...	53.47	42.1	54.07	54.01	55.51	53.60	54.36	52.58	72.65	64.85
Potatoes...	32.07	29.06	31.20	30.33	34.46	34.11	39.56	38.91	55.96	30.67
Cabbages...	23.99	28.19	24.67	24.75	38.86	22.17	25.71	31.73	37.54	29.79
Tomatoes...	56.24	41.74	58.70	68.11	68.09	55.03	70.23	52.60	73.84	79.82
Bananas...	39.01	34.98	42.50	42.46	37.26	37.46	37.36	41.82	49.18	50.68

7.16. Table 7.11 shows recorded sale of selected crops for the last five years. During the period under review, sale of all the selected crops decreased with pyrethrum (extract equivalent) registering the highest decrease of 42.4 per cent. Sales were mainly affected by reduced production as a result of unfavourable weather conditions. The quantity of maize sold continued to decline for the second year, reducing by 10.0 per cent from 265.8 thousand tonnes in 2016 to 239.2 thousand tonnes in 2017. Similarly, the quantity of wheat sold reduced by 27.3 per cent from 215.9 thousand tonnes in 2016 to 156.9 thousand tonnes in 2017. In addition, the volume of rice paddy, coffee and tea delivered to factories reduced by 20.2, 15.1 and 7.0 per cent, respectively over the same period.

Table 7.11: Recorded Sale of Selected Crops, 2013-2017

Crop	Unit	2013	2014	2015	2016	2017*
Maize ¹	000 Tonnes	316.4	289.4	295.3	265.8	239.2
Wheat ²	000 Tonnes	185.0	218.0	227.3	215.9	156.9
Coffee	000 Tonnes	38.4	42.5	32.2	39.7	33.7
Tea	000 Tonnes	432.5	445.1	399.2	473.0	439.9
Cotton ²	000 Tonnes	7.2	1.5	15.7	15.8	11.9
Sugar-cane ²	Million Tonnes	6.7	6.5	7.2	7.2	4.8
Pyrethrum (extract equivalent)	Tonnes	4.2	3.6	3.7	3.3	1.9
Sisal	000 Tonnes	26.0	23.1	21.2	24.3	22.5
Rice Paddy ²	000 Tonnes	43.6	46.2	43.7	38.1	30.4

* Provisional.

¹ Includes purchases by National Cereals and Produce Board and millers.² Deliveries to factories/ginneries.

7.17. **Wheat:** Table 7.12 presents annual wheat production and imports from 2013 to 2017. Wheat production reduced by 23.1 per cent from 214.7 thousand tonnes in 2016 to 165.2 thousand tonnes in 2017. In order to meet the deficit in production, wheat imports increased by 36.2 per cent in 2017 from 1,362.3 thousand tonnes in 2016.

Table 7.12: Production and Imports of Wheat, 2013 - 2017

'000 Tonnes			
Year	Production ¹	Imports	Total
2013..	194.5	1,033.1	1,227.6
2014	228.9	1,225.7	1,454.6
2015	238.6	1,421.8	1,660.4
2016	214.7	1,362.3	1,577.0
2017*	165.2	1,855.0	2,020.2

* Provisional.

¹ Includes retention for seed.

7.18. **Coffee:** Area, production and average yield of coffee by type of grower for crop year 2012/13 to 2016/17 is as shown in Table 7.13. During the period under review, the area under coffee production increased by 700 hectares from 114.0 thousand hectares in 2015/16 to 114.7 thousand hectares in 2016/17. Coffee production decreased by 11.5 per cent from 46.1 thousand tonnes in 2015/16 to 40.8 thousand tonnes in 2016/17. The decline was attributable to cold and rainy weather conditions, the bi-modal production system where the crop takes time to recover in one year; and extended dry weather during picking which adversely affected coffee production. Coffee production by Co-operatives declined by 14.0 per cent from 30.8 thousand tonnes in 2015/16 to 26.5 thousand tonnes in 2016/17. The average yield for cooperatives and estates decreased by 16.3 and 10.3 per cent, respectively in the 2016/17 crop year.

Table 7.13: Production, Area and Average Yield of Coffee by Type of Grower, 2012/13-2016/17

	2012/13	2013/14	2014/15	2015/16	2016/17*
AREA (Ha) '000-					
Co-operatives	85.2	85.3	87.8	88.2	88.8
Estates	24.6	24.7	25.7	25.8	25.9
TOTAL	109.8	110.0	113.5	114.0	114.7
PRODUCTION (Tonnes) '000-					
Co-operatives	21.9	32.7	27.2	30.8	26.5
Estates	17.9	16.8	14.8	15.3	14.3
TOTAL	39.8	49.5	42.0	46.1	40.8
AVERAGE YIELD ¹ (Kg/Ha.)-					
Co-operatives	257.0	383.8	319.2	361.1	302.1
Estates	727.6	682.9	601.6	619.4	555.6

Source: Agriculture and Food Authority, Coffee Directorate

* Provisional.

Note: The coffee year is from October to September

¹ Yield is obtained by dividing current production by previous acreage 3 years ago

7.19. **Tea:** The area under tea increased by 6.5 per cent from 218.5 thousand hectares in 2016 to 232.7 thousand hectares in 2017 as shown in Table 7.14. However, production of tea reduced by 7.0 per cent from 473.0 thousand tonnes in 2016 to 439.8 thousand tonnes in 2017. Tea production by small holder growers decreased by 7.3 per cent to 246.1 thousand tonnes in 2017 while output within the tea estates declined by 6.6 per cent to 193.7 thousand tonnes over the same period. The depressed tea production was attributed to the drought that was experienced during the first half of 2017. The average yield for the small holder growers decreased from 2,086.4 kilograms per hectare in 2016 to 1,913.7 kilograms per hectare in 2017 while that within the tea estates decreased from 2,908.8 kilograms per hectare in 2016 to 2,603.5 kilograms per hectare in 2017.

Table 7.14: Production, Area and Average Yield of Tea by Type of Grower, 2013-2017

	2013	2014	2015	2016	2017*
AREA ('000 Ha)					
Smallholders	127.3	128.6	134.2	138.3	141.1
Estates	71.3	74.4	75.2	80.2	91.6
TOTAL	198.6	203.0	209.4	218.5	232.7
PRODUCTION ('000 Tonnes)					
Smallholders	249.8	262.4	237.6	265.6	246.1
Estates	182.6	182.7	161.6	207.4	193.7
TOTAL	432.4	445.1	399.2	473.0	439.8
AVERAGE YIELD (Kg/Ha) ¹					
Smallholders	2,172.0	2,126.8	1,900.8	2,086.4	1,913.7
Estates	3,209.8	2,833.7	2,459.7	2,908.8	2,603.5

Source: Agriculture and Food Authority, Tea Directorate

* Provisional

¹ Obtained by dividing current production by the area four years ago

7.20. **Sugarcane:** Area, production and average yield of sugarcane for the years 2013 to 2017 is shown in Table 7.15. During the year under review, the area under cane reduced to 191.2 thousand hectares compared to 220.8 thousand hectares in 2016. Reduction in cane area was attributable to conversion of some area under cane to other crops. Further, the quantity of cane delivered to factories reduced by 33.3 per cent from 7.2 million tonnes in 2016 to 4.8 million tonnes in 2017. This was on account of prolonged dry weather conditions which were unfavourable for the growth of cane leading to harvesting of immature cane. As a result, the average sugarcane yield reduced to 55.3 tonnes per hectare in 2017 compared to 62.2 tonnes per hectare in 2016, representing a decrease of 10.9 per cent.

Table 7.15: Planted Area, Area Harvested, Production and Average Yield of Sugarcane, 2013-2017

	2013	2014	2015	2016	2017*
Area under cane (Ha).....	213,920	211,342	223,605	220,826	191,215
Area harvested (Ha) ¹	85,857	72,180	77,830	85,761	67,708
Total Production (Tonnes).....	6,673,725	6,409,929	7,164,790	7,151,670	4,751,609
Production by non-contracted farmers (Tonnes)....	1,979,802	1,977,068	1,995,777	1,816,726	1,004,304
Average yield (Tonnes/Ha) ²	54.7	61.4	66.4	62.2	55.3

Source: Agriculture and Food Authority, Sugar Directorate

* Provisional

¹ Excludes area harvested by non-contracted farmers² Yield = (Total production - production by non-contracted farmers)/area harvested

7.21. Domestic sugar production, imports and exports for 2013 to 2017 is shown in Table 7.16 and Figure 7.3. The total domestic sugar production declined by 41.2 per cent from 639.7 thousand tonnes in 2016 to 376.1 thousand tonnes in 2017. A total of 989.6 thousand tonnes of sugar was imported in 2017 to bridge the deficit occasioned by the low production during the year. Most of the sugar imports were meant for final consumption at 83.1 per cent of total sugar imports.

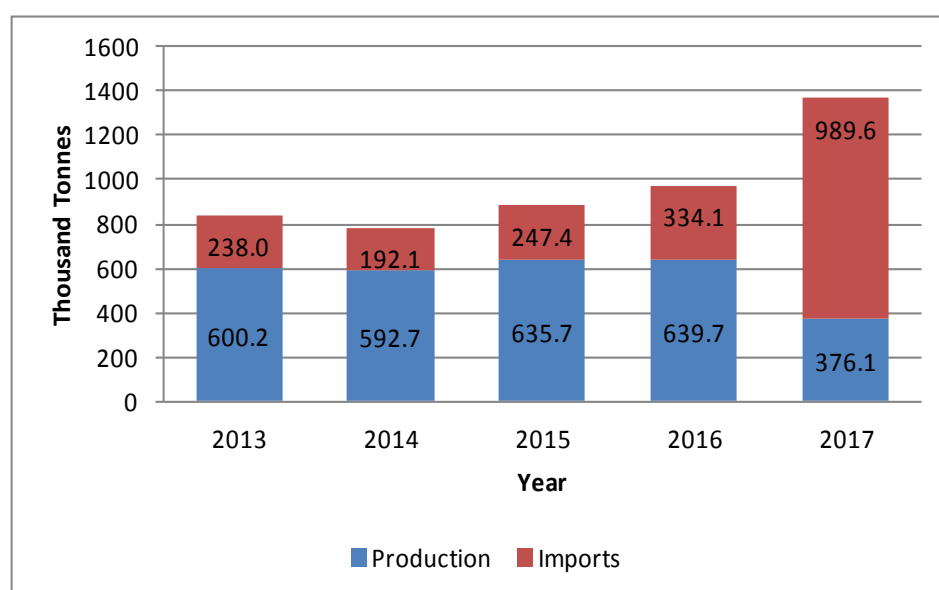
Table 7.16: Production, Imports and Exports of Sugar, 2013-2017

Year	'000 Tonnes		
	Production	Imports	Exports
2013	600.2	238.0	0.1
2014	592.7	192.1	0.4
2015	635.7	247.4	0.1
2016	639.7	334.1	0.1
2017*	376.1	989.6	0.4

Source: Agriculture and Food Authority, Sugar Directorate

*Provisional

Figure 7.3: Sugar Production and Imports, 2013-2017



7.22. Horticulture: Earnings from exports of fresh horticultural produce have exhibited an upward trend since 2014 as shown in Table 7.17. Export earnings from cut flowers grew by 16.1 per cent to KSh 82.2 billion in 2017 and accounted for 71.3 per cent of total earnings from horticulture in 2017, mainly occasioned by a 19.7 per cent increase in export volumes. Exports values of fruits and vegetables increased by 23.3 per cent and 3.0 per cent, respectively in 2017.

Table 7.17: Exports of Fresh Horticultural Produce¹, 2013-2017

Year	Cut Flowers		Fruits		Vegetables		Total	
	Volume 000 Tonnes	Value KSh billion	Volume 000 Tonnes	Value KSh billion	Volume 000 Tonnes	Value KSh billion	Volume '000 Tonnes	Value KSh billion
2013	105.6	56.0	31.1	4.8	77.2	22.9	213.9	83.7
2014	114.8	59.9	35.1	5.4	70.3	18.8	220.2	84.1
2015	122.8	62.9	46.2	6.6	69.7	20.9	238.7	90.4
2016	133.7	70.8	48.7	7.3	78.8	23.4	261.2	101.5
2017*	160.0	82.2	56.9	9.0	87.2	24.1	304.1	115.3

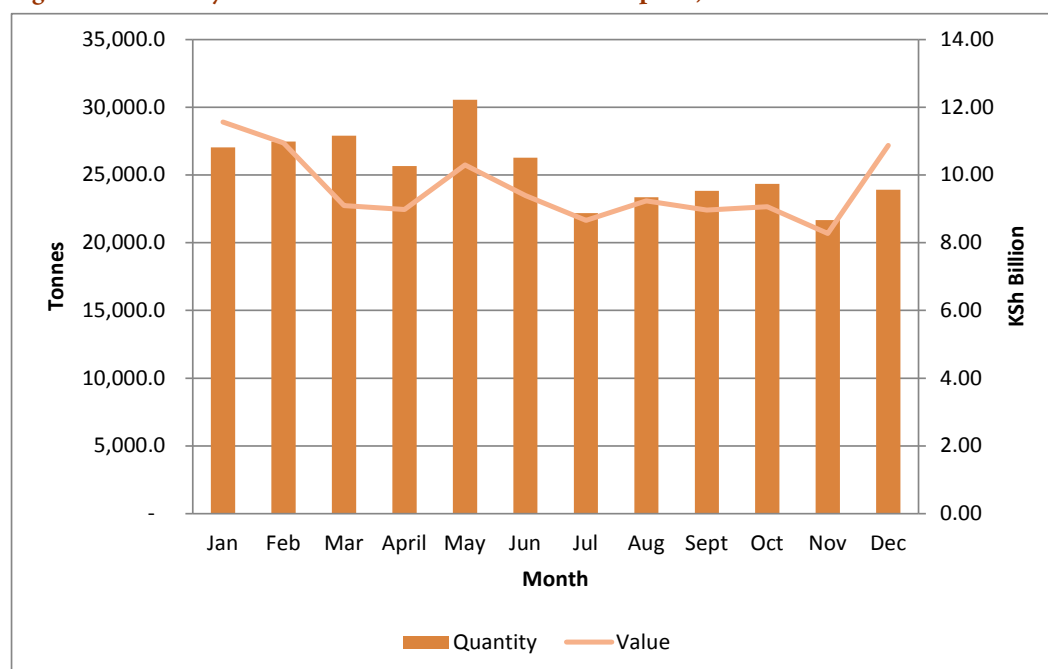
Source: Agriculture and Food Authority, Horticulture Directorate

* Provisional.

¹ Excludes exports of processed horticultural produce and nuts.

7.23. Monthly quantity and value of horticultural exports for 2017 are depicted in Figure 7.2. The highest quantities of horticultural exports of over 30.0 thousand tonnes were recorded in the month of May 2017. Export earnings from horticulture were highest in January 2017 and lowest in November, 2017.

Figure 7.4: Monthly Performance of Fresh Horticultural Exports, 2017



7.24. **Rice:** Table 7.18 shows rice production in various irrigation schemes over the last five years. An additional 7,363 hectares of land was placed under irrigation in 2017, representing a 50.5 per cent increase. This was largely attributable to the expansion of acreage in the out grower areas within the Mwea irrigation scheme. Similarly, the number of plot holders practicing irrigation rose by 25.1 per cent to 16,326 in 2017. Despite the increase in the area cropped and the increase in the number of plot holders, the volume of total paddy declined by 20.0 per cent to 81.2 thousand tonnes in 2017. This resulted to a 22.5 per cent decrease in gross value of output from all scheme areas to KSh 4.4 billion in the review period.

Table 7.18: Production of Rice in Irrigation Schemes, 2012/13 - 2016/17

	2012/13	2013/14	2014/15	2015/16	2016/17*
Mwea-					
Area cropped-Hectares	10,629	10,629	10,629	10,629	17,146
Plot-holders-Number ¹	7,178	7,178	7,178	7,178	7,178
Gross value of output-KSh million ...	3,880	3,872	5,727	4,726	3,558
Payments to plot-holders-KSh million ..	2,793	2,522	4,780	3,938	1,816
All Scheme Areas-					
Area cropped-Hectares	18,600	19,411	13,998	14,586	21,949
Plot-holders-Number	15,828	15,828	13,055	13,055	16,326
Gross value of output-KSh million ...	4,347	4,536	6,717	5,673	4,395
Payments to plot-holders-KSh million ..	3,205	3,345	5,508	4,591	2,169
Crops Produced - Tonnes					
Mwea-Paddy	64,672	70,416	91,624	78,760	59,291
Ahero-Paddy	8,326	7,405	7,942	6,494	7,752
W.Kano-Paddy	5,165	4,345	2,039	4,634	4,083
Bunyala-Paddy	4,278	4,289	4,600	4,522	3,632
S.W Kano -Paddy	8,262	9,574	10,268	7,100	6,440
Total Paddy	90,703	96,029	116,473	101,510	81,198

Source: National Irrigation Board

*Provisional

7.25. Dairy Produce: The quantity of milk delivered to dairy processors recorded a significant drop of 17.4 per cent from 648.2 million litres in 2016 to 535.7 million litres in 2017, after posting consistent growths in the previous years as presented in Table 7.19. Similarly, the quantity of processed milk and cream from processing plants decreased by 8.5 per cent and that of butter and ghee declined by 22.0 per cent. Production of cheese however, increased from 311.2 tonnes in 2016 to 338.3 tonnes in 2017.

7.26. Livestock slaughtered: The number of cattle and calves slaughtered in abattoirs rose by 5.3 per cent from 2,460.2 thousand in 2016 to 2,590.0 thousand in 2017. During the same period, the total number of goats and sheep slaughtered increased by 12.0 per cent to stand at 9,206.7 thousand. The number of pigs slaughtered increased for the third consecutive year, to 360.1 thousand in 2017. The increase in the number of livestock slaughtered was attributable to the increased livestock off take occasioned by drought experienced during the period under review to cushion from losses.

Table 7.19: Livestock Slaughtered and Dairy products, 2013-2017

	Unit	2013	2014	2015	2016	2017*
Recorded Milk Production...	Mn. Litres	523.0	540.0	615.9	648.2	535.7
Milk Processed						
Milk and cream	Mn. Litres	406.7	419.6	437.9	448.6	410.6
Butter and ghee	Tonnes	1,231.0	1,444.5	1,646.4	1,444.9	1,127.3
Cheese	Tonnes	267.4	265.7	302.9	311.2	338.3
Livestock Slaughtered						
Cattle and Calves.. ..	'000 Head	2,147.3	2,076.7	2,274.5	2,460.2	2,590.0
Sheep and Goats	'000 Head	6,084.8	6,138.5	6,560.8	8,220.2	9,206.7
Pigs	'000 Head	264.3	257.2	282.9	313.6	360.1

Source: Kenya National Bureau of Statistics, Kenya Dairy Board, State Department of Livestock

* Provisional

Agricultural Training

7.27. Agricultural training provides the human capital required for agriculture sector development. Details on levels of enrolment at various institutions offering agricultural courses are presented in Table 7.20. Enrolment for agricultural courses at degree level registered a growth of 41.7 per cent from 17,095 students in 2016 to 24,221 students in 2017. Student enrollment for diploma courses at Egerton University maintained a downward trend and decreased by 70.5 per cent to 196 students in 2017. Enrolment for diploma courses in Bukura Institute of Agriculture and Naivasha Dairy Training Institute rose by 16.1 per cent and 70.8 per cent, respectively, in 2017. Kabete and Ndomba Animal Health Training Institutes enrolled their first diploma students in 2017. The number of trainees pursuing certificate courses in animal health declined from 326 in 2016 to 247 in 2017. The number of trainees attending short courses conducted at the Naivasha Dairy Institute and the Athi River Meat Training Institute more than doubled in 2017.

Table 7.20: Enrolment in Agricultural Training Institutions, 2013-2017

Table 7.20: Enrolment in Agricultural Training Institutions, 2013-2017										Number					
	2013			2014			2015			2016			2017*		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
DEGREE LEVEL-Public Universities															
All Universities.....	5,948	3,587	9,535	7,758	4,438	12,196	9,420	5,800	15,220	10,165	6,930	17,095	14,835	9,386	24,221
DIPLOMA LEVEL-Public Universities															
Egerton.....	1,149	671	1,820	542	928	1,470	324	800	1,124	459	206	665	116	80	196
DIPLOMA LEVEL- MOA															
Bukura Institute of Agriculture.....	819	360	1,179	674	290	964	710	309	1,019	705	326	1,031	791	406	1,197
Naivasha Dairy Training Institute ¹	-	-	-	-	-	-	-	-	-	27	21	48	51	31	82
DIPLOMA - Animal Health Training Institutes²															
Kabete	-	-	-	-	-	-	-	-	-	-	-	-	101	19	120
N domba	-	-	-	-	-	-	-	-	-	-	-	-	41	9	50
CERTIFICATE LEVEL-															
Naivasha Dairy Training Institute.....	122	79	205	138	93	231	102	68	170	64	59	123	55	63	118
Animal Health Training Institutes-															
Kabete	92	24	116	155	32	187	187	25	212	91	13	104	35	18	53
Nyahururu	52	28	80	51	27	78	51	22	73	52	24	76	46	28	74
N domba	140	44	184	230	65	295	337	89	426	118	28	146	95	25	120
Total.....	284	96	380	436	124	560	575	136	711	261	65	326	176	71	247
SHORT-TERM VOCATIONAL COURSES-															
Naivasha Dairy Training School	122	44	166	189	100	289	202	84	286	116	51	167	290	101	391
Athi River M.T. School	66	28	94	46	37	83	66	44	110	44	12	56	41	23	64
Total.....	188	72	260	235	137	372	268	128	396	160	63	223	331	124	455

* Provisional

¹ The Diploma course at Naivasha DTI was approved in 2015 and the first intake was done in 2016.² Diploma courses at the Animal Health Training Institutes (AHTIs) was introduced in 2017.

Societies and Unions in Agricultural activities 7.28 The total number of societies and unions registered grew by 7.4 per cent, from 18,573 in 2016 to 19,951 in 2017 as presented in Table 7.21. A total of 67 multi-produce societies were registered in 2017 while the number of dairy societies increased by 11.4 per cent over the same period. There has been a sustained growth in the number of non agricultural societies since 2014. The number of Savings and Credit societies grew by 4.8 per cent while that of other non-agricultural societies rose by 19.3 per cent in 2017. One agricultural union was registered in 2017.

Table 7.21: Number of Societies and Unions, 2013 – 2017

TYPE OF SOCIETY	Number				
	2013	2014	2015	2016	2017*
Agricultural:					
Coffee	597	600	605	613	616
Sugar-cane	191	191	192	199	206
Pyrethrum	148	146	146	146	147
Cotton	78	60	61	62	62
Dairy	376	412	427	465	518
Multi-produce.. .. .	2,068	2,118	2,169	2,222	2,289
Farm Purchase.. .. .	116	116	117	118	118
Fisheries	86	92	94	99	111
Other Agricultural Societies	1,518	1,605	1,643	1,706	1,843
Sub- Total	5,178	5,340	5,454	5,629	5,910
Non-Agricultural:					
Savings and Credit.. .. .	7,942	8,592	8,914	9,567	10,029
Other Non-Agricultural Societies	2,735	2,938	3,031	3,279	3,913
Sub- Total	10,677	11,530	11,945	12,846	13,942
Unions (Agricultural)	109	99	99	98	99
GRAND TOTAL	15,964	16,969	17,498	18,573	19,951

Source: Ministry of Industrialization and Enterprise Development, Directorate of Cooperatives

* Provisional

7.29. Table 7.22 gives details on sales of agricultural produce from co-operative societies. The total value of sales from co-operative societies went up by KSh 6 million to KSh 10.5 billion in 2017 mainly due to an increase in milk sales. The share of marketed coffee sold through co-operatives increased marginally from 29.4 in 2016 to 29.6 in 2017.

Table 7.22: Sale of Selected Agricultural Produce by Co-operatives and their Contribution to Gross Farm Revenue, 2013– 2017

Year	Coffee	Sugar cane	Pyrethrum	Cotton	Milk	Total
Sale (KSh Million)						
2013.....	4,785	239	36	3	5,405	10,468
2014.....	4,763	212	27	3	5,491	10,496
2015.....	4,769	213	27	3	5,497	10,509
2016.....	4,755	204	24	3	5,554	10,541
2017*.....	4,751	204	24	3	5,589	10,547
Share to marketed production (per cent)						
2013.....	36.5	0.9	65.4	3.2	32.5	33.5
2014.....	28.6	1.0	44.2	4.7	29.2	18.8
2015.....	39.5	1.0	52.9	4.5	26.6	19.4
2016.....	29.4	0.9	64.3	5.5	28.5	17.7
2017*.....	29.6	1.0	90.6	5.5	26.8	18.3

Source: Ministry of Industry, Trade and Cooperatives, Directorate of Cooperatives

* Provisional.

Food Balance Sheet 7.30 Food Balance Sheet (FBS) is an important food security instrument used to measure a country's national food supply, demand and per capita levels for the supply of food commodities. The FBS shows the trend in the overall national food supply during a specific period and reveals the extent to which the food supply is adequate in relation to nutritional requirements of a country. Supply side consists of food production, imports, and changes in stocks less exports while the demand side components include production used as food, feed, seed, processed, other uses and waste.

FBS Indicators 7.31 Table 7.23 gives a summary of the FBS indicators for the period 2013 to 2017. Per Caput Daily Supply from calories, proteins and fats increased by 1.3, 3.2 and 2.4 per cent, respectively, in 2017. The Per Caput Daily Supply from calories of 2,123 kilocalories was below the recommended daily allowance of 2,250 kilocalories. The overall Import Dependency Ratio (IDR) increased from 29.4 per cent in 2016 to 42.7 per cent in 2017 attributable to increased imports of vegetable products occasioned by food deficits experienced in the country.

7.32 During the review period, the total Self-Sufficiency Ratio (SSR) decreased by 14.1 percentage points to 60.3 per cent. The SSR from vegetable and animal products decreased by 15.0 percentage points and 0.7 percentage points respectively, in 2017. Per Caput Caloric Daily Supply from vegetable products and cereals increased by 2.1 per cent and 7.4 per cent, to 1,861 thousand kilo calories and 955 thousand kilo calories, respectively, in 2017. However, Per Caput Caloric Daily Supply from animal products decreased by 4.0 per cent from 273 thousand kilo calories in 2016 to 262 thousand kilo calories over the same period.

Table 7.23: Food Balance Sheet, 2013-2017

Indicator		2013	2014	2015	2016	2017*
Per Caput Daily Supply	Calories - '000	2,284	2,202	2,288	2,095	2,123
	Proteins - Grams... ..	67	64	69	63	65
	Fats - Grams... ..	46	43	47	42	43
SSR - Per Cent	Total... ..	80	74	75	74	60
	Vegetable Products... ..	77.7	71.6	72.2	71.3	56.3
	Animal Products... ..	99.1	99.9	100	99.6	98.9
IDR - Per Cent	Total... ..	23	29	28	29	43
	Vegetable Products... ..	26	32.3	31.6	32.9	46.9
	Animal Products... ..	1	1	0.8	1.2	1.9
Per Caput Caloric Daily Supply	Vegetable Products - '000 Kcl.	1,993	1,945	1,975	1,822	1,861
	Of which Cereals - '000 Kcl...	917	925	920	889	955
	Animal Products - '000 Kcl....	291	256	313	273	262

*Provisional

Figure 7.5: Import Dependency and Self-Sufficiency Ratios, 2017

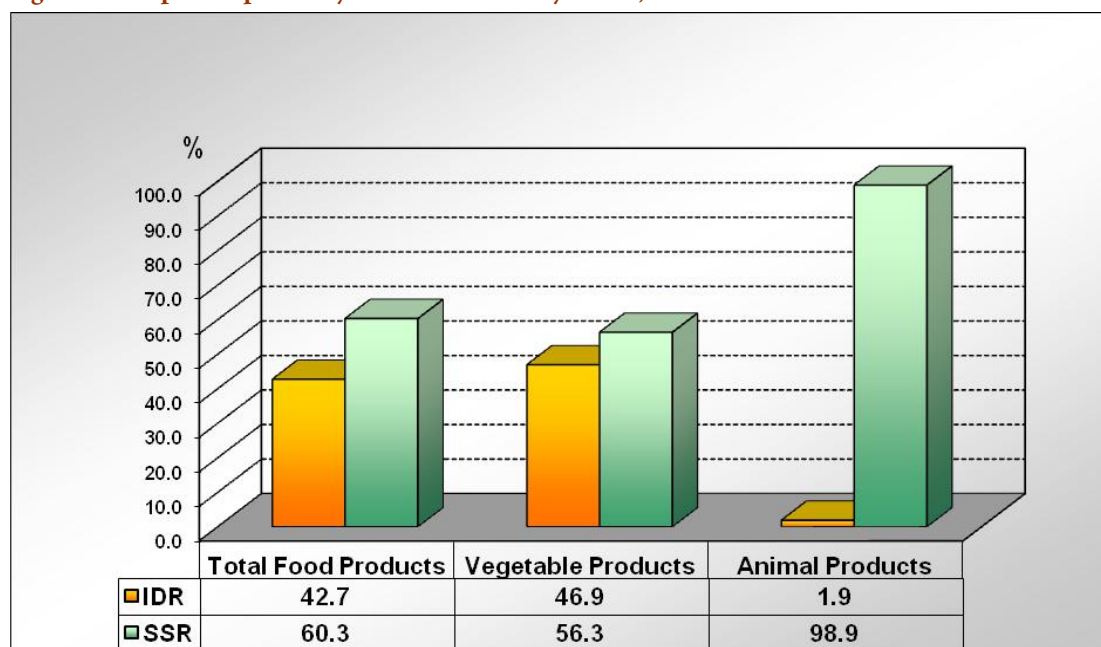


Figure 7.6: Caloric Supply by Main Food Groups, 2017

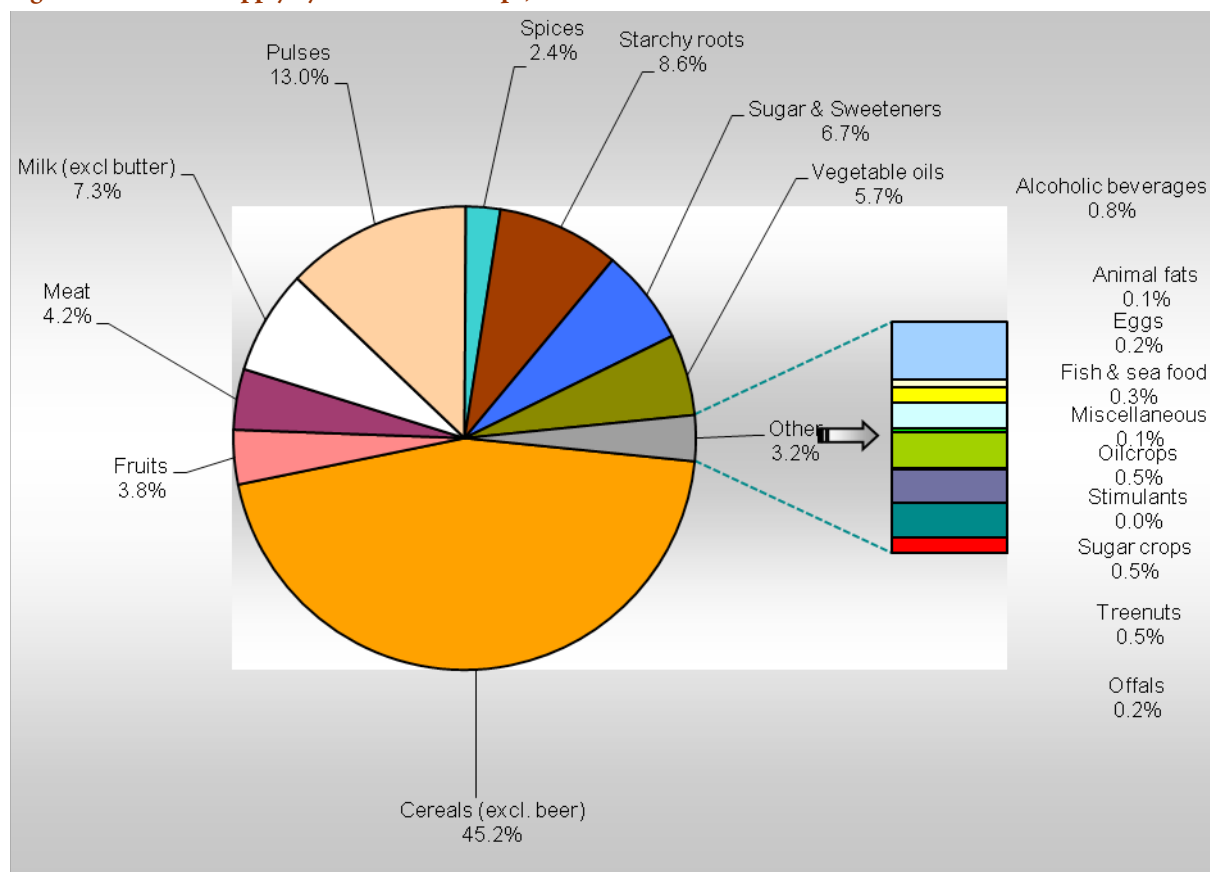


Table 7.24 (a): Food Balance Sheet, 2017

FOOD BALANCE SHEET 2017														Population('000):	46,595
Products	DOMESTIC SUPPLY (1000 MT)					DOMESTIC UTILIZATION (1000 MT)						PER CAPUT SUPPLY			
	Prod.	Imports	Stock changes	Exports	Total D.S.	Feed	Seed	Processed	Waste	Oth.Util.	Food	PER YEAR FOOD	PER DAY		
	1000 Metric Tons											Kg.	Calories	Proteins	Fats
													units	grams	grams
Grand total													2123	65	43
Vegetable prod.													1861	47	25
Animal prod.													262	18	17
Cereals (excl. beer)	3681	4161	585	57	8371	348	80	1875	604	0	5373	115	955	23	6
Wheat	165	1879	0	20	2024	0	11	82	40	0	1856	39.8	286	8	4
Maize	3186	1374	585	6	5140	309	63	1683	514	0	2639	56.6	493	12	2
Rice (Milled Eq.)	54	646	0	1	700	0	0	1	2	0	693	14.9	143	3	0
Barley	77	0	0	23	55	0	2	50	2	0	1	0.0	0	0	0
Rye	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Oats	0	0	0	0	1	0	0	0	0	0	1	0.0	0	0	0
Millet	54	87	0	0	141	11	2	18	15	0	52	1.1	9	0	0
Sorghum	144	133	0	3	274	28	3	42	30	0	95	2.0	17	1	0
Cereals, other	0	40	0	4	36	0	0	0	0	0	36	0.8	6	0	0
Starchy roots	3792	5	0	17	3781	0	104	2	301	0	3374	72.4	181	2	0
Cassava	1112	1	0	0	1113	0	0	1	33	0	1079	23.2	68	1	0
Potatoes	1500	4	0	17	1487	0	104	2	150	0	1231	26.4	51	1	0
Sweet Potatoes	1150	0	0	0	1150	0	0	0	115	0	1036	22.2	60	0	0
Yams	10	0	0	0	10	0	0	0	1	0	10	0.2	1	0	0
Roots, other	19	0	0	0	19	0	0	0	2	0	17	0.4	1	0	0
Sugar crops	4752	0	0	0	4752	0	0	4150	0	0	602	12.9	10	0	0
Sugar cane	4752	0	0	0	4752	0	0	4150	0	0	602	12.9	10	0	0
Sugar beet	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Sugar & Sweeteners	413	1002	-705	18	691	0	0	34	0	0	678	14.6	141	0	0
Sugar non-centrifugal	23	0	0	0	23	0	0	20	0	0	3	0.1	1	0	0
Sugar (raw equivalent)	390	990	-705	15	660	0	0	7	0	0	652	14.0	137	0	0
Sweeteners, other	0	12	0	4	8	0	0	7	0	0	1	0.0	0	0	0
Honey	0	0	0	0	0	0	0	0	0	0	22	0.5	4	0	0
Pulses	1104	7	433	1	1543	0	10	0	168	0	1365	29.3	274	18	1
Beans	846	1	35	0	882	0	0	0	132	0	750	16.1	150	10	1
Peas	0	5	0	0	5	0	0	0	0	0	5	0.1	1	0	0
Pulses, other	258	1	398	1	657	0	10	0	36	0	610	13.1	123	8	1
Treenuts	31	0	0	6	25	0	0	0	1	0	21	0.5	3	0	0
Oilcrops	187	8	0	7	188	10	2	82	9	0	86	1.8	11	0	1
Soybeans	0	0	0	0	0	0	0	0	0	0	1	0.0	0	0	0
Groundnuts	13	1	0	0	14	0	1	0	1	0	13	0.3	4	0	0
Sunflowerseed	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Rape & Mustard seed	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Cottonseed	13	3	0	1	15	0	2	13	1	0	0	0.0	0	0	0
Coconuts (incl. copra)	124	0	0	2	123	10	0	34	7	0	72	1.5	6	0	1
Sesame seed	0	4	0	5	0	0	0	0	0	0	0	0.0	0	0	0
Palm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Olive	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Oilcrops, other	36	0	0	0	35	0	0	35	0	0	0	0.0	0	0	0
Vegetable oils	35	536	0	80	491	0	0	0	0	258	232	5.0	120	0	13
Soybean oil	0	5	0	5	0	0	0	0	0	0	0	0.0	0	0	0
Groundnut oil	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Sunflower seed oil	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Rape and mustard oil	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Cottonseed oil	2	0	0	0	1	0	0	0	0	0	1	0.0	1	0	0
Palm kernel oil	0	2	0	0	2	0	0	0	0	0	2	0.0	1	0	0
Palm oil	0	515	0	73	442	0	0	0	0	256	186	4.0	96	0	11
Copra oil	6	12	0	1	17	0	0	0	0	0	17	0.4	9	0	1
Sesame seed oil	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Olive oil	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Rice bran oil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize germ oil	14	1	0	0	14	0	0	0	0	0	14	0.3	7	0	1
Oilcrops oil, other	14	1	0	0	15	0	0	0	0	3	12	0.3	6	0	1
Vegetables	1395	135	0	232	1298	0	0	0	187	0	1235	26.5	16	1	0
Tomatoes	283	27	0	0	310	0	0	0	31	0	279	6.0	3	0	0
Onions	68	0	0	0	68	0	0	0	7	0	27	0.6	1	0	0
Vegetables, other	1044	108	0	231	920	0	0	0	150	0	928	19.9	12	1	0

FOOD BALANCE SHEET 2017

Population('000): 46,595

Products	DOMESTIC SUPPLY (1000 MT)					DOMESTIC UTILIZATION (1000 MT)						PER CAPUT SUPPLY			
	Prod.	Imports	Stock changes	Exports	Total D.S.	Feed	Seed	Processed	Waste	Oth.Util.	Food	PER YEAR FOOD	PER DAY		
													Calories	Proteins	Fats
1000 Metric Tons												Kg.	units	grams	grams
Fruits	2907	116	0	253	2770	0	0	6	303	0	2415	51.8	80	1	1
Oranges & mandarins	74	43	0	1	117	0	0	0	12	0	105	2.3	2	0	0
Lemons & limes	98	4	0	2	100	0	0	0	10	0	90	1.9	1	0	0
Grapefruit	4	0	0	0	4	0	0	0	0	0	3	0.1	0	0	0
Citrus, other	135	0	0	0	135	0	0	0	14	0	121	2.6	2	0	0
Bananas	742	1	0	0	743	0	0	0	111	0	632	13.6	22	0	0
Plantains	600	0	0	0	600	0	0	6	60	0	534	11.5	28	0	0
Apples (excl. cider)	0	17	0	0	17	0	0	0	2	0	15	0.3	0	0	0
Pineapples	363	2	0	132	233	0	0	0	37	0	197	4.2	6	0	0
Dates	1	5	0	0	5	0	0	0	0	0	5	0.1	1	0	0
Grapes (excl. wine)	0	3	0	0	3	0	0	0	0	0	3	0.1	0	0	0
Fruit, other	891	40	0	118	813	0	0	0	58	0	708	15.2	18	0	0
Stimulants	481	12	5	528	-30	0	0	433	13	0	2	0.0	0	0	0
Coffee	41	1	5	58	-11	0	0	0	0	0	0	0.0	0	0	0
Cocoa Beans	0	2	0	1	2	0	0	0	0	0	2	0.0	0	0	0
Tea	440	9	0	470	-21	0	0	433	13	0	0	0.0	0	0	0
Spices	256	3	0	3	256	0	0	0	0	0	256	5.5	51	2	2
Pepper	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Pimento	5	0	0	0	5	0	0	0	0	0	5	0.1	1	0	0
Cloves	1	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Spices, other	250	3	0	2	251	0	0	0	0	0	251	5.4	50	2	2
Alcoholic beverages	533	7	0	2	538	0	0	0	0	0	538	11.5	17	0	0
Wine	0	4	0	1	3	0	0	0	0	0	3	0.1	0	0	0
Beer	210	2	0	1	211	0	0	0	0	0	211	4.5	5	0	0
Beverages, fermented	298	0	0	0	299	0	0	0	0	0	298	6.4	7	0	0
Beverages, alcoholic	25	1	0	1	26	0	0	0	0	0	25	0.5	4	0	0
Alcohol, non food	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meat	724	1	0	10	715	0	0	0	0	0	840	18.0	90	7	8
Bovine meat	589	0	0	2	587	0	0	0	0	0	587	12.6	66	5	6
Mutton & goat meat	0	0	0	7	-7	0	0	0	0	0	90	1.9	9	1	1
Pig meat	0	1	0	2	-1	0	0	0	0	0	12	0.3	3	0	0
Poultry meat	106	0	0	0	106	0	0	0	0	0	106	2.3	8	1	0
Other meat	29	0	0	0	29	0	0	0	0	0	44	0.9	4	0	0
Offals	76	0	0	0	76	0	0	0	0	0	76	1.6	5	1	0
Animal fats	17	4	0	1	20	0	0	13	0	3	4	0.1	2	0	0
Butter, ghee	1	0	0	0	1	0	0	0	0	0	1	0.0	1	0	0
Cream	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Fats, animal, raw	16	4	0	0	19	0	0	13	0	3	3	0.1	2	0	0
Fish, body oil	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Fish, liver oil	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Milk (excl butter)	3855	87	0	5	3937	17	0	338	319	0	4078	87.5	154	8	8
Eggs	84	0	0	0	84	0	5	0	13	0	67	1.4	5	0	0
Fish & sea food	0	51	0	18	33	0	0	0	0	0	189	4.1	7	1	0
Freshwater fish	0	28	0	3	25	0	0	0	0	0	144	3.1	5	1	0
Demersal fish	0	0	0	10	-10	0	0	0	0	0	0	0.0	0	0	0
Pelagic fish	0	21	0	3	18	0	0	0	0	0	21	0.4	1	0	0
Marine fish, other	0	2	0	1	1	0	0	0	0	0	23	0.5	1	0	0
Crustaceans	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Molluscs other	0	0	0	1	-1	0	0	0	0	0	1	0.0	0	0	0
Cephalopods	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Aquatic products, oth	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aquatic mammals me	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aquatic animals, othe	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Aquatic plants	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous	18	7	2	14	13	0	0	7	0	3	3	0	1	0	0
Infant food	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous, other	18	7	2	14	13	0	0	7	0	3	3	0	1	0	0

Table 7.24 (b): Food Balance Sheet, 2016

FOOD BALANCE SHEET 2016											Population('000):		45,367			
Products	DOMESTIC SUPPLY (1000 MT)					DOMESTIC UTILIZATION (1000 MT)						PER CAPUT SUPPLY				
	Prod.	Imports	Stock changes	Exports	Total D.S.	Feed	Seed	Processed	Waste	Oth.Util.	Food	PER	PER DAY			
												YEAR	Calories	Proteins	Fats	
												FOOD				
1000 Metric Tons											Kg.	units	grams	grams		
Grand total													2095	63	42	
Vegetable prod.													1822	45	24	
Animal prod.													273	18	18	
Cereals (excl. beer)	3941	2184		545	95	6575	270	80		868	554	0	4822	106	889	22
Wheat	222	1389		0	21	1590	0	11		53	32	0	1474	32.5	235	7
Maize	3402	150		545	4	4093	246	63		721	491	0	2639	58.2	506	12
Rice (Milled Eq.)	68	518		0	1	585	0	0		1	3	0	577	12.7	123	2
Barley	77	0		0	15	63	0	2		58	2	0	1	0.0	0	0
Rye	0	0		0	0	0	0	0		0	0	0	0	0.0	0	0
Oats	0	1		0	0	1	0	0		0	0	0	1	0.0	0	0
Millet	54	7		0	0	61	5	2		8	7	0	22	0.5	4	0
Sorghum	117	71		0	49	139	19	3		28	20	0	65	1.4	12	0
Cereals, other	0	47		0	4	43	0	0		0	0	0	43	0.9	8	0
Starchy roots	3592	1		0	3	3591	0	104		2	281	0	3204	70.6	179	2
Cassava	1112	0		0	0	1113	0	0		1	33	0	1079	23.8	70	1
Potatoes	1300	0		0	3	1298	0	104		1	130	0	1063	23.4	46	1
Sweet Potatoes	1150	0		0	0	1150	0	0		0	115	0	1035	22.8	61	0
Yams	10	0		0	0	10	0	0		0	1	0	10	0.2	1	0
Roots, other	19	0		0	0	19	0	0		0	2	0	17	0.4	1	0
Sugar crops	7152	1		0	0	7153	0	0		4150	0	0	3003	66.2	51	0
Sugar cane	7152	1		0	0	7153	0	0		4150	0	0	3003	66.2	51	0
Sugar beet	0	0		0	0	0	0	0		0	0	0	0	0.0	0	0
Sugar & Sweeteners	676	346		-313	18	691	0	0		34	0	0	678	14.9	145	0
Sugar non-centrifugal	23	0		0	0	23	0	0		20	0	0	3	0.1	1	0
Sugar (raw equivalent)	653	334		-313	15	660	0	0		7	0	0	652	14.4	140	0
Sweeteners, other	0	12		0	4	8	0	0		7	0	0	1	0.0	0	0
Honey	0	0		0	0	0	0	0		0	0	0	22	0.5	4	0
Pulses	987	7		433	1	1426	0	10		0	151	0	1258	27.7	260	17
Beans	729	1		35	0	765	0	0		0	115	0	650	14.3	134	9
Peas	0	5		0	0	5	0	0		0	0	0	5	0.1	1	0
Pulses, other	258	1		398	1	657	0	10		0	36	0	603	13.3	125	8
Treenuts	21	0		0	6	16	0	0		0	0	0	12	0.3	3	0
Oilcrops	172	8		0	8	172	10	2		82	8	0	71	1.6	8	0
Soybeans	0	0		0	0	0	0	0		0	0	0	1	0.0	0	0
Groundnuts	7	1		0	0	8	0	1		0	0	0	7	0.2	2	0
Sunflowerseed	0	0		0	0	0	0	0		0	0	0	0	0.0	0	0
Rape & Mustard seed	0	0		0	0	0	0	0		0	0	0	0	0.0	0	0
Cottonseed	13	3		0	1	15	0	2		13	1	0	0	0.0	0	0
Coconuts (incl. copra)	115	0		0	2	113	10	0		34	7	0	62	1.4	6	0
Sesame seed	0	4		0	5	0	0	0		0	0	0	0	0.0	0	0
Palm	-	-		-	-	-	-	-		-	-	-	-	-	-	-
Olive	0	0		0	0	0	0	0		0	0	0	0	0.0	0	0
Oilcrops, other	36	0		0	0	35	0	0		35	0	0	0	0.0	0	0
Vegetable oils	35	536		0	80	491	0	0		0	0	258	232	5.1	123	0
Soybean oil	0	5		0	5	0	0	0		0	0	0	0	0.0	0	0
Groundnut oil	0	0		0	0	0	0	0		0	0	0	0	0.0	0	0
Sunflower seed oil	0	0		0	0	0	0	0		0	0	0	0	0.0	0	0
Rape and mustard oil	0	0		0	0	0	0	0		0	0	0	0	0.0	0	0
Cottonseed oil	2	0		0	0	1	0	0		0	0	0	1	0.0	1	0
Palm kernel oil	0	2		0	0	2	0	0		0	0	0	2	0.0	1	0
Palm oil	0	515		0	73	442	0	0		0	0	256	186	4.1	98	0
Copra oil	6	12		0	1	17	0	0		0	0	0	17	0.4	9	0
Sesame seed oil	0	0		0	0	0	0	0		0	0	0	0	0.0	0	0
Olive oil	0	0		0	0	0	0	0		0	0	0	0	0.0	0	0
Rice bran oil	-	-		-	-	-	-	-		-	-	-	-	-	-	-
Maize germ oil	14	1		0	0	14	0	0		0	0	0	14	0.3	7	0
Oilcrops oil, other	14	1		0	0	15	0	0		0	0	3	12	0.3	6	0
Vegetables	1483	114		0	227	1370	0	0		0	187	0	1311	28.9	17	1
Tomatoes	324	6		0	0	330	0	0		0	33	0	298	6.6	3	0
Onions	68	0		0	0	68	0	0		0	7	0	27	0.6	1	0
Vegetables, other	1090	108		0	227	971	0	0		0	148	0	986	21.7	13	1

FOOD BALANCE SHEET 2016

Population('000): 45,367

Products	DOMESTIC SUPPLY (1000 MT)					DOMESTIC UTILIZATION (1000 MT)						PER CAPUT SUPPLY			
	Prod.	Imports	Stock changes	Exports	Total D.S.	Feed	Seed	Processed	Waste	Oth.Util.	Food	PER YEAR FOOD	PER DAY		
												Kg.	Calories	Proteins	Fats
	1000 Metric Tons												units	grams	grams
Fruits	2730	101	0	249	2583	0	0	6	284	0	2248	49.5	80	1	1
Oranges & mandarins	65	49	0	0	113	0	0	0	11	0	102	2.2	2	0	0
Lemons & limes	13	1	0	0	13	0	0	0	1	0	12	0.3	0	0	0
Grapefruit	2	0	0	0	2	0	0	0	0	0	2	0.0	0	0	0
Citrus, other	135	0	0	0	135	0	0	0	14	0	121	2.7	2	0	0
Bananas	691	1	0	0	692	0	0	0	104	0	588	13.0	21	0	0
Plantains	600	0	0	0	600	0	0	6	60	0	534	11.8	29	0	0
Apples (excl. cider)	2	16	0	0	18	0	0	0	2	0	17	0.4	0	0	0
Pineapples	388	1	0	132	257	0	0	0	39	0	218	4.8	7	0	0
Dates	1	4	0	0	5	0	0	0	0	0	5	0.1	1	0	0
Grapes (excl. wine)	0	3	0	0	3	0	0	0	0	0	3	0.1	0	0	0
Fruit, other	834	27	0	116	745	0	0	0	54	0	646	14.2	18	0	0
Stimulants	519	12	5	542	-6	0	0	465	14	0	5	0.1	0	0	0
Coffee	46	1	5	58	-5	0	0	0	0	0	4	0.1	0	0	0
Cocoa Beans	0	2	0	1	2	0	0	0	0	0	2	0.0	0	0	0
Tea	473	9	0	484	-2	0	0	465	14	0	0	0.0	0	0	0
Spices	256	3	0	3	256	0	0	0	0	0	256	5.6	52	2	2
Pepper	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Pimento	5	0	0	0	5	0	0	0	0	0	5	0.1	1	0	0
Cloves	1	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Spices, other	250	3	0	2	251	0	0	0	0	0	251	5.5	51	2	2
Alcoholic beverages	417	7	0	2	422	0	0	0	0	0	422	9.3	15	0	0
Wine	0	4	0	1	3	0	0	0	0	0	3	0.1	0	0	0
Beer	210	2	0	1	211	0	0	0	0	0	211	4.7	5	0	0
Beverages, fermente	181	0	0	0	181	0	0	0	0	0	181	4.0	4	0	0
Beverages, alcoholic	26	1	0	1	26	0	0	0	0	0	26	0.6	5	0	0
Alcohol, non food	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meat	612	1	0	8	605	0	0	0	0	0	709	15.6	79	6	7
Bovine meat	529	0	0	2	528	0	0	0	0	0	528	11.6	60	5	6
Mutton & goat meat	0	0	0	5	-5	0	0	0	0	0	74	1.6	8	1	1
Pig meat	0	1	0	2	-1	0	0	0	0	0	10	0.2	3	0	0
Poultry meat	64	0	0	0	64	0	0	0	0	0	64	1.4	5	0	0
Other meat	19	0	0	0	19	0	0	0	0	0	34	0.7	3	0	0
Offals	76	0	0	0	76	0	0	0	0	0	76	1.7	5	1	0
Animal fats	17	4	0	1	20	0	0	13	0	3	4	0.1	2	0	0
Butter, ghee	1	0	0	0	1	0	0	0	0	0	1	0.0	1	0	0
Cream	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Fats, animal, raw	16	4	0	0	19	0	0	13	0	3	3	0.1	2	0	0
Fish, body oil	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Fish, liver oil	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Milk (excl butter)	4410	33	0	5	4438	17	0	379	344	0	4512	99.5	175	9	10
Eggs	84	0	0	0	84	0	5	0	13	0	67	1.5	5	0	0
Fish & sea food	0	47	0	19	28	0	0	0	0	0	187	4.1	7	1	0
Freshwater fish	0	23	0	3	20	0	0	0	0	0	142	3.1	5	1	0
Demersal fish	0	0	0	10	-10	0	0	0	0	0	0	0.0	0	0	0
Pelagic fish	0	21	0	3	18	0	0	0	0	0	21	0.5	1	0	0
Marine fish, other	0	2	0	1	1	0	0	0	0	0	22	0.5	1	0	0
Crustaceans	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Molluscs other	0	0	0	1	-1	0	0	0	0	0	1	0.0	0	0	0
Cephalopods	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Aquatic products, oth	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aquatic mammals me	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aquatic animals, othe	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0
Aquatic plants	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous	18	7	2	14	13	0	0	7	0	3	3	0	1	0	0
Infant food	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous, other	18	7	2	14	13	0	0	7	0	3	3	0	1	0	0

Environment and Natural Resources

Chapter 08

Overview The environment and natural resources sector registered mixed performance on selected indicators in 2017. Gross Value Added from the sector grew by 6.3 per cent in 2017. The total expenditure by national government on water and related services is expected to decline from KSh 43.9 billion in 2016/17 to KSh 35.5 billion in 2017/18. The value of fish landed which has been on the decline for the last three consecutive years, dropped by 6.1 per cent to KSh 23.0 billion in 2017. Total area covered by forest increased marginally from 4,185.2 thousand hectares in 2016 to 4,225.4 thousand hectares in 2017. Sales of timber from Government forests declined from 1,037.3 thousand true cubic meters in 2016 to 881.6 thousand true cubic meters in 2017. Total value of mineral output increased by 2.0 per cent to KSh 23.8 billion in 2017. The country experienced reduced rainfall and rising temperatures in most parts, during the review period.

Environment and Natural Resources Gross Value Added 8.2. Gross Value Added (GVA) of selected activities under the environment and natural resources sector from 2013 to 2017 is shown in Table 9.1. Overall, environment and natural resources accounted for 3.2 per cent of Gross Domestic Product (GDP) while the GVA grew by 6.3 per cent from KSh 235.7 billion in 2016 to KSh 250.6 billion in 2017. Output from Forestry and Logging grew by 9.2 per cent from KSh 91.1 billion in 2016 to KSh 99.5 billion in 2017 while that from Fishing and Aquaculture, and Water Supply, grew by 4.6 and 11.0 per cent, respectively, in 2017. During the review period, the GVA from the Mining and Quarrying industry dropped marginal from KSh 59.1 billion in 2016 to KSh 58.5 billion.

Table 8.1: Trends in Environment and Natural Resources Gross Value Added, 2013 - 2017

KSh Million					
Industry	2013	2014	2015	2016	2017*
Forestry and Logging	67,230	72,148	79,697	91,084	99,511
Fishing and Aquaculture	34,315	38,732	40,300	35,033	36,647
Mining and Quarrying	40,742	44,936	54,584	59,130	58,459
Water Supply ¹	40,442	42,102	46,814	50,418	55,989
Total	182,730	197,918	221,395	235,664	250,606
GDP at Current Prices	4,745,090	5,402,647	6,284,185	7,194,147	7,749,426
Natural Resource as per cent of GDP	3.9	3.7	3.5	3.3	3.2

* Provisional

¹ Includes sewerage and waste management

Water Supplies 8.3. In pursuit of the policy to provide clean water to households within a reasonable distance, the Government has continued to initiate and maintain modest Water Purification Points (WPPs). As presented in Table 8.2, the number of WPPs is expected to increase from 248 in 2016/17 to 258 in 2017/18.

8.4. The Ministry of Water and Sanitation together with the private sector are engaged in drilling of boreholes to improve access to water for households. A total of 2,419 boreholes are expected to be sunk country-wide in 2017/18 compared to 1,557 boreholes sunk in 2016/17 as a drought mitigation measure. Whereas the number of boreholes drilled by the public sector declined, those drilled by the private sector almost doubled in 2017/18.

Table 8.2: Water Purification Points and Boreholes Drilled, 2013/14 - 2017/18

	Number				
	2013/14	2014/15	2015/16	2016/17	2017/18*
Water Purification Points ¹	230	234	242	248	258
Boreholes	376	607	446	1,557	2,419
Public	74	13	4	305	239
Private Sector	302	594	442	1,252	2,180

Source: Ministry of Water and Sanitation

* Provisional

¹ Cumulative

8.5. Table 8.3 shows development expenditure by the National Government on water supplies and related services over the financial years 2013/14 to 2017/18. The overall National Government expenditure on water and related services is expected to decline from KSh 43.9 billion in 2016/17 to KSh 35.5 billion in 2017/18. Factors contributing to the decline include Government expenditure rationalization and the gradual channeling of funds to County Governments following devolution of water services.

8.6. The budget items mostly affected were allocations to the National Water Conservation and Pipeline Corporation (NWCP) and Water Development. Allocation to the NWCP dropped drastically from KSh 1.9 billion in 2016/17 to KSh 0.2 billion in 2017/18 on the account of transfer of the function of drilling boreholes and small dams to the County Governments.

8.7. Expenditure on Water Development had the highest share of the total budgetary allocation for water supplies and related services over the entire period. Expenditure on this item is expected to drop by 23.6 per cent from KSh 34.8 billion in 2016/17 to KSh 26.6 billion in 2017/18. Expenditure on Rural Water Supplies is expected to increase from KSh 0.6 billion in 2016/17 to KSh 1.6 billion in 2017/18, while that on Miscellaneous and Special Water programs is expected rise from KSh 0.4 billion to KSh 0.6 billion in 2017/18. Expenditure on Irrigation Development is expected to almost double while that of National Irrigation Board (NIB) is expected to increase by KSh 33.3 million in 2017/18.

Table 8.3: Development Expenditure on Water Supplies and Related Services by the National Government, 2013/14 - 2017/18

	KSh Million				
Item	2013/14	2014/15	2015/16	2016/17	2017/18*
Water Development	15,385.0	17,329.0	23,247.7	34,829.1	26,573.0
Training of Water Development Staff	135.0	170.0	150.0	31.0	31.0
Rural Water Supplies	300.6	1,326.5	1,436.7	620.2	1,622.0
Miscellaneous and Special Water Programs	2,153.0	304.8	528.0	373.7	607.0
National Water Conservation and Pipeline Corporation	3,507.2	2,460.0	1,156.0	1,891.7	244.0
Irrigation Development	139.0	157.2	2,190.9	245.0	480.0
National Irrigation Board	11,268.6	10,900.0	12,569.7	5,860.0	5,893.3
TOTAL	32,888.4	32,647.5	41,279.0	43,850.7	35,450.3

Source: Ministry of Water and Sanitation

* Provisional

Fisheries 8.8. Despite efforts made by the Government to ensure optimal exploitation of fishery products, the fisheries sub-sector continued to register a decline in performance as presented in Table 8.4. Over the last five years, fish from fresh water sources accounted for over 80 per cent of the total fish landed. Fish landed from marine sources contributed a relatively smaller share mainly due to inadequate facilities and technology necessary for fishing in deep waters. Total quantity of fish landed declined from 147.7 thousand tonnes in 2016 to 135.1 thousand tonnes in 2017. Fish from fresh water sources dropped from 123.5 thousand tonnes in 2016 to 111.8 thousand tonnes in 2017, mainly attributed to decline in catches from Lake Victoria, Lake Turkana and Fish Farming.

8.9. Fish landed from Lake Victoria accounted for 68.5 per cent of the total fish landed during the year. However, the lake's annual output dropped from 98.7 thousand tonnes in 2016 to 92.7 thousand tonnes in 2017. The encroachment of water hyacinth, coupled with destructive fishing practices and dwindling stocks of Nile perch species in the Lake are some of the reasons for the declining fish catch in Lake Victoria. Fish landed from Lake Turkana declined from 7.9 thousand tonnes in 2016 to 4.0 thousand tonnes in 2017 on account of receding water levels coupled with improper fishing practices and poor fish handling.

8.10. The quantity of fish from Fish Farming reduced from 15.0 thousand metric tonnes in 2016 to 12.4 thousand metric tonnes in 2017. The decline was partly attributed to failure by farmers to re-stock fish ponds in 2017, citing high prices of fish inputs and drying up of ponds due to drought during the year under review. Total output from marine sources recorded a decline of 3.7 per cent from 24.2 thousand tonnes in 2016 to 23.3 thousand tonnes with marine fish accounting for 88.5 per cent. Crustaceans and molluscs contributed only 3.0 and 8.5 per cent of marine sources, respectively, in 2017.

8.11. Total value of fish landed which has been on the decline for three consecutive years, dropped further from KSh 24.5 billion in 2016 to KSh 23.0 billion in 2017. The value of fresh water fish dropped by 6.1 per cent from KSh 19.8 billion in 2016 to KSh 18.6 billion in the year under review. Similarly, the value of fish from marine sources decreased from KSh 3.4 billion in 2016 to KSh 3.3 billion in 2017.

Figure 8.1: Value of Fish Landed, 2013 – 2017



Table 8.4: Quantity and Value of fish landed, 2013 - 2017

	2013	2014	2015	2016	2017*
Quantities - Tonnes:					
Freshwater fish					
Lake Victoria	124,643	128,708	109,902	98,666	92,727
Lake Turkana +	4,338	4,166	10,605	7,926	4,021
Lake Naivasha	231	633	1,072	1,064	1,689
Lake Baringo	263	302	176	141	155
Lake Jipe	116	115	123	106	112
Tana River dams	705	1,024	852	444	422
Fish Farming	23,501	24,096	18,656	14,952	12,356
Other areas	456	296	312	214	332
SUB-TOTAL	154,253	159,340	141,698	123,513	111,814
Marine Sources+					
Marine fish	7,667	20,870	19,742	21,190	20,601
Crustaceans	799	713	621	772	702
Molluscs	670	1,703	2,045	2,203	1,983
SUB-TOTAL	9,136	23,286	22,408	24,165	23,286
GRAND TOTAL	163,389	182,626	164,106	147,678	135,100
Value - KSh Million					
Freshwater fish	19,984	20,941	20,750	19,771	18,581
Marine fish	921	3,418	3,018	3,424	3,287
Crustaceans	286	968	475	888	777
Molluscs	90	255	303	379	312
TOTAL	21,281	25,582	24,546	24,462	22,957

Source: Kenya Fisheries Service

* Provisional

+ Revised

Forestry 8.12. Table 8.5 shows the status of forests in the country from 2013 to 2017. Total forest area consisting of natural and plantation forests increased marginally from 4,185.2 thousand hectares in 2016 to 4,225.4 thousand hectares in 2017. The area under natural forests increased from 3,994.4 thousand hectares in 2016 to 4,036.0 thousand hectares in 2017, mainly due to an increase in area under indigenous mixed trees. The share of forest cover increased to 7.29 per cent in 2017 from 7.22 per cent in 2016.

Table 8.5: Forest Coverage by Category, 2013 - 2017

	'000 Ha				
Category of Forest Cover Type	2013	2014	2015	2016	2017*
Natural Forests					
Indigenous Mixed trees...	3,853.0	3,795.5	3,854.6	3,884.4	3,928.0
Bamboo.....	59.0	57.0	60.0	58.0	59.0
Mangroves	54.0	54.0	54.0	52.0	49.0
Sub Total	3,966.0	3,906.5	3,968.6	3,994.4	4,036.0
Public Plantation forests	135.3	136.5	139.4	140.8	142.4
Private Plantation forests	71.0	60.0	55.0	50.0	47.0
Total Forest Area	4,172.3	4,103.0	4,163.0	4,185.2	4,225.4
Grassland and Bushland.....	34,909.0	41,200.0	41,170.0	41,100.0	41,100.0
Total Area for Country.....	58,037.0	58,037.0	58,037.0	58,037.0	58,037.0
Forest percentage	7.20	7.07	7.17	7.22	7.29

Source: Kenya Forest Service

* Provisional

8.13. As shown in Table 8.6, the total area of Government forest plantations increased from 131.4 thousand hectares in 2016 to 135.1 thousand hectares in 2017, an increase of 2.8 per cent. Area planted with trees grew by 6.8 per cent from 10.3 thousand hectares in 2016 to 11.0 thousand hectares in 2017 while area clear-felled decreased from 6.8 thousand hectares in 2016 to 5.2 thousand hectares in 2017. During the same period, tree planting failures and damages from forest fire resulted to loss of 2,100 hectares of forest stocks. This mainly resulted from the widespread drought experienced in the country during the year.

Table 8.6: Government Forest Plantation Stocking, 2013 - 2017

	'000 Ha				
Stocking	2013	2014	2015	2016	2017*
Previous Plantation Area ¹	127.1	129.4	129.4	130.5	131.4
Area Planted.	8.2	7.1	10.0	10.3	11.0
Total	135.3	136.5	139.4	140.8	142.4
Area Clear felled.	4.7	6.1	4.7	6.8	5.2
Planting failures/fire damages	1.2	1.0	4.2	2.6	2.1
Total Area	129.4	129.4	130.5	131.4	135.1

Source: Kenya Forest Service

* Provisional

¹ Opening stock at the beginning of the year

8.14. Table 8.7 presents recorded sales of products from government forest in 2013 to 2017. Total sales of timber decreased from 1,037.3 thousand true cubic meters in 2016 to 881.6 thousand true cubic meters in 2017. The sales of softwood timber declined by 17.4 per cent from 966.4 thousand cubic meters in 2016 to 798.2 thousand cubic meters in 2017, reflecting the impact of control measures put in place to conserve the existing forests. Notable decline was also recorded on sale of fuel wood which reduced from 147.2 thousand stacked cubic meters in 2016 to 53.7 thousand stacked cubic meters in 2017. However, sales of hardwood timber grew by 17.6 per cent to 83.4 thousand true cubic meters in 2017 from 70.9 thousand true cubic meters in 2016. Sales of power poles recorded an increase of 48.7 per cent during the review period.

Table 8.7 -Sale of Products from Government Forest, 2013 - 2017

Forest Products	2013	2014	2015	2016	2017*
Timber - '000 true cu. metres-					
Soft wood	933.7	1,167.0	621.1	966.4	798.2
Hard wood	-	30.6	12.4	70.9	83.4
TOTAL	933.7	1,197.6	633.5	1,037.3	881.6
Fuelwood ('000 stacked cu. Metres)..	64.0	70.0	43.7	147.2	53.7
Power Poles (000)	14.5	43.3	34.5	23.0	34.2

Source: Kenya Forest Service

* Provisional.

Mining 8.15. Table 8.8 presents the quantity and value of mineral production for the last five years. Soda ash output increased marginally from 301.7 thousand tonnes in 2016 to 303.6 thousand tonnes in 2017. Gold and salt outputs recorded significant growths, from 0.2 thousand tonnes and 23.4 thousand tonnes in 2016 to 0.5 thousand tonnes and 43.2 thousand tonnes in 2017, respectively. The increase in gold output was partly due to an upsurge in gold mining activities following abolition of the special gold license which was prohibitively expensive. However, fluorspar output declined by 83.8 per cent from 42.6 thousand tonnes in 2016 to 6.9 thousand tonnes in 2017.

8.16. Extraction of Titanium ore increased by 1.5 per cent from 588.4 thousand tonnes in 2016 to 597.0 thousand tonnes in 2017. During the review period, titanium ore concentrates recorded marginal growths of 0.9, 4.3 and 1.0 per cent for Ilmenite, Rutile and Zircon, respectively. Gemstones (rough) output reduced by 76.0 per cent from 518.2 thousand tonnes in 2016 to 124.3 thousand tonnes in 2017. On the other hand, the quantities of crushed refined soda dropped from 741 thousand tonnes in 2016 to 539 thousand tonnes in 2017, representing a 27.3 per cent decrease.

8.17. Total value of mineral output increased by 2.1 per cent from KSh 23.3 billion in 2016 to KSh 23.8 billion in 2017. The low growth in value despite high mineral prices was contributed by decreased earnings from fluorspar, gemstones and salt. Earnings from gold more than doubled from KSh 652.5 million in 2016 to KSh 1,533.6 million in 2017. Earnings from titanium ores increased by 2.3 per cent from KSh 13.3 billion in 2016 to KSh 13.6 billion in 2017.

Table 8.8: Quantity and Value of Mineral Production, 2013 - 2017

Mineral	2013	2014	2015	2016	2017*
Quantities - Tonnes:					
Minerals-					
Soda Ash	468,215.0	409,845.0	319,761.0	301,719.0	303,580.0
Fluorspar	71,987.0	97,156.0	70,096.0	42,656.0	6,945.0
Salt	8,895.0	18,936.0	21,201.0	23,425.0	43,245.1
Crushed Refined Soda	947,074.0	851,906.0	614,055.0	741,000.0	538,952.2
Carbon Dioxide	18,436.0	19,450.0	19,750.0	19,550.0	19,775.0
Diatomite	1,054.0	1,195.0	1,090.0	1,237.6	1,278.3
Gold (kg)	2,100.0	237.1	336.9	196.9	502.6
Gemstones(cut) in 000 carrats..	-	-	-	-	22,956.0
Gemstones (rough)	563.0	247.3	442.0	518.2	124.3
Manganese Ore	-	-	-	-	9,125.0
Titanium Ore Minerals	-00.0	374,131.2	549,897.0	588,421.0	596,987.0
Ilmenite	-	281,543.0	444,999.0	465,728.0	470,240.0
Rutile	-	52,465.0	78,947.0	87,716.0	91,454.0
Zircon	-	40,123.2	25,951.0	34,977.0	35,293.0
Value - KSh Million					
Soda Ash	8,865.2	7,840.8	6,599.6	6,227.2	6,259.7
Fluorspar	1,783.0	1,901.0	1,427.7	868.8	100.3
Salt	71.6	173.5	197.8	218.5	98.9
Crushed Refined Soda	631.9	568.4	409.7	494.4	1,108.9
Carbon Dioxide	495.6	503.9	525.6	514.9	510.7
Diatomite	69.6	70.6	70.6	75.2	79.4
Gold	7,432.6	695.3	978.7	652.5	1,533.6
Gemstones(cut) in 000 carrats	-	-	-	-	128.6
Gemstones (rough)	411.0	263.6	798.4	936.0	238.3
Manganese Ore	-	-	-	-	47.0
Titanium Ore Minerals	-00	9,063.4	12,819.0	13,296.9	13,648.2
Ilmenite	-	3,697.0	3,763.0	3,430.8	3,464.0
Rutile	-	4,085.2	6,329.0	6,818.7	7,109.3
Zircon	-	1,281.2	2,727.0	3,047.4	3,074.9
TOTAL	19,760.5	21,080.5	23,827.1	23,284.4	23,753.6

Source: Ministry of Mining and Petroleum

* Provisional

Wildlife 8.18. Table 8.9 presents average export prices of soda ash, fluorspar, and titanium ore and its concentrates for the period 2013 to 2017. The average export price of soda ash declined by 1.4 per cent in 2017 compared to 8.4 per cent in 2016. The export price for fluorspar improved by 2.8 per cent in 2017 while that of titanium ore and its concentrates increased by 43.8 per cent during the same period.

Table 8.9: Average Export Prices of Soda Ash, Fluorspar, and Titanium Ore and Concentrates, 2013 - 2017

Mineral	Sh per tonne				
	2013	2014	2015	2016	2017*
Soda Ash.....	18,790	19,774	22,925	20,998	20,714
Fluorspar.....	21,978	20,029	20,368	17,313	17,798
Titanium Ore and Concentrates.....	-	20,198	19,100	17,968	25,840

* Provisional

8.19. Kenya is endowed with different wildlife species which contributes substantially to the national economy through tourism. The population of most wildlife species in the country have declined over the years owing to factors such as poaching, habitat loss and drought.

8.20. The population of different wildlife species in the rangelands as derived from aerial sample surveys is shown in Table 8.10. Wildlife species whose numbers show substantial decline include Burchell's zebra, Grant's gazelle, giraffe, impala, thomson's gazelle and topi. Wildlife species that showed moderate decline in numbers include eland, elephants, gerenuk and Grevy's zebra. The main possible cause of these declines was prolonged drought that was experienced during the review period. The rest of the wildlife species declined in population numbers, although not to significant levels.

Table 8.10: Wildlife Population Estimates¹ in the Kenya Rangelands, 2013-2017

Species ¹	'000 Number				
	2013	2014	2015	2016	2017*
Buffalo	13.0	15.6	15.0	18.7	17.8
Burchell's Zebra	100.3	110.2	100.0	110.0	104.5
Eland	5.8	4.7	4.3	5.6	5.3
Elephant	16.0	15.9	15.8	22.0	20.0
Gerenuk	16.0	15.8	15.5	12.0	11.4
Giraffe	19.0	18.9	18.5	18.6	17.0
Grant's Gazelle	111.7	111.9	111.9	112.1	106.5
Grevy's Zebra	3.0	3.0	3.0	2.9	2.6
Hunters Hartebeest	0.7	0.3	0.3	0.4	0.4
Impala	61.8	59.9	59.0	58.0	55.1
Kongoni	5.0	4.9	4.9	5.5	5.2
Kudu	11.0	11.0	11.0	9.9	9.4
Oryx	14.5	14.0	13.9	10.0	9.5
Ostrich	28.5	27.8	27.7	28.4	26.9
Thomson's Gazelle	42.0	43.4	43.0	42.6	40.5
Topi	20.5	15.3	15.3	14.9	12.0
Warthog	18.4	17.0	16.9	15.2	14.4
Waterbuck	3.5	2.9	2.8	2.7	2.6
Wildebeest	276.0	270.0	265.0	240.0	228.0

Source: Directorate of Resource Surveys and Remote Sensing

* Provisional

¹ Derived using aerial sample surveys

Refuse Management 8.21. Table 8.11 presents expenditure on cleaning and refuse management by Nairobi City County (NCC). The total expenditure for 2017/18 is expected to decline by 45.4 per cent from KSh 1,067.1 million in 2016/17 to KSh 582.3 million in 2017/18.

Table 8.11: Expenditure on Cleaning and Refuse Management by the Nairobi City County, 2012/13-2016/17

KSh Million					
Expenditure Category	2013/14	2014/15	2015/16	2016/17	2017/18*
Cleaning and Administration	151.0	143.0	-	-	-
Cleaning - General.	36.9	20.9	-	-	-
Refuse Removal	380.0	255.2	862.7	1,067.1	582.3
Total.	567.9	419.1	862.7	1,067.1	582.3

Source: Nairobi City County

* Provisional

8.22. Management of solid waste has been a big challenge facing authorities mandated to undertake this task. There was a slight drop of solid waste collected by NCC from 460.0 thousand tonnes collected in 2016 to 459.9 thousand tonnes in 2017 as shown in Table 8.12.

Table 8.12: Solid Waste Collected, 2013 - 2017

000 Tonnes					
Year	2013	2014	2015	2016	2017*
Nairobi County.	274.4	331.0	282.0	460.0	459.9

Source: Nairobi City County

* Provisional

Environment Impact Assessments 8.23. Table 8.13 presents the number of Environmental Impact Assessments (EIAs) on the high risks projects for 2013 to 2017. High risk projects are those classified as posing substantial negative impacts to the environment. The number of EIAs on high risk proposed projects decreased by 1.7 per cent from 1,874 in 2016 to 1,842 in 2017. The energy sector recorded a significant increase in the number of EIAs compared to the other sectors. This was attributed to increased investments in oil and gas, especially in the increase in the number of petrol stations being constructed. The transport and communication sector recorded the highest number of EIAs in 2017 though there was a 17.9 drop from the number of EIAs received in 2016.

Table 8.13: Environment Impact Assessments by Sector, 2013 - 2017

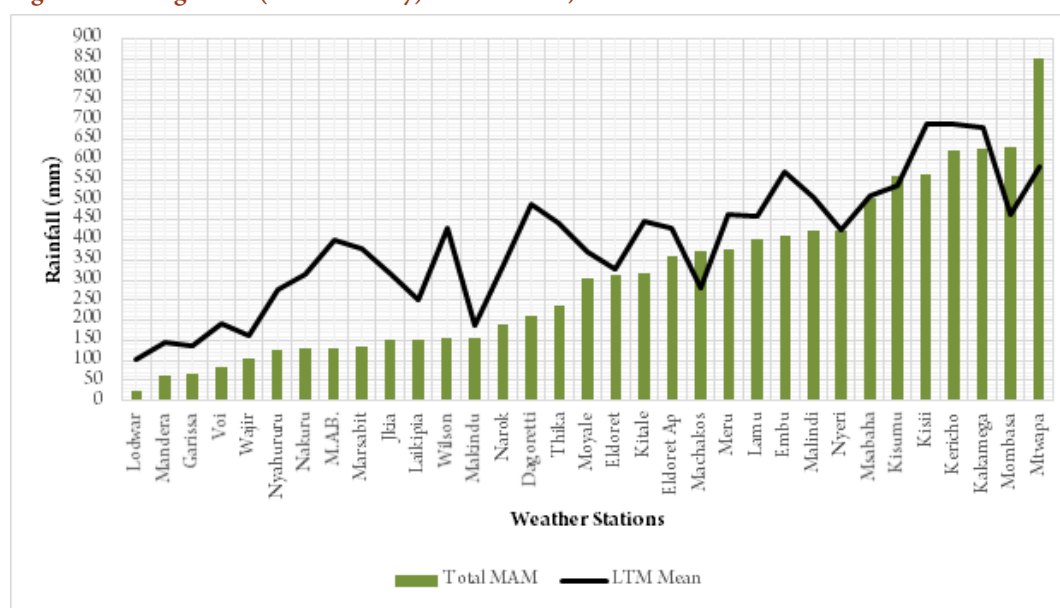
Number					
Sector	2013	2014	2015	2016	2017*
Transport and Communication	208	437	607	636	522
Energy	163	188	298	422	501
Tourism	12	11	14	11	8
Mining and Quarrying	26	19	18	28	51
Human settlements and Infrastructure	320	340	505	545	434
Agriculture and Forestry	34	34	26	21	31
Commerce and Industry	85	149	135	150	228
Water Resources	8	41	51	61	67
TOTAL	856	1,219	1,654	1,874	1,842

Source: National Environment Management Authority (NEMA)

Weather Patterns 8.24. An assessment of the long rains March-April-May (MAM) rainfall recorded from March to May 2017 indicated that the rainfall performance was generally poor over most parts of the country. The long rain seasonal rainfall was characterized by late onset as well as poor distribution, both in time and space. Generally sunny and dry weather conditions were dominant over the entire country in March 2017. Much of the rainfall was recorded during the second half of April and May 2017.

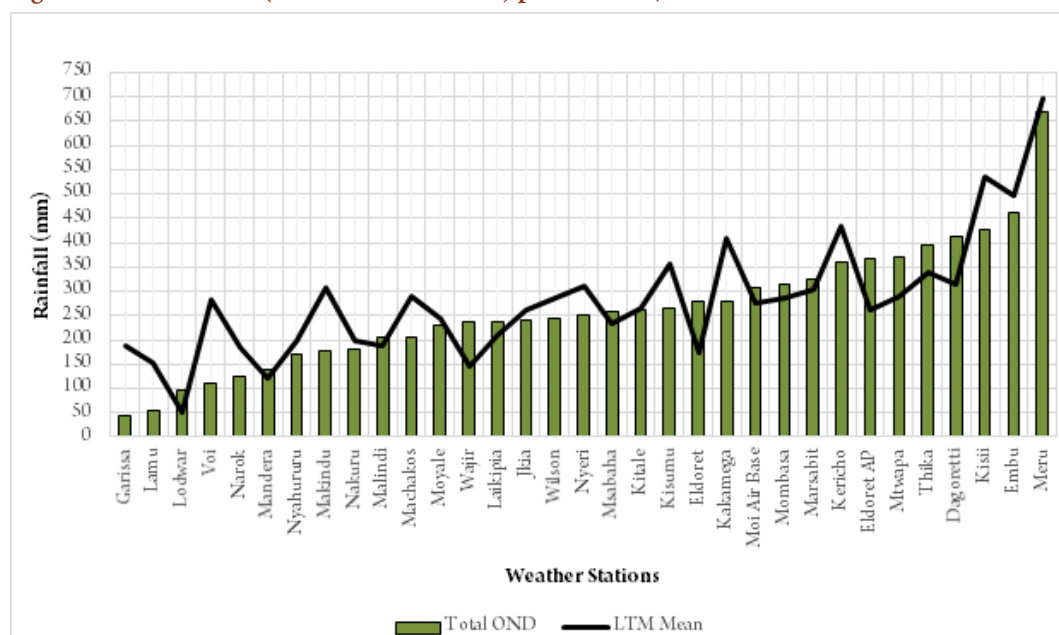
8.25. As shown in Figure 8.2, most meteorological stations in the country recorded below their seasonal Long-Term Means (LTMs) for the March to May long rain season. However, Machakos, Mtwapa and Mombasa stations recorded rainfall above the LTMs. Stations that recorded near-normal rainfall include Kisumu, Kakamega, Kericho, Eldoret, Kisii, Nyeri, Meru, Msabaha, Lamu, Malindi and Makindu. Stations that recorded the most depressed rainfall were Nyahururu, Mandera, Moi Airbase, Wilson Airport, Dagoretti, Thika, Voi, Marsabit and Lodwar.

Figure 8.2: Long Rains (March to May) Performance, 2017



8.26. The seasonal short rains October-November-December (OND) was characterized by early cessation whereby most parts of the country remained generally sunny and dry. As shown in Figure 8.3, this was more so in North-Western and North-Eastern Kenya where all meteorological stations recorded little rainfall. Stations that received well above their LTM included Malindi, Wajir, Laikipia, Eldoret, Mombasa, Eldoret AP, Mtwapa, Thika and Dagoretti. Depressed rainfall was witnessed in Garissa, Lamu, Voi and Narok stations.

Figure 8.3: Short Rains (October to December) performance, 2017



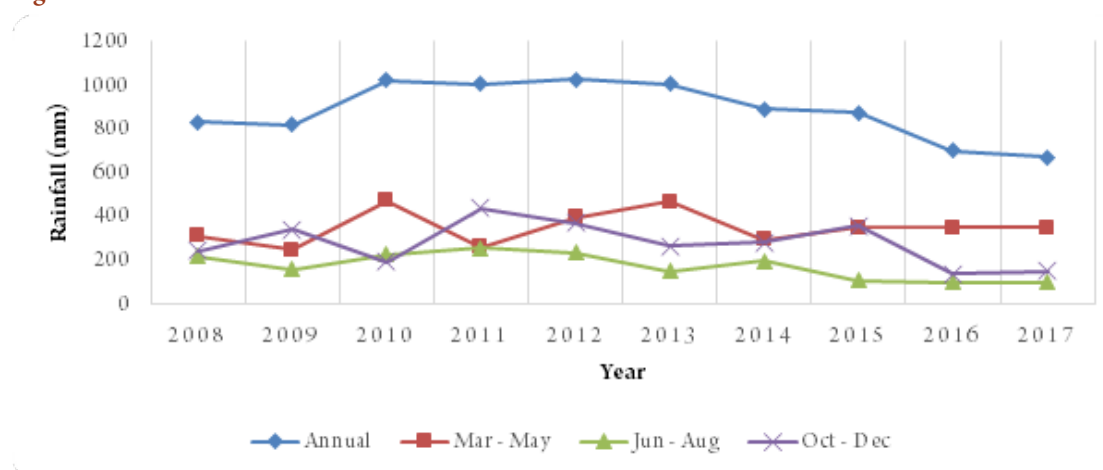
8.27. Figure 8.4 depicts the annual, March to May, June to August and October to December seasonal rainfall trends being on the decrease during the period 2008 to 2017. However, during the review period, annual and October to December seasonal rainfall trend line shows a sharp reduction. The October to December seasonal rainfall was characterized by high temporal variability. There was low average rainfall of less than 200 mm in 2010 and 2016 and high average rainfall of more than 400 mm in 2011 as shown in Table 8.14. The March to May season, was characterized by low temporal variability with a low average rainfall of about 250 mm in 2009, and a high average of more than 400 mm in 2010 and 2013.

Table 8.14 - Mean Annual and Seasonal Rainfall

	mm									
Season	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Annual.....	835.8	820.7	1,024.1	1,009.5	1,030.4	1,007.9	891.7	876.5	703.9	675.3
Mar - May..	313.9	250.9	476.9	262.5	399.3	469.0	297.8	350.3	350.7	354.0
Jun - Aug....	219.7	160.9	228.4	260.4	239.8	155.3	199.2	110.4	104.6	104.0
Oct - Dec....	246.1	342.9	197.1	439.9	372.1	265.6	286.1	360.6	142.8	155.0

Source: Kenya Meteorological Department

Figure 8.4: Mean Annual and Seasonal Rainfall



8.28. Both annual and seasonal maximum temperatures were characterized by increasing trends as shown in Table 8.15 and Figure 8.5. However, minimum temperatures were characterized by mixed trends as presented in Table 8.16 and Figure 8.6.

Table 8.15 - Mean Annual and Seasonal Maximum Temperatures

Season/Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Annual.....	27.7	28.4	27.9	27.9	27.8	27.7	28.5	29	28.7	28.9
Mar - May.....	28.2	29.3	28.3	29.2	28.6	28.1	29.2	29.4	29.8	30.3
Jun - Aug.....	25.5	26.9	26.2	26.7	25.5	25.8	27.1	27.4	26.6	27.4
Oct - Dec.....	27.9	28.1	28.4	27.4	27.6	28	28.7	28.7	29.1	29.2

Source: Kenya Meteorological Department

Figure 8.5: Mean Annual and Seasonal Maximum Temperatures

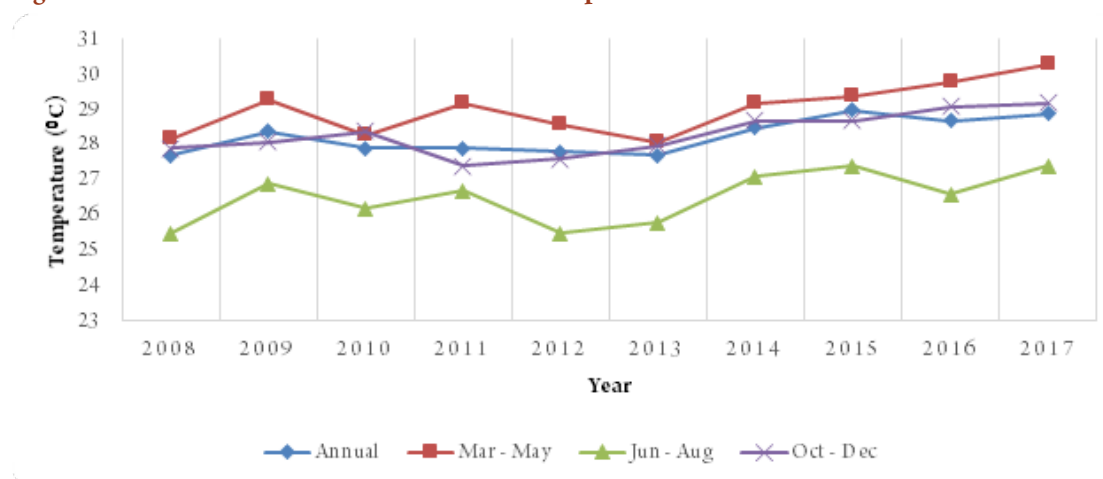
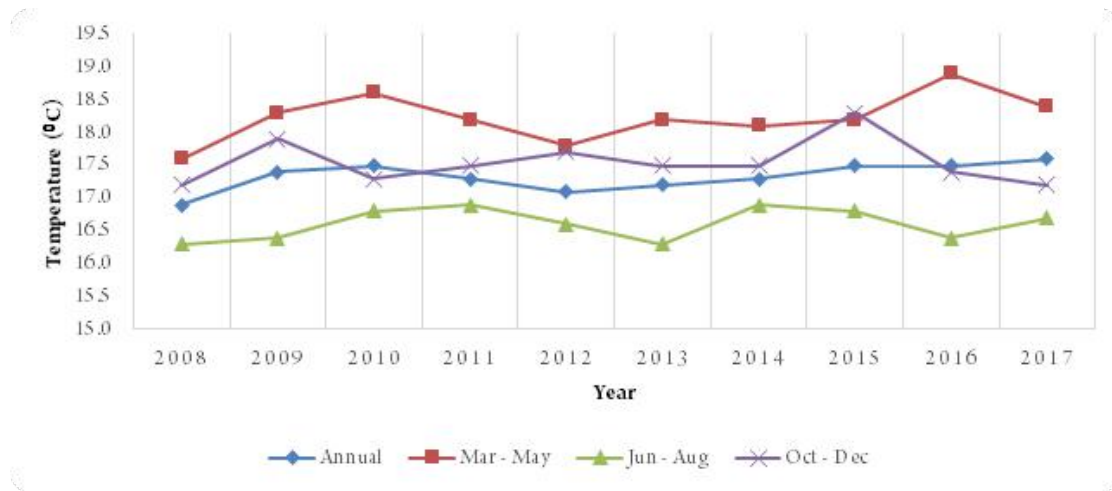


Table 8.16: Mean Annual and Seasonal Minimum Temperatures

Season/Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Annual.....	16.9	17.4	17.5	17.3	17.1	17.2	17.3	17.5	17.5	17.6
Mar - May.....	17.6	18.3	18.6	18.2	17.8	18.2	18.1	18.2	18.9	18.4
Jun - Aug.....	16.3	16.4	16.8	16.9	16.6	16.3	16.9	16.8	16.4	16.7
Oct - Dec.....	17.2	17.9	17.3	17.5	17.7	17.5	17.5	18.3	17.4	17.2

Source: Kenya Meteorological Department

Figure 8.6: Mean Annual and Seasonal Minimum Temperatures



Recent Developments 8.29. The Government recognizes the need to stop pollution from all sources and has instituted a wide range of policy and regulatory measures to eradicate vice. The Kenya gazette notice no 2,356 of 2017 which aimed at reducing plastic pollution was enforced from 28th August 2017. The law banned the use, importation of and manufacture of plastic carrier bags in the country. The ban will go a long way in addressing the challenges in waste management and reduce the effects of non-biodegradable waste to the environment.

8.30. The third session of the UN Environment Assembly (UNEA 3), was held in Nairobi, Kenya from 4th to 6th December 2017 under the overarching theme of pollution. It positioned the country in the global leadership of sustainable management of the environment following the ban on plastic carrier bags.

8.31. The United Nations Climate Change Conference (UNCCC) was held in Bonn, Germany, from 6th to 18th November, 2017 and recognized climate change as one of the greatest challenges of the present day requiring actions to sustain temperature increases to below two degrees centigrade. Parties reached a historic decision on agriculture and established the Koronivia Joint Work on Agriculture to develop and implement new strategies for mitigation and adaptation the agriculture sector.

Energy Sector

Chapter 09

Overview The energy sector was faced with increased international crude oil prices in 2017, with the prices peaking during the last quarter of the year. The increase was as a result of supply cuts by top producers under the Organization of Petroleum Exporting Countries (OPEC), the subsequent decline in commercial crude oil inventories and increased demand, mainly from China. The average Murban crude oil prices rose to US Dollars 54.91 per barrel in 2017 up from US Dollars 44.18 per barrel in 2016.

9.2. The total volume of petroleum products imported into the country increased from 5,990.0 thousand tonnes in 2016 to 6,347.7 thousand tonnes in 2017 while domestic petroleum exports declined by 2.1 per cent to 32.4 thousand tonnes in 2017. During the review period, total import bill of petroleum products increased by 34.3 per cent to KSh 265.3 billion while the total value of petroleum products exported, including re-exports, declined by 16.4 per cent to KSh 36.1 billion in 2017.

9.3. The total installed and effective electricity generation capacity, were 2,339.9 MW and 2,264.4 MW, respectively, in 2017. Total electricity generation expanded by 3.0 per cent to 10,359.9 GWh in 2017. Hydro generated power registered a significant drop of 29.9 per cent to 2,776.8 GWh while thermal and geo thermal generated power expanded by 72.3 and 6.1 per cent, respectively, in 2017. Domestic demand for electricity increased from 8,053.2 GWh in 2016 to 8,410.1 GWh in 2017 with sales to domestic and small commercial consumers increasing from 3,315.7 GWh to 3,528.3 GWh over the same period.

Petroleum 9.4. Details of quantities and values of imports and exports of petroleum products for the period 2013 to 2017 are presented in Table 9.1. The quantity of petroleum products imported into the country increased by 6.0 per cent to 6,347.7 thousand tonnes in 2017. The volume of total exports decreased from 1,097.3 thousand tonnes in 2016 to 842.4 thousand tonnes in 2017 mainly on account of re-exports which declined by 23.9 per cent to 810.0 thousand tonnes. The share of re-exports to total exports by volume, declined marginally from 97.0 per cent in 2016 to 96.2 per cent in 2017.

9.5. Total import bill of petroleum products expanded from KSh 197.6 billion in 2016 to KSh 265.3 billion in 2017. This may be attributed to rise in demand and prices of international crude oil during the review period. The value of domestic exports of petroleum products increased by 6.4 per cent to KSh 5,013.6 million in 2017. However, value of total exports declined by 16.4 per cent to KSh 36.1 billion in 2017 mainly attributed to a decline in the value of re-exports from KSh 38.5 billion in 2016 to KSh 31.1 billion in 2017. As a result, net balance increased from KSh 154.4 billion to KSh 229.1 billion in the review period.

Table 9.1: Quantity and Value of Imports, Exports and Re-exports of Petroleum Products¹, 2013-2017

Year	Quantity ('000 Tonnes)					Value (KSh Million)				
	2013	2014	2015	2016	2017*	2013	2014	2015	2016	2017*
IMPORTS										
Crude Petroleum	567.4	...	...	...	...	41,037.4	...	...	...	...
Petroleum Fuels	4,173.5	5,377.3	5,470.1	5,978.3	6,334.0	274,967.0	333,784.5	223,173.7	195,279.2	262,770.0
Lubricating Oils	7.7	7.6	12.0	9.1	11.2	1,422.9	1,423.8	2,468.0	1,741.4	1,999.0
Lubricating Greases	2.3	2.4	2.8	2.6	2.5	474.9	468.5	717.7	570.0	484.6
TOTAL	4,750.9	5,387.3	5,484.9	5,990.0	6,347.7	317,902.2	335,676.7	226,359.4	197,590.7	265,253.6
DOMESTIC EXPORTS										
Petroleum Fuels	19.2	46.4	4.8	12.5	6.4	1,386.8	2,735.4	321.1	545.5	368.6
Lubricating Oils	10.5	13.4	26.4	20.5	25.9	2,074.8	2,955.3	6,039.1	4,134.9	4,618.4
Lubricating Greases	0.2	0.1	0.1	0.1	0.1	31.3	14.7	21.5	31.2	26.5
TOTAL... ..	29.8	59.9	31.2	33.1	32.4	3,493.0	5,705.4	6,381.6	4,711.6	5,013.6
RE-EXPORTS										
Petroleum Fuels	156.4	709.7	934.5	1,062.6	809.7	10,566.8	47,134.6	53,843.4	38,163.2	31,079.4
Lubricating Oils	4.7	6.2	0.2	1.6	0.3	435.3	570.8	33.8	302.2	43.5
Lubricating Greases	0.1	0.0	0.0	0.0	0.0	12.0	9.8	3.1	8.1	5.2
TOTAL... ..	161.2	715.9	934.7	1,064.2	810.0	11,014.2	47,715.2	53,880.3	38,473.5	31,128.1
TOTAL EXPORTS... ..	191.1	775.8	965.9	1,097.3	842.4	14,507.2	53,420.6	60,261.9	43,185.1	36,141.7
NET BALANCE... ..						303,395.0	282,256.1	166,097.5	154,405.5	229,111.9

*Provisional

¹ Petroleum fuels refer to liquified petroleum gas, motor spirit premium, aviation spirit, jet fuel, illuminating kerosene, light and heavy diesel oils, and fuel oils

... Insignificant

9.6. Table 9.2 shows a breakdown of supply and demand for petroleum products for the period 2013 to 2017. Total domestic demand for petroleum products increased by 2.5 per cent to 5,170.6 thousand tonnes in 2017. During the review period demand of fuel oil, liquefied petroleum gas and illuminating kerosene went up by 49.6, 24.8 and 20.5 per cent, respectively, while domestic demand for light diesel oil and aviation spirit decreased by 10.0 per cent and 20.8 per cent, respectively, in 2017. Light diesel oil and motor gasoline (premium) continued to be the major contributors to the total domestic demand, jointly accounting for 64.9 per cent.

Table 9.2: Petroleum Fuels Supply and Demand, 2013-2017

	'000 Tonnes				
	2013	2014	2015	2016	2017*
DEMAND -					
Liquefied petroleum gas	92.9	149.7	148.6	151.7	189.3
Motor gasoline (premium) ...	774.5	903.8	1,107.0	1,227.2	1,267.4
Aviation spirit	2.2	2.3	18.7	4.8	3.8
Jet/turbo fuel	551.3	529.3	635.3	619.2	649.7
Illuminating kerosene	296.1	300.3	390.1	371.7	448.0
Light diesel oil	1,601.2	1,721.4	2,080.9	2,318.3	2,086.2
Heavy diesel oil	18.7	3.0	0.1	0.5	1.2
Fuel oil	371.0	328.1	357.8	350.9	525.0
TOTAL	3,707.9	3,937.9	4,738.5	5,044.3	5,170.6
Refinery usage	31.3	0.0	0.0	0.0	0.0
TOTAL DOMESTIC DEMAND..	3,739.2	3,937.9	4,738.5	5,044.3	5,170.6
Exports of petroleum fuels	19.2	46.4	4.8	12.5	6.4
TOTAL DEMAND... ..	3,758.4	3,984.4	4,743.2	5,056.8	5,177.0
SUPPLY -					
Imports less re-exports:					
Crude oil	567.4	0.0	0.0	0.0	0.0
Petroleum fuels	4,017.1	4,667.6	4,535.7	4,915.7	5,524.2
TOTAL	4,584.5	4,667.6	4,535.7	4,915.7	5,524.2
Adjustment ¹	826.0	683.3	(207.6)	(141.1)	347.2
TOTAL SUPPLY... ..	3,758.4	3,984.4	4,743.2	5,056.8	5,177.0

Source: Ministry of Energy/Energy Regulatory Commission

* Provisional.

¹ Adjustment for inventory changes and losses in production.

9.7. Net domestic sales of petroleum fuels by consumer category for the period 2013 to 2017 are shown in Table 9.3. Total net domestic sales of petroleum fuels increased by 2.5 per cent in 2017 to 5,170.6 thousand tonnes. Consumption of fuel used for power generation increased significantly to 44.7 thousand tonnes in 2017 from 15.3 thousand tonnes in 2016. This could be attributed to increased thermal generation of power during the year 2017. Similarly, agriculture; marine; tourism; industrial, commercial and other; and aviation industries also registered notable increases in the consumption of petroleum fuels in the review period.

9.8. In contrast, consumption by rail transport industry declined from 43.0 thousand tonnes in 2016 to 11.8 thousand tonnes in 2017 while consumption by the retail pump and road transport industry declined by 4.7 per cent to 3,541.2 thousand tonnes during the review period. Retail pump outlets and road transport; and industrial commercial and other categories jointly accounted for 84.7 per cent of total sales in during the year under review.

Table 9.3: Net Domestic Sale of Petroleum Fuels by Consumer Categories, 2013-2017

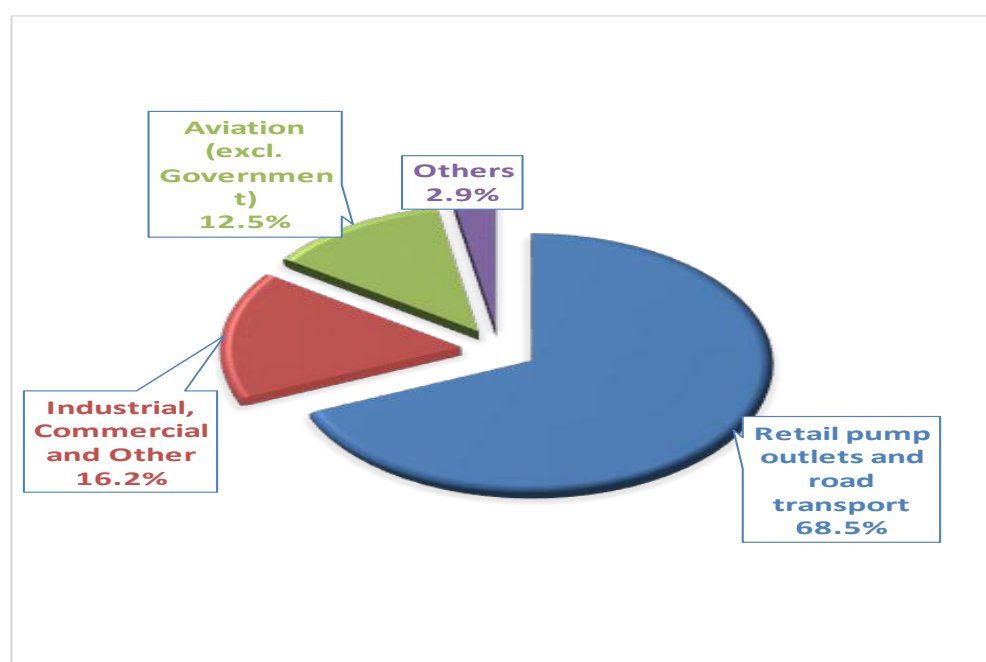
	'000 Tonnes				
User	2013	2014	2015	2016	2017*
Agriculture	28.5	36.4	29.7	35.2	57.4
Retail pump outlets and road transport..	2,573.7	2,791.0	3,414.7	3,717.6	3,541.2
Rail transport	14.2	15.6	36.9	43.0	11.8
Tourism ¹	5.5	5.1	4.8	5.1	9.1
Marine (excl. Naval Forces)	25.4	18.6	2.9	2.3	6.2
Aviation (excl. Government)	552.4	530.4	637.7	598.4	644.5
Power Generation	64.1	98.9	32.3	15.3	44.7
Industrial, Commercial and Other	462.3	451.2	572.1	615.9	837.2
Government	7.2	9.3	7.7	11.3	18.5
Balancing Item	-25.4	-18.6	0.3	0.1	0.0
TOTAL	3,707.9	3,937.9	4,738.5	5,044.3	5,170.6

Source: Ministry of Energy/Energy Regulatory Commission

* Provisional

¹ Comprises sales to tour operators

9.9. Figure 9.1 displays share of sale of petroleum fuels by major consumer categories. Retail pump outlets and road transport; industrial, commercial and other; and aviation categories jointly consumed 97.1 per cent of total sales in 2017. All other sectors consumed 2.9 per cent of total sales in the year under review.

Figure 9.1: Sale of Petroleum Fuels by Major Consumer Categories, 2017

9.10. Table 9.4 presents the average wholesale prices of petroleum fuels in Mombasa for the month of December in the period 2013 to 2017. The prices for all the fuels were higher in December 2017 than those recorded in December 2016 and most of them were almost at same level with the prices experienced in December 2014. Increase in the wholesale price of liquefied petroleum gas was the most notable from KSh 80,078 per tonne in December 2016 to KSh 110,000 per tonne in December 2017, representing a 37.4 per cent rise. Wholesale price for illuminating kerosene increased by 13.1 per cent to KSh 87,048 per tonne in the same period. Prices of motor gasoline (premium) and light diesel oil increased by 9.7 per cent to KSh 138,421 and 8.7 per cent to KSh 105,221, respectively, in 2017.

Table 9.4: Whole Sale Prices¹ of Petroleum Fuels in Mombasa, 2013-2017

PRODUCT	KSh per Tonne				
	Dec. 2013	Dec. 2014	Dec. 2015	Dec. 2016	Dec. 2017
Liquefied Petroleum Gas ..	123,803	110,721	95,920	80,078	110,000
Motor Gasoline (Premium)	143,535	133,711	123,644	126,129	138,421
Illuminating Kerosene.. . . .	101,153	86,449	69,282	76,933	87,048
Light Diesel Oil	120,303	104,097	94,149	96,759	105,221
Industrial Diesel Oil	74,238	73,874	..	..	..
Fuel Oil	64,950	58,678	..	..	..

Source: National Oil Corporation

¹ Including duties and VAT.

.. Data not available

9.11. Details of Murban crude oil prices at the international market for the last five years are shown in Table 9.5. The price of crude oil increased significantly from an average of US Dollars 44.18 per barrel in 2016 to US Dollars 54.91 per barrel in 2017. This was occasioned by a decision by OPEC to cut crude oil supply and a robust demand from China. The highest prices of crude oil averaging at US Dollars 63.18 per barrel were recorded in the fourth quarter of 2017.

Table 9.5: Murban ADNOC Prices¹, 2013-2017

Month/Year	US\$/BBL				
	2013	2014	2015	2016	2017*
January	112.05	109.75	46.40	29.95	55.35
February	115.40	109.95	56.55	33.00	56.10
March	109.95	108.30	56.10	38.20	52.60
April	105.65	107.95	60.55	42.00	53.40
May	103.65	109.15	65.75	47.35	51.45
June	103.00	111.65	63.70	49.05	47.30
July	106.85	109.50	57.70	44.60	48.60
August	111.70	104.25	48.85	48.85	48.85
September	114.50	97.95	46.60	45.50	55.70
October	112.45	87.35	47.30	51.35	63.83
November	112.20	77.00	43.55	46.15	63.65
December	113.85	60.65	37.25	54.15	62.06
Annual average	110.10	99.45	52.53	44.18	54.91

Source : Ministry of Petroleum and Mining

* Provisional

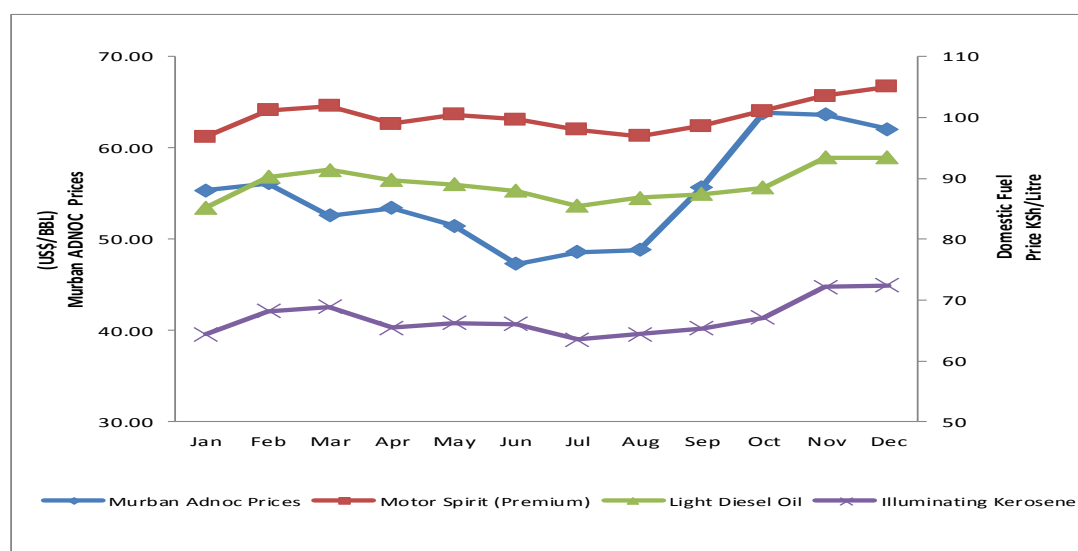
¹ Abu Dhabi Free On Board (FOB) Prices

ADNOC : Abu Dhabi National Oil Company

US\$/BBL: US Dollars per Barrel

9.12. Figure 9.2 illustrates the trends in the monthly international prices for crude oil and domestic fuel prices in 2017. International crude oil registered high prices in the fourth quarter of 2017, with the highest price of US dollars 63.83 per barrel being recorded in October while the lowest price of US dollars 47.30 per barrel was recorded in June. Similar trends were registered for domestic prices of motor gasoline (premium), gas oil and kerosene which declined moderately in July before attaining the highest prices in December 2017.

Figure 9.2: International Crude Oil and Domestic Fuel Prices, 2017



9.13. Table 9.6 depicts average retail prices of selected petroleum products in Kenya from 2013 to 2017. During this period, the average prices of motor gasoline (premium), light diesel oil and illuminating kerosene recorded increases of 11.1, 14.4 and 22.6 per cent, respectively. On the other hand, the average price of Liquefied Petroleum Gas (LPG) for a 13 Kg cylinder recorded a slight decline of 3.7 per cent from an annual average of KSh 2,154.81 in 2016 to an annual average of KSh 2,075.29 in 2017. This could be attributed to the ongoing government efforts to increase the use of LPG in order to promote use of clean energy.

Table 9.6: Average Retail Prices of Selected Petroleum Fuels, 2013- 2017

	Month	KSh per Litre			KSh per 13 Kg cylinder
		Motor Gasoline (Premium)	Light Diesel Oil	Illuminating Kerosene	Liquified Petroleum Gas (LPG)
2013	January	112.35	104.83	84.71	2,630.73
	March	118.41	108.21	89.39	2,662.61
	June	108.93	100.01	82.38	2,573.75
	September	114.69	106.47	86.47	2,836.67
	December	110.11	105.44	83.99	2,876.00
	Annual Average¹	113.89	105.38	83.92	2,769.24
2014	January	111.41	105.65	85.98	2,995.22
	March	114.43	105.79	84.82	3,094.16
	June	115.43	105.73	84.04	3,074.57
	September	112.46	103.28	82.55	3,111.74
	December	102.86	91.79	72.30	3,018.45
	Annual Average¹	112.75	102.99	82.46	3,062.40
2015	January	93.75	84.3	66.53	2,954.36
	March	90.34	77.16	56.71	2,629.56
	June	98.14	84.26	62.73	2,387.04
	September	103.49	80.94	53.52	2,393.85
	December	90.94	79.47	54.23	2,369.46
	Annual Average¹	94.63	80.99	57.67	2,465.44
2016	January	89.52	77.66	47.11	2,343.86
	March	86.46	66.68	43.13	2,277.48
	June	87.07	74.69	59.1	2,231.38
	September	92.28	83.42	60.08	2,029.12
	December	95.08	88.18	64.52	1,983.06
	Annual Average¹	90.22	77.83	54.68	2,154.81
2017	January	96.88	85.2	64.41	1,989.50
	February	101.14	90.22	68.15	1,976.38
	March	101.91	91.39	68.93	1,998.70
	April	99.01	89.7	65.44	2,063.95
	May	100.48	89.02	66.26	2,104.29
	June	99.68	87.95	66.04	2,112.19
	July	98.00	85.45	63.55	2,073.62
	August	96.98	86.84	64.41	2,080.10
	September	98.62	87.4	65.33	2,094.22
	October	101.09	88.43	67.12	2,140.47
	November	103.58	93.37	72.2	2,128.59
	December	105.04	93.41	72.39	2,141.46
	Annual Average¹	100.20	89.03	67.02	2,075.29

¹ Twelve months average

Electricity 9.14. Details of installed and effective capacity of electricity by source are presented in Table 9.7a. Total installed capacity slightly increased to 2,339.9 MW in 2017 from 2,327.0 MW in 2016. Hydro capacity increased by 7.5 MW to 826.2 MW in 2017 as a result of new hydro-electric power plants in Genro Teremi Falls, Gura and Chania. Similarly, thermal capacity increased by 5.3 MW to 806.9 MW while solar capacity increased by 0.1 MW to 0.7 MW in 2017. Installed capacity for geo thermal, wind and co-generation remained at the same in 2017 as in 2016.

9.15. Total effective capacity increased by 10.3 MW to 2,264.4 MW in 2017. This was attributed to slight increases in hydro and thermal capacity in the review period. Similarly, there was an increase of 0.4 MW in solar capacity during the year under review. On the other hand, effective wind capacity declined by 1.9 per cent to 25.5 MW in 2017. Effective capacity of geo thermal and co-generation remained the same in 2017 as in 2016.

Table 9.7a: Installed and Effective Capacity of Electricity, 2013-2017

Year	INSTALLED CAPACITY MW							EFFECTIVE CAPACITY MW						
	Hydro	Thermal Oil	Geothermal	Wind	Co-generation	Solar	Total	Hydro	Thermal Oil	Geothermal	Wind	Co-generation	Solar	Total
2013	812.3	714.4	241.8	5.9	26.0	..	1,800.4	766.6	693.2	236.5	5.3	21.5	..	1,723.1
2014	818.3	751.3	573.4	26.3	26.0	..	2,195.3	797.5	712.6	558.0	5.3	21.5	..	2,094.9
2015	820.4	833.6	627.0	26.1	26.0	0.6	2,333.7	799.5	799.2	619.0	26.1	21.5	0.2	2,263.3
2016	818.7	801.6	652.0	26.1	28.0	0.6	2,327.0	797.5	762.9	644.0	26.0	23.5	0.2	2,254.1
2017*	826.2	806.9	652.0	26.1	28.0	0.7	2,339.9	805.0	765.8	644.0	25.5	23.5	0.6	2,264.4

Source: Kenya Power & Lighting Company Ltd and Kenya Electricity Generation Company Ltd

* Provisional

.. Data not available

1 Megawatt = 1,000 kilowatts = 1 million watts

Notes:

Installed capacity refers to the maximum theoretical electric output a power station could produce when operating at 100 per cent

Effective capacity is the capacity a power station is expected to achieve given current operating constraints

9.16. Table 9.7b and Figure 9.3 present local generation and imports of electricity for the period 2013 to 2017. Total electricity generation increased by 3.0 per cent to 10,359.9 GWh in 2017. The hydro generation registered a significant drop of 29.9 per cent to 2,776.8 GWh mainly due to prolonged drought in 2017. In order to meet electricity demand, thermal generation increased significantly from 1,470.9 GWh in 2016 to 2,534.1 GWh in 2017. Electricity generation by wind and geothermal also increased by 8.7 and 6.1 per cent, respectively, in the review period. There was no emergency power production in 2017 following the decommissioning of Aggreko Muhoroni power plant in June 2016.

Table 9.7b: Generation and Imports of Electricity, 2013-2017

GENERATION									GWh	
	Hydro	Thermal oil				Geo thermal	Co-generation	Wind	Imports	Total
		KenGen	IPP	EPP	Total					
2013	4,386.0	598.3	1,386.2	177.2	2,161.7	1,780.9	55.6	14.7	49.0	8,447.9
2014	3,410.6	844.2	1,673.0	68.0	2,585.2	2,917.4	50.0	17.0	158.4	9,138.6
2015	3,463.3	393.4	954.2	64.5	1,412.1	4,520.7	0.0	59.7	58.8	9,514.6
2016	3,959.9	539.4	905.3	26.2	1,470.9	4,484.2	0.0	56.4	86.3	10,057.7
2017*	2,776.8	998.2	1,535.8	0.0	2,534.1	4,756.3	1.9	61.3	229.6	10,359.9

Source: Kenya Power & Lighting Company Ltd and Kenya Electricity Generation Company Ltd

* Provisional

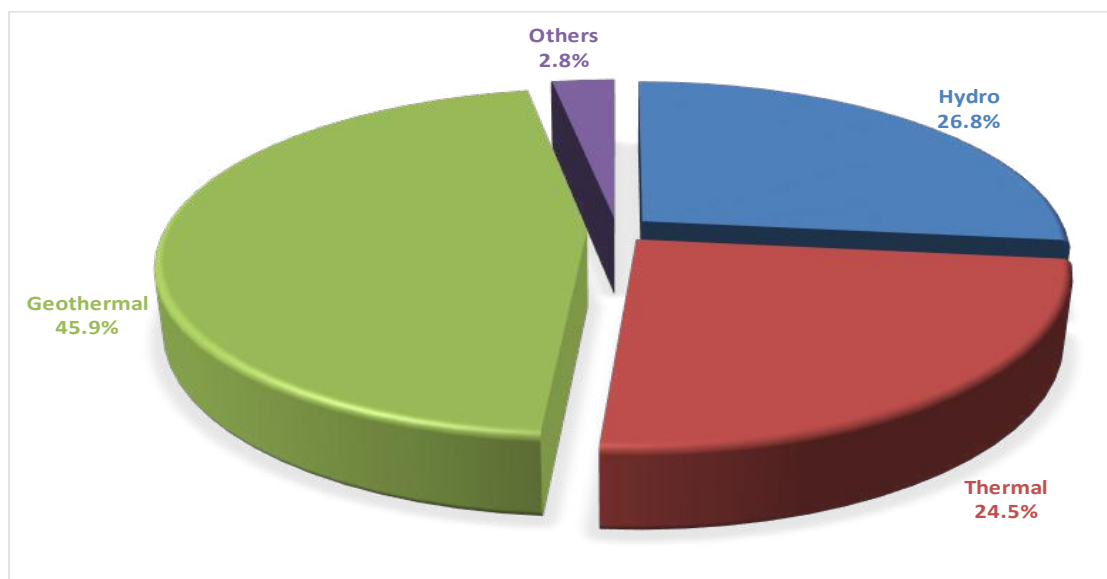
Notes:

IPP: Independent Power Producers

EPP: Emergency Power Producers

1 Gigawatt hour = 1,000,000 kilowatt hours

Figure 9.3: Proportion of Electricity Generation by Source, 2017



9.17. The demand and supply of electricity for the period 2013 to 2017 is shown in Table 9.8. Total domestic demand for electricity recorded a 4.4 per cent increase in 2017 to 8,410.1 GWh. Sales to domestic and small commercial consumers increased by 6.4 per cent to 3,528.3 GWh in 2017, while that to large and medium (commercial and industrial) consumers increased by 52.7 GWh to 4,199.0 GWh in 2017. There was a 29.8 per cent increase in street lighting to 60.1 GWh in 2017 on account of increased activities to provide street lighting in towns by County Governments. Sales as a result of rural electrification continued to increase for the fourth year in a row, rising by 13.2 per cent to 580.6 GWh in 2017. Domestic and small commercial; large and medium (commercial and industrial) consumer categories jointly accounted for 91.9 per cent of total domestic demand during the year under review.

9.18. Total electricity imports increased significantly from 86.3 GWh in 2016 to 229.6 GWh in 2017 while exports declined from 39.1 GWh to 12.3 GWh in the review period. Local generation increased by 1.6 per cent to 10,130.3 GWh in 2017. Transmission and distribution losses amounted to 1,937.5 GWh in 2017, accounting for 18.7 per cent of the total supply.

Table 9.8: Electricity Supply and Demand, 2013-2017

	GWh				
	2013	2014	2015	2016	2017*
Domestic and Small Commercial	2,866.1	3,273.8	3,254.9	3,315.7	3,528.3
Large & Medium (Commercial and Industrial)	3,585.3	3,891.5	4,017.8	4,146.3	4,199.0
Off-peak	32.7	33.7	25.7	31.8	42.2
Street Lighting	17.2	22.5	31.4	46.3	60.1
Rural Electrification	426.8	478.7	496.6	513.1	580.6
TOTAL DOMESTIC DEMAND	6,928.1	7,768.6	7,826.4	8,053.2	8,410.1
Exports to Uganda & Tanzania	43.7	30.8	46.7	39.1	12.3
Transmission and Distribution losses ¹	1,476.1	1,339.3	1,641.5	1,965.4	1,937.5
TOTAL DEMAND = TOTAL SUPPLY ²	8,447.9	9,138.7	9,514.6	10,057.7	10,359.9
Less imports from Uganda and Tanzania	49.0	158.4	58.8	86.3	229.6
Local generation	8,398.9	8,980.3	9,455.8	9,971.4	10,130.3

Source: Kenya Power and Lighting Company Ltd

Average Electricity Tariffs 9.19. The average electricity tariffs for 2012/2013 to 2016/2017 are presented in Table 9.9. The average tariff yield increased by 6.6 per cent from KSh 14.68 per unit sold in 2015/2016 to KSh15.65 per unit sold in 2016/2017.

Table 9.9: Average Electricity Tariffs¹, 2013-2017

	KSh				
	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017*
Average Tariff Yield of Units Sold	14.38	15.52	14.97	14.68	15.65

Provisional

¹ Average electricity tariff is calculated by dividing total revenue received by total units sold

9.20. Details of demand and supply of commercial energy by primary source is presented in Table 9.10. Total energy consumption increased from 6,270.0 thousand tonnes of oil equivalent in 2016 to 6,306.2 thousand tonnes of oil equivalent in 2017 mainly due to a 12.4 per cent increase in net imports of petroleum products. Total production of hydro, geo thermal, wind and co-generation energy dropped by 8.9 per cent to 672.9 thousand tonnes of oil equivalent in 2017 mainly as a result of a 29.9 per cent reduction in the local production of hydro power during the review period. Similarly, Consumption of coal and coke declined by 5.1 per cent to 462.7 thousand tonnes of oil equivalent in 2017. Consequently, the share of local production to total energy consumption dropped to 10.4 per cent in 2017 compared to a share of 11.7 per cent recorded in 2016. Annual per capita energy consumption stood at 135.3 Kg of oil equivalent in the review period.

Table 9.10: Production, Trade and Consumption of Energy¹ by Primary Sources, 2013-2017

	'000 tonnes of Oil Equivalent				
	2013	2014	2015	2016	2017
COAL AND COKE	298.4	466.0	494.6	487.5	462.7
LIQUID FUELS	3,707.9	3,937.9	4,738.5	5,044.2	5,170.6
Imports of crude oil	567.4	0.0	0.0	0.0	0.0
Net imports of petroleum	4,017.1	4,667.6	4,535.7	4,915.7	5,524.2
Exports of petroleum fuels.....	19.2	46.4	4.8	12.5	6.4
Stock changes and balancing item	258.6	683.3	-207.6	-141.0	347.2
HYDRO, GEOTHERMAL, WIND AND CO-GENERATION ENERGY	540.4	563.6	696.7	738.4	672.9
Total Local Energy Production¹	536.2	550.0	691.6	731.0	653.2
Local production of hydro power	377.1	293.3	297.8	340.5	238.8
Local production of geothermal power	153.1	250.9	388.7	385.6	409.0
Local production of Wind	1.3	1.5	5.1	4.8	5.3
Local production of Co-generation	4.8	4.3	0.0	0.0	0.2
Electricity Imports	4.2	13.6	5.1	7.4	19.7
TOTAL ENERGY CONSUMPTION¹	4,546.7	4,967.4	5,929.9	6,270.0	6,306.2
LOCAL PRODUCTION AS PERCENTAGE OF.....					
TOTAL ENERGY CONSUMPTION.....	11.8	11.1	11.7	11.7	10.4
PER CAPITA CONSUMPTION IN TERMS.....					
OF KILOGRAMME OF OIL.....					
EQUIVALENT	106.6	112.5	130.9	134.8	135.3

* Provisional

¹ Excludes wood fuel and charcoal

Developments in the Rural Electrification Energy Sector

9.21. The number of customers connected under the rural electrification program expanded by 30.6 per cent to 1,269,510 in 2016/17 from 972,018 customers in 2015/16, mainly drawn from domestic consumers and small commercial categories. As a result, units of electricity sold increased by 2.2 per cent from 537 million units as at July 2016 to 549 million units in 2016/17. Consequently, revenue realized grew by 5.7 per cent from KSh 9,812 million in 2015/16 to KSh 10,376 million in 2016/17. Under the rural electrification program, a total of 1,319,490 customers were connected as at December 2017.

Electricity Generation and Transmission

9.22. The country's electricity generating capacity is currently being upgraded through various geothermal, wind and solar projects. It is expected to increase by 875.9 MW by 2023 from the current 2,339 MW. Among the projects expected to be commissioned in 2019 are the 50 MW Wellhead Modula plants, 158 MW Olkaria V and 70 MW Olkaria I Unit 6.

9.23. Three transmission line projects were completed in 2017 covering 629 kilometers. These are the Mombasa-Nairobi 400 kV line, Suswa-Isinya 400 kV and the Kisii-Awendo 132 kV line covering 482, 103 and 44 Km, respectively. Further, fourteen transmission line projects are currently ongoing and due for completion between 2018 and 2020 with ten of the projects expected to be completed in 2018. These are; Nairobi Ring Sub-Stations, Olkaria-Lessos in Kisumu, Loiyangalani in Suswa, Nanyuki-Isiolo, Lessos-Kabarnet line, Nanyuki-Nyahururu (Rumuruti) line, Olkaria-Narok line, Mwingi-Kitui-Wote-Sultan Hamud line, Turkwel-Ortom line in Kitale and Isinya-Namanga line. Sondu-Homa Bay-Ndhiwa-Awendo project,

Eastern Electricity Highway Project (Ethiopia-Kenya Interconnector) and Kenya-Tanzania Interconnector projects are to be completed by 2019 while Lessos-Tororo line (Kenya-Uganda Interconnector) is expected to be commissioned in 2020.

Oil Exploration Status

9.24. Oil and gas exploration activities were concentrated in four blocks located in the Lokichar, Lotikipi and Kerio valley sub-basins of the Tertiary Rift Basin. New geological and geophysical data in open petroleum blocks were acquired with the sole purpose of enriching geo-scientific data to boost their attractiveness to new prospective investors in oil exploration. Similar studies were carried out in Lamu Basin along the coastal region of Kenya. The next block to be studied will be L14A, also situated onshore in Lamu Basin.

Construction of Mombasa – Nairobi New Pipeline for Refined Products

9.25. A new 20-inch diameter pipeline is being constructed from Mombasa to Nairobi which will have installed capacity of up to 1,000 cubic metres per hour on commissioning. The pipeline is designed to achieve a flow rate of 1,800 cubic metres per hour through the installation of four additional pumping stations. The new pipeline is expected to reduce pipeline maintenance costs, ensure security of supply for the country and the region, enhance safety and environment and remove petroleum trucks from the highway. This project also involves construction of four petroleum products tanks with a total capacity of 133,000 cubic metres. This will provide sufficient capacity for receipt of higher volumes of products expected from the new Mombasa Nairobi pipeline, increase storage capacity for ground fuels in Nairobi from the current 100,580 cubic metres to 233,580 cubic metres, provide capacity to build stocks in Nairobi for hinterland demand from 7 days to 17 days; enhance operational flexibility and evacuation of products at Kipevu Oil Storage Facility (KOSF) thereby creating more ullage at KOSF and reduce demurrage charges.

Mwananchi Gas Project

9.26. The Government intends to facilitate access of LPG to low income households. The project entails purchasing of 6 Kg cylinders with burners and 'meko' type grills. These cylinders will be purchased and distributed across the country with the objective of increasing LPG uptake. In addition, at least 40 mini LPG storage and filling plants (LPG skids) will be installed to be operated by women and youth. This project is expected to reduce average wood consumption as a source of energy in the country thereby boosting afforestation initiatives.

Manufacturing

Chapter 10

Overview Manufacturing sector real value added rose marginally by 0.2 per cent in 2017 compared to a growth of 2.7 per cent in 2016. The volume of output of the sector contracted by 1.1 per cent attributed mainly to decline in food products, beverages and tobacco, leather and related products, rubber and plastics and non-metallic minerals sub-sectors. The sector was negatively affected by uncertainties relating to general elections, rise in inflation, high production costs and competition from imported goods. The ban on production and use of plastic carrier bags also had adverse effects on the volume of output of the sector. The food sub-sector declined by 10.8 per cent mainly due to low availability of raw materials for some key agro-based industries resulting from unfavourable weather conditions in the year. The total approved credit to the sector rose to KSh 311.8 billion in 2017 from KSh 275.8 billion in 2016.

10.2. The Producer Price Index (PPI) which measures change in prices of goods sold by producers at basic prices rose by 4.6 per cent in 2017 to 118.89 from 113.67 in 2016. The main contributors to the increase in the index were manufacture of food products, electricity and manufacture of basic metals which increased by 9.3, 5.0 and 5.3 per cent, respectively. The index for other non-metallic mineral products dropped by 1.2 per cent in 2017.

10.3. Key performance indicators under the Export Processing Zone (EPZ) program which include number of gazetted zones, operating enterprises, employment and cumulative investment recorded growths in 2017. The number of local employees engaged by EPZ enterprises increased to 54,622 persons in 2017 from 52,947 persons in 2016. The cumulative capital investment increased to KSh 92.3 billion in 2017. However, total sales decreased in the period under review due to reduced exports.

Formal employment in the Sector 10.4. Formal employment in the manufacturing sector rose at a slower rate of 0.8 per cent in 2017 compared to 1.8 per cent growth in the previous period. The sector's formal employment was 303.3 thousand persons in 2017 and accounted for 11.4 per cent of the total formal employment.

Manufacturing Output 10.5. Table 10.1 shows manufacturing sector value of output, intermediate consumption, value added and compensation of employees. The value of output grew by 4.0 per cent to KSh 2,204.8 billion while intermediate consumption increased by 6.1 per cent to KSh 1,556.4 billion in 2017. This resulted to a 0.8 per cent decrease in the value added to KSh 648.4 billion in the same period. Compensation of employees rose by 8.1 per cent in the period under review.

Table 10.1: Manufacturing Output, Compensation of Employees and Value Added, 2013-2017

YEAR	Current Prices - KSh Million			
	Value of Output	Intermediate Consumption	Value Added	Compensation of Employees
2013	1,737,699	1,231,087	506,612	127,186
2014	1,820,369	1,282,369	537,999	147,453
2015	1,977,169	1,388,274	588,896	163,392
2016	2,120,718	1,466,879	653,839	174,767
2017*	2,204,805	1,556,408	648,397	188,893

* Provisional.

Quantum Indices

10.6. Details of the quantum indices and the production of some selected commodities from 2013 to 2017 are presented in Tables 10.2, 10.3 and 10.4. Production volumes for several sub-sectors in manufacturing contracted, leading to an overall decline of 1.1 per cent in 2017. The low performance was on account of low production of sugar, dairy products, leather and related products, other non-metallic mineral products, wood and products of wood, motor vehicle, trailers and semi-trailers and food products not elsewhere classified. However, cocoa, chocolate and sugar confectionery, machinery and equipment n.e.c, grain mill products, bakery products, wearing apparel, animal feed, basic metals, paper and paper products sub-sectors remained resilient during the review period and registered growths in the volumes of output.

Table 10.2: Quantum Indices of Manufacturing Production, 2013-2017

Base: 2009=100

Industry Divisions and Groups Descriptions	2013	2014	2015	2016	2017*
Meat and Meat Products	109.4	108.3	118.3	131.2	139.2
Processing and preserving of fish	85.0	86.7	67.8	61.0	59.0
Prepared and Preserved Fruits and Vegetables.....	120.0	100.9	103.6	112.8	111.1
Animal and Vegetable Fats and Oils.....	111.4	128.2	133.6	133.8	136.8
Dairy Products	147.4	156.8	169.7	174.1	153.0
Grain Mill Products.....	137.4	148.5	160.8	165.9	179.7
Bakery Products.....	141.7	152.3	164.6	162.4	175.5
Sugar.....	109.5	108.2	115.3	116.5	68.8
Cocoa, Chocolate and Sugar Confectionery	131.6	137.4	167.4	180.3	202.4
Food Products not elsewhere classified.....	129.6	136.2	121.5	139.4	129.3
Animal Feed.....	131.0	132.2	138.2	141.3	153.5
Food Products	126.3	132.5	134.7	143.2	127.8
Beverages Products	112.5	110.8	138.7	146.6	146.1
Tobacco Products.....	119.6	144.0	137.6	115.4	110.3
Beverages and Tobacco Products	113.7	116.5	138.5	141.2	139.9
Textiles.....	112.1	113.9	129.9	120.6	118.5
Wearing Apparel.....	154.4	172.9	196.8	230.8	243.8
Leather and Related Products.....	135.4	118.6	100.0	111.5	98.1
Wood and Products of Wood	113.9	132.4	138.5	119.2	103.5
Paper and Paper Products.....	144.9	140.1	140.3	153.6	160.1
Printing and Production of Recorded Media.....	102.3	99.3	99.2	98.0	97.7
Refined Petroleum Products.....	47.0	0.0	0.0	0.0	0.0
Chemical and Chemical Products.....	112.6	125.3	134.6	134.3	136.7
Pharmaceutical Products.....	250.0	295.9	360.8	435.3	430.6
Rubber Products.....	100.2	93.1	78.4	59.3	0.0
Plastic Products.....	114.1	123.6	135.1	146.5	141.0
Rubber and Plastic Products	111.8	118.6	125.9	132.4	118.1
Other Non-metallic Mineral Products.....	135.1	156.1	169.9	179.7	165.5
Basic Metals.....	149.8	152.7	150.9	171.9	178.8
Fabricated Metal Products.....	154.3	175.1	163.8	130.6	131.5
Electrical Equipment.....	133.3	145.1	154.6	159.9	160.0
Machinery and Equipment nec.....	90.8	77.1	42.6	31.0	34.5
Motor Vehicle, Trailers and Semi Trailers.....	131.0	161.4	171.0	116.4	98.2
Manufacture of furniture	183.8	211.0	258.5	258.5	247.3
Other Manufacturing	139.5	174.6	210.1	204.1	204.4
Repair and Installation of Machinery and Equipment ...	110.2	117.8	122.0	128.0	130.5
Overall	130.6	139.0	146.0	152.6	150.9

* Provisional

Table 10.3: Percentage change in Quantum Indices of Manufacturing Production, 2013-2017

Industry Divisions and Groups Descriptions	2013	2014	2015	2016	2017*
Meat and Meat Products.....	0.2	-1.0	9.3	10.9	6.1
Processing and preserving of fish.....	-3.2	2.0	-21.8	-10.0	-3.3
Prepared and Preserved Fruits and Vegetables.....	16.7	-15.9	2.7	8.8	-1.5
Animal and Vegetable Fats and Oils.....	12.7	15.0	4.3	0.1	2.2
Dairy Products.....	1.7	6.4	8.2	2.6	-12.1
Grain Mill Products.....	5.5	8.1	8.3	3.2	8.3
Bakery Products.....	6.0	7.5	8.1	-1.3	8.1
Sugar.....	21.5	-1.3	6.6	1.0	-41.0
Cocoa, Chocolate and Sugar Confectionery.....	-1.4	4.4	21.8	7.7	12.3
Food Products not elsewhere classified.....	10.7	5.1	-10.8	14.7	-7.2
Animal Feed.....	6.8	1.0	4.5	2.2	8.7
Food Products	8.3	5.0	1.6	6.3	-10.8
Beverages.....	-8.4	-1.5	25.2	5.7	-0.3
Tobacco Products.....	-6.8	20.5	-4.4	-16.2	-4.4
Beverages and Tobacco Products	-8.1	2.5	18.9	1.9	-0.9
Textiles.....	-4.7	1.6	14.1	-7.1	-1.7
Wearing Apparel.....	9.7	12.0	13.8	17.3	5.6
Leather and Related Products.....	3.5	-12.4	-15.7	11.4	-12.0
Wood and Products of Wood	6.5	16.2	4.6	-13.9	-13.2
Paper and Paper Products.....	7.2	-3.3	0.2	9.4	4.2
Printing and Production of Recorded Media.....	2.1	-2.9	-0.1	-1.3	-0.3
Refined Petroleum Products.....	-48.6	-100.0	0.0	0.0	0.0
Chemical and Chemical Products.....	-3.0	11.2	7.5	-0.2	1.8
Pharmaceutical Products.....	32.0	18.3	21.9	20.6	-1.1
Rubber Products.....	22.1	-7.1	-15.8	-24.4	0.0
Plastic Products.....	-2.1	8.4	9.3	8.4	-3.8
Rubber and Plastic Products	0.8	6.1	6.1	5.1	-10.8
Other Non-metallic Mineral Products.....	7.8	15.5	8.9	5.8	-7.9
Basic Metals.....	20.7	1.9	-1.2	13.9	4.0
Fabricated Metal Products.....	17.2	13.4	-6.4	-20.2	0.6
Electrical Equipment.....	6.8	8.8	6.5	3.5	0.0
Machinery and Equipment nec.....	1.2	-15.1	-44.7	-27.1	11.0
Motor Vehicle, Trailers and Semi Trailers.....	5.9	23.1	6.0	-31.9	-15.6
Manufacture of furniture.....	12.0	14.8	22.5	0.0	-4.4
Other Manufacturing.....	3.5	25.1	20.4	-2.9	0.1
Repair and Installation of Machinery and Equipment..	3.2	6.9	3.6	4.9	2.0
Overall	6.9	6.4	5.0	4.6	-1.1

* Provisional

10.7. Overall, manufacture of food products declined by 10.8 per cent in 2017 on account of shortfalls in the domestic supply of some key raw materials such as sugarcane, tea, milk and rice paddy. Production of sugar declined significantly by 41.2 per cent from 639.7 thousand tonnes in 2016 to 376.1 thousand tonnes in 2017 mainly attributed to low cane deliveries by farmers. In addition, the dairy sub-sector production volumes contracted by 12.1 per cent in 2017. The quantity of processed milk dropped from 448.5 million litres in 2016 to 383.2 million litres in 2017. This was mainly due to reduced milk intake by the processors. Likewise, production of yoghurt and other fermented milk dropped by 3.5 per cent in the same period. Other food products not elsewhere classified reduced by 7.2 per cent in 2017. This decline was mainly due to a drop in the quantities of processed tea and semi processed coffee. Production of tea dropped by 7.0 per cent from 473.0 thousand tonnes in 2016 to 439.8 thousand tonnes in 2017. Semi-processed coffee dropped by 15.1 per cent to 33.7 thousand tonnes in 2017. The quantity of milled rice dropped by 20.0 per cent while prepared and preserved fruits and

vegetables dropped by 1.5 per cent over the same period. Fish processing declined by 3.3 per cent in the year under review.

10.8. Grain milling sub-sector recorded a growth of 8.3 per cent in 2017. The year under review saw the introduction of duty-free imports of maize by flour millers. This resulted to a 9.8 per cent increase in production of maize flour to 669.4 thousand tonnes in 2017. Production of wheat flour by formal establishments also rose by 9.2 per cent to 1,237.0 thousand tonnes in 2017 from 1,133.1 thousand tonnes in 2016. Manufacture of animal feeds, which are by-products of grain milling, went up by 8.7 per cent during the year under review.

10.9. The quantity of bakery products increased by 8.1 per cent in 2017. The growth was attributed to the 8.2 per cent and 7.4 per cent increase in the quantities of bread and biscuits produced, respectively in the year under review. Production of cocoa, chocolate and sugar confectionery increased by 12.3 per cent.

10.10. Meat and meat products sub-sector recorded a 6.1 per cent growth in 2017 mainly driven by a 10.2 per cent increase in the quantity of sausages processed. Manufacture of vegetable fats and oils went up by 2.2 per cent in 2017.

Table 10.4: Production of Selected Commodities 2013-2017

Commodity	Unit	2013	2014	2015	2016	2017*
Processed Milk	Million litres	350.4	419.1	437.5	448.5	383.2
Wheat flour ¹	000 Tonnes	884.2	988.7	1,103.8	1,133.1	1,237.0
Maize flour ¹	„	562.5	571.2	570.7	609.7	669.4
Biscuits	„	12.3	10.6	12.2	12.1	13.0
Cooking oil	„	162.8	186.1	208.2	208.3	215.0
Edible fats and margarine	„	235.6	265.2	255.6	256.1	258.8
Sugar	„	600.2	592.7	635.7	639.7	376.1
Coffee - milled	„	39.8	49.5	41.6	39.7	33.7
Tea	„	432.4	445.1	399.1	473.0	439.8
Soft drinks	Million litres	407.4	462.1	551.4	505.1	557.8
Blankets	000 Number	2,048.4	2,339.1	2,873.7	2,930.2	2,670.7
Assembled vehicles	Number	7,026.0	9,514.0	10,181.0	6,541.0	4,877.0
Galvanized sheets	000 Tonnes	305.2	284.5	256.8	268.7	262.8

* Provisional

¹Produced by formal Millers

10.11. The beverages and tobacco sub-sector declined by 0.9 per cent. Production of beverages declined marginally on account of a 5.2 per cent drop in the quantity of beer produced in 2017. In addition, tobacco products dropped by 4.4 per cent as a result of a 4.1 per cent decline in production of cigarettes in 2017. Production of carbonated soft drinks (soda) and spirits went up by 10.4 per cent and 8.9 per cent, respectively during the year under review.

10.12. The textile sub-sector recorded a decline of 1.7 per cent mainly attributed to a drop of 8.9 per cent and 2.2 per cent in the production of blankets; and twine, cordage and rope, respectively in 2017. However, production of woven fabrics and textile yarn; and threads increased by 11.1 per cent and 8.8 per cent, respectively. During the same period, production of wearing apparel increased by 5.6 per cent due to a growth of 10.4 per cent in the production of T-shirts.

10.13. Leather and related products recorded a decline of 12.0 per cent during the review period. This was attributed to reduced production of finished leather and shoes with uppers of leather, which decreased by 13.3 per cent and 8.2 per cent, respectively.

10.14. Manufacture of wood and products of wood dropped further by 13.2 per cent in 2017. The production of plywood and ceiling board decreased by 18.1 per cent and 4.5 per cent, respectively in 2017. The paper and paper product sub-sector registered a 4.2 per cent growth in 2017. This growth was mainly driven by an increase of 10.7 per cent and 5.5 per cent in the production of toilet paper and exercise books, respectively.

10.15. The chemical and chemical products sub-sector grew marginally in 2017. Production of paints went up by 2.1 per cent while that of soaps, detergent and shoe polish increased by 6.2, 4.8 and 1.9 per cent, respectively in the period under review. However, manufacture of vanishes dropped by 6.5 per cent. Production of industrial gases dropped by 18.8 per cent in the review period.

10.16. Production of pharmaceutical products decreased by 1.1 per cent in 2017. This was on account of a 7.7 per cent drop in production of capsules. On the contrary, production of tablets and syrup rose by 6.9 per cent and 1.6 per cent, respectively over the same period.

10.17. Output volumes of plastic products declined by 3.8 per cent in 2017 mainly due to a decrease of 21.8 per cent in the production of plastic bags attributed to a ban on production of plastic carrier bags in August 2017. Production of plastic pipes decreased by 2.8 per cent in 2017. However, production of plastic tanks increased by 9.4 per cent in the period under review.

10.18. The production of basic metals increased by 4.0 per cent in 2017 attributable to an increase of 12.0 per cent in the volumes of iron bars and rods produced. However, there was a 2.2 per cent decline in the output volumes of corrugated iron sheets to 262.8 thousand tonnes. In the same period, fabricated metal products, which include aluminum circles/sufurias, metal structures and nails increased by 0.6 per cent. Production of metal structures increased by 4.5 per cent while that of nails increased by 2.4 per cent during the same period. The quantity of sufurias produced also declined by 9.1 per cent in 2017.

10.20. Production of electrical equipment in 2017 remained largely unchanged compared to the volumes recorded in 2016. Manufacture of primary batteries registered a 25.8 per cent growth in 2017. However, there was a 20.4 per cent decline in manufacture of cables over the same period.

10.21. Motor vehicles, trailer and semi-trailers production registered a drop of 16.4 per cent in 2017. This was mainly attributed to a decline in the number of assembled vehicles which dropped by 25.4 per cent and a 4.9 per cent reduction in trailer and semi-trailer body making.

10.22. Manufacture of furniture registered a decline of 4.4 per cent in 2017. This was as a result of a drop in the production of mattresses, which went down by 6.3 per cent. Production of other non-metallic minerals registered a decline of 7.9 per cent in 2017 due to a drop in the production of both cement and glass bottles.

Cement Production and Utilization 10.23. Cement production decreased by 8.2 per cent from 6,715.4 thousand tonnes in 2016 to 6,162.6 thousand tonnes in 2017 as shown in Table 10.5. Similarly, cement consumption and stocks decreased from 6,310.1 thousand tonnes in 2016 to 5,788.9 thousand tonnes in 2017 owing to reduced demand in the construction sector. Total exports of cement contracted further by 7.6 per cent in 2017 after recording a drop of 38.3 per cent in 2016. Imports decreased marginally from 15.1 thousand tonnes in 2016 to 14.7 thousand tonnes in 2017 while exports of cement to Uganda and Tanzania dropped from 325.0 thousand tonnes in 2016 to 299.3 thousand tonnes in 2017.

Table 10.5: Cement Production and Utilization, 2013-2017

Year	Production	Imports	Consumption and Stocks	‘000 Tonnes	
				Exports to	
				Uganda and Tanzania	All Other Countries
2013	5,059.1	34.4	4,266.5	594.0	233.9
2014	5,882.5	36.4	5,196.7	547.7	175.2
2015	6,352.9	37.6	5,708.8	487.4	194.2
2016	6,715.4	15.1	6,310.1	325.0	95.4
2017* ...	6,162.6	14.7	5,788.9	299.3	89.1

* Provisional.

Producer Prices 10.24. The overall inflation as measured by Producer Price Index (PPI) increased by 4.6 per cent to 118.89 in 2017, as shown in Table 10.6. The main contributors to the increase were manufacture of food products, electricity and manufacture of basic metals, which increased by 9.3, 5.0 and 5.3 per cent, respectively in 2017. In the manufacture of food products, the highest increase was the producer prices of sugar and maize flour. During the review period, prices of electricity increased mainly due to a rise in fuel adjustment costs.

Table 10.6: Producer Price Indices, 2013 to 2017

June 2011 = 100								
Division	Description	Weights	2013	2014	2015	2016	2017	Percentage Change
08	Mining and Quarrying	1.60	111.40	123.09	131.67	138.10	132.58	-4.0
10	Manufacture of food products.....	34.24	109.84	107.52	114.17	113.52	124.11	9.3
11	Manufacture of beverages.....	6.54	111.16	124.25	132.36	136.83	140.91	3.0
12	Manufacture of tobacco products.....	1.38	117.31	117.96	121.74	125.10	125.43	0.3
13	Manufacture of textiles.....	2.29	108.19	109.96	122.72	126.70	125.97	-0.6
14	Manufacture of wearing apparel.....	2.91	99.88	100.27	101.64	102.08	102.35	0.3
15	Manufacture of leather and related products	0.90	101.79	102.19	103.77	104.23	104.40	0.2
16	Manufacture of wood and products of wood and cork except furniture	2.19	104.69	105.40	106.91	113.60	117.56	3.5
17	Manufacture of paper and paper products	3.15	102.28	106.15	109.64	112.55	115.39	2.5
18	Printing and reproduction of recorded media.....	5.66	102.33	104.66	104.66	104.66	104.66	0.0
19	Manufacture of lubricating petroleum oils	0.01	117.13	132.83	114.76	114.76	114.76	0.0
20	Manufacture of chemicals and chemical products.....	5.97	106.67	113.24	119.61	118.35	123.12	4.0
22	Manufacture of rubber and plastics products.....	5.47	105.07	107.66	110.01	110.27	109.80	-0.4
23	Manufacture of other non-metallic mineral products.....	4.32	113.59	116.00	117.36	113.06	111.71	-1.2
24	Manufacture of basic metals	6.51	98.69	97.11	93.68	92.96	97.90	5.3
25	Manufacture of fabricated metal products except machinery and equipment	3.31	94.11	96.62	94.35	92.04	94.73	2.9
29	Manufacture of motor vehicles.....	1.20	112.60	117.28	121.17	122.95	123.76	0.7
31	Manufacture of Furniture.....	1.83	102.45	102.17	132.88	131.29	134.37	2.3
33	Repair and installation of machinery and equipment...	1.42	99.78	100.16	102.92	103.76	104.36	0.6
35	Electricity	8.63	98.34	118.41	116.52	116.21	122.07	5.0
36	Water.....	0.46	114.44	124.54	131.68	143.63	154.56	7.6
	Total	100.00	105.96	109.17	113.44	113.67	118.89	4.6
	Overall percentage change		0.50	3.03	3.91	0.20	4.59	

10.25. The average producer prices of selected products are shown in Table 10.7. These prices exclude Value Added Tax (VAT) and transportation costs. During the year under review, the producer prices for a tonne of sugar increased by 35.4 per cent from KSh 71,354 in 2016 to KSh 96,606 in 2017. Similarly, the producer prices of a bale of maize flour increased by 7.3 per cent from KSh 1,117 in 2016 to KSh 1,199 in 2017. However, the price of a tonne of cement reduced by 1.2 per cent during the review period.

Table 10.7 Average Producer Prices of Selected Products

KSh/Unit						
Product	Units of Measure	2013	2014	2015	2016	2017
Vegetable oils	20 Litres	4,251.4	4,006.7	4,090.8	3,908.7	3,950.6
Vegetable fats	20 Kg	4,173.3	4,105.1	4,019.8	3,850.4	3,795.2
Pasteurized milk.....	Crate 18 packets each 500 Ml	625.5	623.8	678.9	672.3	696.9
Sugar.....	One Tonne	81,547.0	67,626.2	65,493.7	71,353.9	96,606.3
Wheat flour.....	12 packets each 2Kg	1,462.2	1,510.7	1,421.0	1,303.6	1,317.4
Maize Flour.....	12 packets each 2Kg	1,165.0	1,235.6	1,110.3	1,116.9	1,199.1
Gloss paints	4 Litres	1,816.1	1,909.5	2,243.3	2,135.7	2,263.4
Ballast.....	One Tonne	927.5	969.9	1,008.4	1,008.4	1,009.5
Plastic water tank.....	5000 litre capacity	31,920.0	31,650.2	33,604.9	32,531.9	32,779.1
Cement.....	One Tonne	12,428.2	12,691.8	12,841.1	12,370.3	12,223.2
Steel bars	1 Kg	78.8	77.7	77.0	77.1	80.7
Ordinary nails	50 kg	4,075.0	4,592.5	4,265.2	3,853.5	4,021.4

Credit to Manufacturing Sector 10.26. The number of projects approved in the manufacturing sector by financial institutions and commercial banks from 2013 to 2017 are shown in Table 10.8. The total loans advanced rose from KSh 275.8 billion in 2016 to KSh 311.8 billion in 2017. The value of approved credit by industrial financial institutions increased from KSh 1.1 billion in 2016 to KSh 1.3 billion in 2017. The number of manufacturing projects approved decreased from 338 in 2016 to 293 in 2017, mainly due to a decline in the number of projects within the micro and small enterprises financed by Kenya Industrial Estate (KIE).

10.27. Industrial Development Bank (IDB) Limited approved projects worth KSh 200.1 million in 2017 compared to KSh 129.8 million in 2016. The funding was for expansion of three existing projects in the manufacture of concrete poles, steel mills and textiles activities.

10.28. Development Bank of Kenya (DBK) approved three projects for manufacturing of cement products, plastics pipes and printing in 2017, which were worth KSh 130.5 million.

10.29. Industrial and Commercial Development Corporation (ICDC) approved credit worth KSh 791 million for seven manufacturing projects in 2017. Four projects were startups while three were expansion to existing projects mainly in food and beverage sub-sectors.

Table 10.8: Manufacturing Projects Approved by Financial Institutions and Other Commercial Banks, 2013 -2017

Institution	Number of Projects					Loans Advanced (KSh Million)				
	2013	2014	2015	2016	2017*	2013	2014	2015	2016	2017*
IDB Capital limited.....	5	3	5	3	3	339.1	74.2	252.0	129.8	200.1
Development Bank of Kenya.....	4	2	6	6	3	230.0	66.6	341.0	292.3	130.5
Kenya Industrial Estates Limited	257	543	233	325	280	104.5	194.3	120.8	165.3	181.0
Industrial and Commercial Development Corporation....	2	1	7	4	7	431.6	234.0	421.2	495.6	791.0
Sub - total.....	268	549	251	338	293	1,105.2	569.1	1,135.0	1,083.0	1,302.6
All other commercial banks ¹.....	..	..	..	..	..	181,457.1	237,355.8	289,727.8	274,725.4	310,502.9
TOTAL	268	549	251	338	293	182,562.3	237,924.9	290,862.8	275,808.3	311,805.4

* Provisional

¹ Source: Central Bank of Kenya (excludes DBK).

10.30. The Kenya Industrial Estates plays a major role in promoting local entrepreneurship by financing and developing small scale and micro enterprises. The number of manufacturing projects approved decreased from 325 in 2016 to 280 in 2017 as shown in Table 10.9. However, the loans advanced for these projects rose by 9.5 per cent to KSh 181.0 million during the review period. Manufacturers of food products remained the main beneficiaries of this funding accounting for 29.5 per cent of the total loans advanced in 2017.

Table 10.9: Industrial Projects Approved by Kenya Industrial Estates, 2013-2017

Des criptions	Number of Projects					Advanced Loans (KSh '000)				
	2013	2014	2015	2016	2017*	2013	2014	2015	2016	2017*
Manufacture of food products	83	193	75	107	93	36,545	64,855	28,092	66,133	53,391
Manufacture of beverages	3	3	8	2	-	1,747	6,791	230	690	-
Manufacture of animal feeds	-	2	2	-	-	-	1,500	3,500	-	-
Manufacture of food products nec	-	2	12	1	-	-	3,327	4,370	70	-
Manufacture of textiles	4	3	37	65	42	1,360	1,900	12,813	19,958	19,200
Manufacture of wearing Apparel	46	139	1	1	1	18,319	29,891	500	1,700	1,500
Manufacture of leather and related products	2	1	2	2	11	550	840	1,000	5,350	765
Manufacture of wood and Products of wood and cork except furniture	7	17	5	22	39	3,905	9,693	3,355	12,621	27,782
Manufacture of paper and paper products	-	1	-	-	-	-	10,000	-	-	-
Printing and reproduction of recorded media	13	20	-	16	10	6,400	10,700	-	9,836	26,858
Manufacture of Chemicals and chemical products	-	-	2	3	3	-	-	18,059	1,115	6,000
Manufacture of other non-metallic mineral products	7	7	7	5	7	1,720	1,510	7,630	1,700	4,490
manufacture of fabricated metal products except machinery and equipment	53	105	53	81	66	20,085	35,005	25,295	39,260	32,669
Manufacture of furniture	34	48	27	13	-	12,470	17,606	13,690	3,810	-
Other manufacturing n.e.c.	3	2	2	6	-	1,400	700	2,315	2,725	-
Repair and installation of machinery and equipment ...	2	-	-	1	8	350	-	-	325	8,300
TOTAL	257	543	233	325	280	104,501	194,316	120,849	165,292	180,954

Source: Kenya Industrial Estates Ltd

* Provisional

10.31. The Kenya Investment Authority registered 40 manufacturing projects in 2017, which was a decline from 43 projects registered in 2016 as shown in Table 10.10. The value of loans advanced to finance the projects increased to KSh 26.6 billion in 2017 from KSh 11.1 billion in 2016.

Table 10.10: Industrial Projects¹ Registered by Kenya Investments Authority, 2013-2017

	2013	2014	2015	2016	2017*
Number of Projects.....	42	19	48	43	40
Loans advanced (KSh billion).....	42.1	7.4	8.8	11.1	26.6

Source: Kenya Investment Authority

* Provisional

¹ Figures presented are not for all projects since the Investment Promotion Act, 2004 does not mandate all investors to register with the Authority

Export Processing Zones 10.32. Key performance indicators under the EPZ program, which include the number of gazetted zones, operating enterprises, employment, cumulative capital investment; and local purchase of goods and services recorded growths in 2017 as shown in Table 10.11.

Table 10.11: Selected EPZ Performance Indicators, 2013-2017

	Unit	2013	2014	2015	2016	2017*
Gazetted Zones.....	Number	50	52	56	65	71
Enterprises Operating	"	85	86	89	111	131
Employment - Locals	"	39,961	46,221	50,302	52,947	54,622
- Expatriates	"	472	517	597	618	717
Total Workers	"	40,433	46,738	50,899	53,565	55,339
Export	KSh Million	44,427	51,377	60,879	64,151	60,377
Domestic Sales ¹	"	5,867	5,815	4,018	4,418	6,512
Total Sales	"	50,294	57,192	64,897	68,569	66,889
Imports	"	27,413	29,461	31,370	30,160	29,738
Local Purchases of Goods and Services.....	"	7,721	8,170	8,815	10,742	10,945
Capital Investment	"	48,004	44,218	48,128	88,977	92,289

Source: Export Processing Zones Authority (EPZA)

* Provisional

¹ Includes sales to duty free shops and agencies

10.33. The number of gazetted zones increased to 71 in 2017 from 65 in 2016. The gazetted zones were distributed as follows: 24 in Mombasa, 10 in Kilifi, 7 in Nairobi, 6 in Machakos, 4 in Bomet, Kiambu, Nakuru and Kwale each had 3 zones while Kajiado, Taita Taveta, Murang'a, Elgeyo/ Marakwet, Uasin Gishu, Laikipia, Nandi, Meru, Embu, Narok and Homa bay counties each had one gazette zone. In the period under review, five zones were public while the rest were owned and operated privately. The number of operating enterprises rose notably from 111 in 2016 to 131 in 2017.

10.34. Total sales by EPZ enterprises dropped from KSh 68.6 billion in 2016 to KSh 66.9 billion in 2017 mainly due to a 5.9 per cent decrease in exports to KSh 60.4 billion in 2017. The decline was mainly attributed to drought which affected supply of raw materials to agro processing industries, global competition and anxiety over the 2017 general elections. However, domestic sales rose to KSh 6.5 billion in 2017 from KSh 4.4 billion in 2016. Local purchases increased marginally from KSh 10.7 billion to KSh 10.9 billion during the same period. Imports decreased further by 1.4 per cent to KSh 29.7 billion in 2017.

10.35 Local employees engaged by EPZ enterprises increased from 52,947 persons in 2016 to 54,622 persons in 2017. Cumulative capital investments, which include equipment, machinery and zone infrastructure, has exhibited an upward trend since 2015 and stood at KSh 92.3 billion in 2017.

African Growth and Opportunity Act

10.36. Table 10.12 shows selected indicators for the EPZ garment/apparel sub-sector under African Growth and Opportunity Act (AGOA). AGOA is an initiative of the United States of America (USA) meant to increase exports especially of apparel from accredited Sub-Saharan Africa (SSA) countries. Direct employment generated by the sub-sector increased by 3.5 per cent to 43,987 persons in 2017. The value of exports reduced for a second consecutive year from KSh 34.4 billion in 2016 to KSh 32.8 billion in 2017. Similarly, capital investment reduced to KSh 14.1 billion in 2017.

Table 10.12: Selected EPZ Garment / Apparel Performance Indicators under AGOA, 2013-2017

	2013	2014	2015	2016	2017*	Percentage Change
Number of Enterprises.....	22	21	21	21	21	0.0
Number of Employees.....	32,932	37,785	41,597	42,496	43,987	3.5
Capital Investment (KSh Million) ..	13,465	15,051	15,708	15,300	14,096	-7.9
Exports (KSh Million).....	24,246	30,244	35,224	34,410	32,761	-4.8

Source: Export Processing Zones Authority

* Provisional

Developments in the Sector

10.37. The Government has identified manufacturing as one of its big four-agenda and has set targets for growth and employment creation in the sector. The plan has emphasized Government focus to boost fish processing, agro-processing, leather and textiles sub-sectors. The budget for the 2017/18 year has several incentives to attract foreign investments and protect locally manufactured goods. Towards this, the Government allocated resources for; modernization of some key industries, development of regional specific industrial clusters, development of basic infrastructure in selected Special Economic Zones (SEZ) and development of basic infrastructure for leather industrial park and a common manufacturing facility for leather among others. In addition, the commencement of the Standard Gauge Railway freight services is expected to ease manufacturers' burden by lowering domestic transport costs. The Government is also supporting the sector by subsidizing electricity supplied to manufacturers and increasing supply of renewable energy. The Government's directive of sourcing domestically manufactured shoes and uniforms for the disciplined forces is expected to spur growth of the textiles and leather sub-sectors.

Building and Construction

Overview

Improved infrastructural networks are key to the economy since they enhance connectivity and mobility, which in turn promotes trade and investment by reducing the cost of doing business. In 2017, the construction sector registered a growth of 8.6 per cent compared to a 9.8 per cent growth in 2016. During the review period, the first phase of construction of the single-track Standard Gauge Rail (SGR) from Mombasa to Nairobi was completed and the first commuter train launched on May 2017. The construction work for the second phase of SGR that runs 120 kilometres from Nairobi to Naivasha commenced in September 2017. The other major projects that were ongoing in the review period were; the expansion and modernisation of the Outer Ring road, expansion of Ngong road, construction of the Kenyatta Western bypass, Dongo Kundu bypass and Nuno-Modogashe road.

11.2. The overall expenditure on roads is expected to increase from KSh 173.7 billion in 2016/17 to KSh 198.4 billion in 2017/18. This growth is mainly attributed to increased development expenditure on roads which is expected to grow by 19.2 per cent to KSh 134.5 billion in 2017/18. Disbursement of funds by Kenya Roads Board (KRB) to various road agencies and County governments is expected to increase from KSh 60.5 billion in 2016/17 to KSh 63.5 billion in 2017/18. Loans and advances from commercial banks to building and construction sector increased to KSh 109.9 billion in 2017 from KSh 104.8 billion in 2016 reflecting a 4.9 per cent increase.

11.3. The value of new private buildings issued with certificate of occupancy by Nairobi County (NCC) increased by 10.2 per cent from KSh 77.7 billion in 2016 to KSh 85.6 billion in 2017. The value of public buildings completed by the State Department for Housing and National Housing Corporation (NHC) decreased from KSh 3.8 billion in 2016 to KSh 2.5 billion in 2017. In 2016/17, the approved expenditure for housing was KSh 17.5 billion while actual expenditure stood at KSh 16.5 billion, representing 94.3 per cent utilization. The value of building plans approved in NCC decreased from KSh 308.4 million in 2016 to KSh 240.5 million in 2017. During the same period, cement consumption decreased by 8.2 per cent to 5,788.9 thousand tonnes.

Key Economic Indicators

11.4. Selected key economic indicators in the building and construction sector from 2013 to 2017 are presented in Table 11.1. The index of Government expenditure on roads increased from 462.8 in 2016 to 526.1 in 2017, due to major road projects undertaken during the review period. Further, the index of reported private building works completed in Nairobi County rose from 409.3 in 2016 to 443.1 in 2017. On the other hand, the index of reported public building works completed in major towns registered a decrease from 69.2 in 2016 to 59.4 in 2017. During the review period, cement consumption decreased by 8.2 per cent to 5,788.9 thousand tonnes in 2017. Loans and advances to the sector increased by 4.8 per cent from KSh 104.8 billion in 2016 to KSh 109.9 billion in 2017.

Table 11.1: Selected Key Economic Indicators in Building and Construction, 2013 - 2017

Indicator	1982=100				
	2013	2014	2015	2016	2017*
Index of reported private building works completed in Nairobi City County ¹	321.3	341.4	369.4	409.3	443.1
Index of reported public building works completed in major towns ¹	103.7	106.1	112.6	69.2	59.1
Index of government expenditure on roads ¹⁺	313.9	263.4	350.3	462.8	526.1
Index of Employment ¹	197.8	220.0	245.0	269.9	277.1
Cement consumption ('000 tonnes)	4,266.5	5,196.7	5,708.8	6,310.1	5,788.1
Private Employment ('000 persons)	112.0	125.3	140.2	155.0	159.1
Public Employment ('000 persons)	7.5	7.6	7.9	8.0	8.1
Loans and Advances from Commercial Banks to the sector (KSh Mn)	70,770.0	80,406.0	107,842.6	104,825.8	109,882.1

* Provisional.

+ Revised

¹The index of roads, reported private and public building works completed has been deflated using construction input price indices.

Construction Price Indices

11.5. The percentage changes in the cost of building and construction materials and labour from 2015 to 2017 are presented in Table 11.2. The cost of materials increased by 3.0 per cent in 2017 compared to a 1.8 per cent growth in 2016. The highest growth in the cost of building materials was in the residential buildings which increased by 3.8 per cent during the review period. The cost of labour in the building and construction sector registered a slower growth of 6.6 per cent in 2017 compared to a growth of 12.3 per cent in 2016. The increase in the cost of labour was highest in the construction of building sub-sector (10.5%) and lowest in civil engineering sub-sector (3.3%).

Table 11.2: Percentage Changes in Construction Cost of Materials and Labour, 2015 – 2017

Materials	2015	2016	2017*
Residential Buildings.....	2.6	1.9	3.8
Non-Residential Buildings.....	2.3	1.6	1.8
All Buildings.....	2.5	1.8	2.9
Other Construction ¹	-3.0	1.8	3.2
Total Cost Index	0.9	1.8	3.0
Labour			
Construction of buildings.....	25.5	12.5	10.5
Civil engineering.....	17.9	6.2	3.3
Specilaized Construction activities.....	25.7	12.2	3.5
Total Labour Cost	25.5	12.3	6.6

* Provisional.

¹Refers mainly to road construction and includes bridges and dams

11.6. The average monthly basic wages for unskilled, semi-skilled and skilled workers in the building and construction industry for the last five years are shown in Table 11.3. Monthly basic wages for the unskilled and semi-skilled workers increased by 6.6 per cent each, while those for skilled workers rose by 6.5 per cent in 2017. The rate of growth in wages for all the three categories of workers was slower compared to the growths recorded in 2016.

Table 11.3: Monthly Average Basic Wages in Building and Construction Industry, 2013 – 2017

Year	KSh		
	Unskilled	Semi-Skilled	Skilled
2013.....	15,811	21,778	31,263
2014.....	16,994	23,500	33,832
2015.....	18,771	25,868	37,127
2016.....	20,174	27,902	40,187
2017.....	21,497	29,757	42,794

Source: Ministry of Labour, Social Security and Services

11.7. Table 11.4 shows the value of building plans approved and completed buildings issued with certificate of occupancy in NCC for the period 2013 to 2017. The value of building plans approved decreased by 23.2 per cent to KSh 240.8 billion in 2017. The value of completed buildings issued with certificate of occupancy in NCC increased by 10.1 per cent to KSh 85.6 billion in 2017.

Table 11.4: Value of Private Building Plans Approved and Building Works Completed in Nairobi City County, 2013 - 2017

Year	KSh Milli	
	Building Plans Approved	Building Works Completed ¹
2013.....	190,646.5	52,276.0
2014.....	205,423.9	59,519.7
2015.....	215,211.0	70,867.4
2016.....	308,361.4	77,749.7
2017*.....	240,752.0	85,588.3

Source: Nairobi City County

*Provisional

¹ Excluding extensions

11.8. Table 11.5 presents the number of completed private buildings reported to Nairobi City County and completed public buildings reported by State Department of Housing and NHIF. The total number of private buildings issued with certificate of occupancy increased by 9.7 per cent from 10,268 in 2016 to 11,202 in 2017. Residential buildings accounted for 85.0 per cent of the completed private buildings during the review period. The number of public buildings completed increased by 9.6 per cent to 1,164 units, out of which 1,072 units were for National Police and Prison services.

Table 11.5: Reported Private and Public Buildings¹ Completed, 2013 – 2017

Year	Private (Nairobi City County)			Public (Countrywide)
	Residential	Non- Residential	Total	Residential
2013.....	5,447	876	6,323	376
2014.....	6,538	985	7,523	243
2015.....	7,834	1,220	9,054	45
2016.....	8,806	1,462	10,268	1,062
2017*.....	9,564	1,638	11,202	1,164

Source: Nairobi City County, National Housing Corporation & The State Department for Housing

* Provisional

¹ New buildings

11.9. Table 11.6 shows reported value of new private buildings issued with certificate of occupancy in NCC and public buildings completed countrywide by the State Department for Housing and NHC. The value of new private buildings increased by 10.2 per cent from KSh 77.7 billion in 2016 to KSh 85.6 billion in 2017, mainly on account of a 9.7 per cent increase in the value of residential buildings. The value of public buildings completed decreased from KSh 3.8 billion in 2016 to KSh 2.3 billion in 2017.

Table 11.6: Reported Value of New Private and Public Buildings issued with certificate of occupancy, 2013 – 2017

Year	Private (Nairobi City County)			Public (Countrywide)
	Residential	Non-Residential	Total	Residential
2013.....	45,236.4	7,039.6	52,276.0	1,725.4
2014.....	50,952.2	8,567.5	59,519.7	502.1
2015.....	61,556.4	9,311.0	70,867.4	61.5
2016.....	67,624.9	10,124.8	77,749.7	3,786.4
2017*	74,207.0	11,381.3	85,588.3	2,347.0

Source: Nairobi City County, National Housing Corporation & the State Department for Housing

* Provisional

NB: Public residential buildings are constructed by the State Department for Housing and National Housing Corporation

**Housing
Credit and
Government
Expenditures**

11.10. Table 11.7 presents the number and value of loans advanced by the National Housing Corporation to individuals for construction and improvement of residential houses by County. A total of 73 loans amounting to KSh 91.7 million were issued in 2017. The highest number of loans were issued to residents of Trans Nzoia and Kiambu counties.

Table 11.7: Housing Loans Advanced by National Housing Corporation by County, 2016/2017

County	Number of Loans	Amount (KSh '000')
Bungoma.....	4	7,150
Busia.....	1	600
Eldoret.....	2	4,000
Homa Bay.....	1	1,900
Kajiado.....	7	4,600
Kakamega.....	3	3,300
Kiambu.....	10	7,740
Kirinyaga.....	1	3,000
Kisii.....	2	2,400
Kisumu.....	3	6,500
Lamu.....	5	2,400
Machakos.....	6	10,440
Meru.....	2	5,700
Murang'a.....	1	3,000
Nairobi City.....	3	6,450
Nakuru.....	4	10,740
Vihiga.....	2	3,700
Taita Taveta.....	4	2,000
Trans Nzoia.....	12	6,100
Total	73	91,720

11.11 Approved and actual Government expenditure on housing from 2013/14 to 2016/17 is shown in Table 11.8. Actual expenditure on housing increased significantly from KSh 6.1 billion in 2013/14 to KSh 16.5 billion in 2016/17. The actual expenditure in 2016/17 was 94.6 per cent of the approved expenditure.

Table 11.8: Approved and Actual Government Expenditure on Housing, 2013/14 – 2017/18

Year	Expenditure in KSh Million		Actual expenditure as a Percentage of Approved Expenditure
	Approved	Actual	
2013/14.....	7,032.0	6,088.6	86.6
2014/15.....	7,395.0	5,857.0	79.2
2015/16.....	7,342.7	6,034.5	82.2
2016/17*.....	17,498.9	16,548.7	94.6
2017/18**.....	14,845.8		

Source: State Department of Housing

*Provisional

**Estimates

Roads Statistics

11.12. Table 11.9 gives a breakdown of the total expenditure on roads from 2013/14 to 2017/18. The overall expenditure on roads is expected to increase by 14.2 per cent to KSh 198.4 billion in 2017/18 from KSh 173.7 billion in 2016/17. Total development expenditure on roads is expected to increase by 19.2 per cent from KSh 113.2 billion in 2016/17 to KSh 134.9 billion in the 2017/18. The expenditure on maintenance and repair of various roads is expected to increase from KSh 60.5 billion in 2016/17 to KSh 63.5 billion in 2017/18. This increase is mainly attributed to the increased budgetary allocation and increase in fuel levy.

Table 11.9: Expenditure on Roads, 2013/14 - 2017/18

	KSh Millions				
	2013/14	2014/15	2015/16	2016/17*	2017/18**
Development:					
Trunk and primary Roads (A,B and C)	43,763.4	37,792.0	60,686.8	63,887.0	79,309.9
Secondary and Minor Roads (D and E)	16,784.0	12,343.5	20,492.1	29,291.5	31,496.1
Miscellaneous Roads (Including Urban)	3,853.0	4,698.4	17,093.3	20,004.0	24,122.1
Sub-total	64,400.4	54,833.9	98,272.2	113,182.5	134,927.9
Recurrent:					
Maintenance & Repair	25,174.5	25,924.2	32,286.5	60,468.6	63,473.1
Total	89,574.9	80,758.1	130,558.7	173,651.1	198,401.1

Source: State Department of Infrastructure & Kenya Roads Board

*Provisional

**Estimates

11.13. The Roads 2000 (R2000) Strategy is a programme geared towards maintenance and improvement of roads, with optimum use of labour and local resources. The programme is funded by several development partners and is managed through the Public Private Partnership (PPP). As shown in Table 11.10, a total of 5.3 thousand kilometres of roads were earmarked for construction in several counties at an estimated cost of KSh 238.7 billion in 2017.

Table 11.10: Status of Ongoing R2000 Programme as at end of December 2017

County	Length (Km)	Percentage Completion	Estimated Project Cost (KSh Million)
Baringo.....	262.0	51.4	10,294.8
Bomet.....	188.2	9.3	7,131.7
Bungoma.....	166.5	38.6	8,810.6
Busia.....	63.0	42.9	3,168.6
Elgeyo/Marakwet.....	47.7	94.3	2,470.1
Embu.....	119.1	23.7	5,485.3
Garisa.....	7.3	5.0	519.9
Homa Bay.....	139.0	9.1	4,644.9
Isiolo.....	82.1	7.7	3,946.1
Kajiado.....	70.0	0.0	3,037.6
Kakamega.....	111.3	26.8	4,986.9
Kericho.....	183.0	23.0	8,913.8
Kiambu.....	263.1	19.7	12,529.2
Kilifi.....	197.0	22.1	7,815.0
Kirinyaga.....	64.0	15.4	2,804.9
Kisii.....	280.0	11.8	12,699.1
Kisumu.....	48.0	9.0	2,005.2
Kitui.....	85.0	1.8	3,821.3
Kwale.....	74.0	1.4	3,024.6
Laikipia.....	120.0	28.9	5,912.4
Machakos.....	191.9	43.8	7,439.6
Makueni.....	105.8	15.4	4,200.2
Marsabit.....	110.0	0.0	5,007.9
Meru.....	280.7	19.4	13,964.6
Migori.....	33.0	96.0	1,536.0
Mombasa	12.2	0.0	866.1
Murang'a.....	238.0	17.3	11,848.4
Nairobi.....	8.0	91.0	721.0
Nakuru.....	257.0	15.0	8,459.0
Nandi.....	180.0	0.2	8,119.3
Narok.....	20.0	33.6	720.3
Nyamira.....	88.6	46.3	4,717.6
Nyandarua.....	58.7	15.8	3,148.1
Nyeri.....	213.9	49.3	9,887.4
Siaya.....	69.0	20.1	3,212.5
Tana River.....	15.0	16.4	761.6
Tharaka-Nithi.....	88.5	12.0	3,526.1
Trans Nzoia.....	50.0	0.0	2,045.4
Turkana.....	153.0	0.2	6,948.7
Uasin Gishu.....	340.5	51.8	17,742.2
Vihiga.....	84.0	5.7	3,195.2
West Pokot.....	160.0	28.5	6,605.9
Total	5,328.0	24.3	238,695.2

Source: Kenya Rural Roads Authority

11.14. Road network by type and classification as at 30th June from 2013 to 2017 is shown in Table 11.11. The length of roads under bitumen increased by 42.3 per cent to 20.6 thousand kilometres in 2017 from 14.5 thousand kilometres in 2016. The length of trunk and primary roads under bitumen increased significantly from 8.5 thousand kilometres in 2016 to 12.2 thousand kilometres in 2017. The length of roads under earth and gravel almost doubled from 72.5 thousand kilometres to 140.8 thousand kilometres mainly due to reclassification of roads during the review period.

Table 11.11: Kilometres of Road by Type and Classification as at 30th June, 2013 - 2017

	'000 Km				
Type of Road	2013	2014	2015	2016	2017*
Bitumen					
Trunk and primary Roads (A,B and C).....	7.9	7.9	8.2	8.5	12.2
Secondary and Minor Roads (D and E)	3.1	3.1	3.2	3.3	4.9
Miscellaneous Roads ¹	0.2	2.1	2.5	2.7	3.6
Total.....	11.2	13.1	13.9	14.5	20.6
Earth /Gravel					
Trunk and primary Roads (A,B and C).....	6.4	6.4	6.5	5.7	27.8
Secondary and Minor Roads (D and E)	35.1	46.3	47.8	56.3	78.9
Miscellaneous Roads ¹	11.0	10.8	11.3	10.5	34.1
Total.....	52.5	63.5	65.6	72.5	140.8

Source: Kenya Roads Board

*Provisional

¹Miscellaneous Roads includes; Urban roads, Government access, Settlement, Rural access, sugar, tea and wheat roads

11.15. Major road works in progress in 2017 are presented in Table 11.12. During the review period, KSh 201.7 billion was expected to be used for road construction, rehabilitation and upgrading. A total of KSh 103.3 billion was expected to be used for construction of 1.5 thousand kilometres of roads while KSh 98.4 billion was expected to be used for rehabilitation and upgrading of roads and interchanges. The major ongoing projects during the review period were: the expansion and modernisation of the Outer Ring road, expansion of Ngong road, the construction of Kenya's Western bypass, Dongo Kundu bypass and Nuno-Modogashe road.

Table 11.12 - Major Road Works in Progress in 2017

Activity	Length (Km)	Contract Amount (KSh Million)
Road Construction		
Construction of Kibwezi - Mutomo - Kitui.....	192.0	18,404.9
Miritini - Mwache Kipevu Link Road.....	19.6	12,675.9
Garsen - Lamu - Witu.....	135.0	10,868.6
Nuno-Modogashe (A13).....	135.0	6,135.7
Loruk - Barpelo (B17).....	66.0	6,040.9
Athi River - Machakos Turn off.....	20.0	5,288.5
Eldoret Bypass.....	32.0	5,079.5
Chiakariga - Meru (C92).....	56.0	4,667.6
Masara-Suna-Kehanacha (C13) and Reinstatement of Awendo - Mariwa (D202)	60.0	4,561.5
Kitale - Endebes - Suam.....	48.0	4,475.0
Uplands - Githunguri road.....	47.0	3,988.1
Chebilat - Ikonge - Chabera (C750).....	35.0	3,109.8
Port Reitz/Moi International Airport (C110).....	9.0	2,797.8
Rumuruti - Maralal Road (C77)	35.0	2,740.8
OljoOrok - Dundori (C83) Road.....	35.0	1,911.1
Siaya - Ruambwa Road (C29)	26.0	1,908.5
Karen round- about.....	4.4	585.9
Northern and Eastern By-passes.....	51.6	90.9
Gitaru road - Kirawa rd - Peponi rd- Kiambu Road- Runda Road -Northern By Pass-Wangige road- (Rironi)	119.5	69.6
Pangani-Wakulima RA-Dagoreti corner- Dagoreti corner-Ngong town/ Junction A8 (ABC place)-Junction A8(GPO)-Kenya Avenue- Junction Moi Avenue	38.5	62.9
Donholm RA- road/ Junction UCB3 (Traffic police)- (Bunyala RA)/ Junction A8 (General Motors)-Enterprise road-Commercial street-Bunyala road-	37.0	59.4
Casuarina Road.....	28.7	54.5
Western Link Roads, Mbagathi Way, Dennis Pritt, State House Road, Jakaya Kikwete, State House Avenue and Lenana Road	24.0	46.8
Msabaha-Serengeti, Kakuyuni-Gede-Watamu, Jilore-Sita Centre, Kakayuni-Gede-Watamu	46.8	38.0
Junction (Magadi Road)-Junction UCB2 (Langata Road)-Junction UCB3(Ngong Road)./ Junction UCB2 - Langata South rd - Ushirika rd - Gataka rd - Matasi rd- Junction Ngong - Kiserian Road./ Junction Langata south - Kipevu rd - Banda lane- Junction Magadi Road (Banda school)	26.5	36.9
Nyayo stadium - Karen Round About- Kikuyu road-Muthiga.....	28.0	35.3
Mkunumbi - Kaloleni, Bomani - Telelani ECD, Lake Amu - Kiogwe - Mkunumbi-Magogoni ...	51.0	31.1
Tsavo N.Park- Shasha-Shelembe-Mkwachunyi-Ikanga Adult Centre- Mkwachunyi-Tausa-Mariwenyi-Gimba Primary-Voi Town-Birikani	38.8	29.7
Routine Maintenance of Nakuru Roads In Nakuru County-Nakuru Municipality Roads (Lot 2- All)	18.7	26.6
Kehanacha-Kegonga-Ntimaru.....	22.5	17.7
Kidunguni - Youngstar - Likoni, A14 - Emmanuel Junior School, A14 - Ferry, Kidunguni - Base Titunium, A14 - Ferry, Shelly Beach Road, Mtongwe - Navy Road	25.6	17.6
Nairobi Outering Road Improvement Project.....	13.0	7,395.2
Devki-Kinanie road.....	22.4	10.0
Sub-Total	1,547.6	103,262.2

Source: KeNHA & KURA

Table 11.12 - Major Road Works in Progress in 2017 Cont'd

Activity	Length (Km)	Contract Amount (KSh Million)
Roads Rehabilitation & Upgrading		
James Gichuru - Rironi.....	119.5	16,366.6
Kisii – Ahero –Isebania (A1) Lot 2: Kisii - Ahero.....	192.0	9,467.0
Kisii – Ahero –Isebania (A1) Lot 1: Isebania - Kisii.....	184.0	8,597.8
Lokitaung Junction - Kalobeiyei River.....	80.0	8,456.3
Lodwar - Lokitaung Junction.....	80.0	8,333.9
Kisumu - Kakamega Road.....	42.0	7,961.5
Kalobeiyei River - Nadapal.....	88.0	7,856.1
Loichangamatak - Lodwar.....	50.0	6,782.4
Mombasa – Kwa Jomvu Rd (A109).....	40.0	6,016.9
Bachuma Gate - Maji ya Chumvi.....	53.4	4,986.2
Kakamega - Kaburengu (Webuye) New.....	40.0	4,168.7
Kisumu Boys - Mamboleo.....	9.2	2,565.1
Phase one of Ngong Road expansion.....	9.8	1,300.0
Kainuk Bridge.....	-	1,539.0
Interchanges¹		
Construction of 3 interchanges at Nakuru.....	-	2,690.0
Interchange at Kericho (B1/C23).....	-	671.9
Interchange at Ahero (A1/B1).....	-	655.9
Sub-Total	987.9	98,415.2
Total	2,535.5	201,677.4

Developments 11.16. In 2017, the first phase of construction of the single-track Standard Gauge Rail (SGR) from Mombasa to Nairobi was completed. The first commuter train, Madaraka Express, was launched on 31st May 2017. Construction work for the second phase of SGR (Phase 2A) that runs 120 kilometres from Nairobi to Naivasha commenced in September 2017. The construction work will cost KSh 155.5 billion and is expected to be completed within 18 months. Construction works include; a 5.3 kilometre tunnel, 9 super bridges rising up to 58 metres, and construction of 4 tunnels covering 7.756 kilometres.

11.17. The construction of a 70-floor building which is expected to be the tallest in Africa started in 2017 and is estimated to cost KSh 20.1 billion on completion. In addition, by December 2017, there were five ongoing housing projects in Machakos, Nairobi and Mombasa Counties. These projects are expected to provide an additional 450 housing units upon completion, at an estimated cost of KSh 2.0 billion.

Tourism Sector

Chapter 12

Overview

The tourism sector recorded improvements during the year under review despite a prolonged electioneering period and negative travel advisories issued by some countries. Improved performance of the sector was supported by enhanced security, and aggressive promotion in both the domestic and the international markets. Receipts from the sector increased significantly by 20.3 per cent from KSh 99.7 billion in 2016 to KSh 119.9 billion in 2017. This was attributed to the increase in the number of international visitor arrivals that rose by 8.1 per cent from 1,339.7 thousand in 2016 to 1,448.8 thousand in 2017.

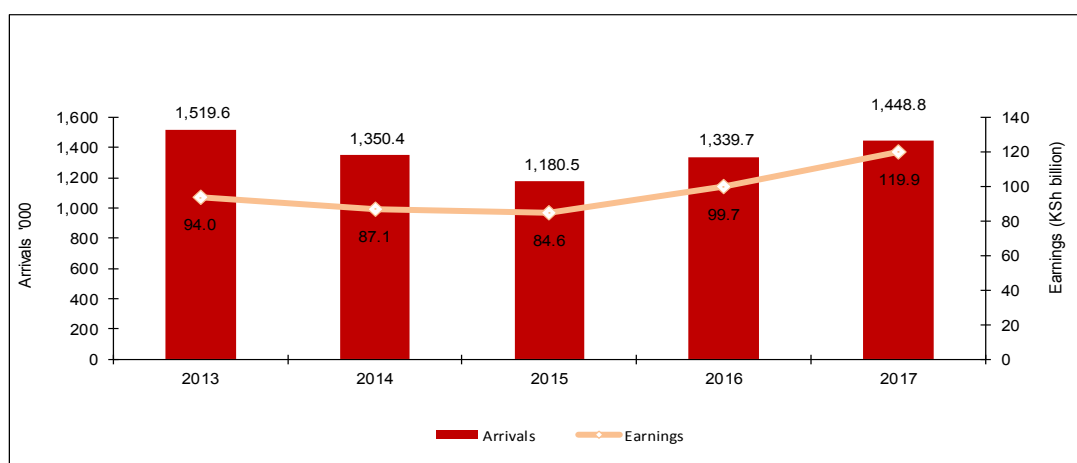
12.2. Hotel bed-nights occupancy increased by 11.3 per cent from 6,448.5 thousand in 2016 to 7,174.2 thousand in 2017. The number of international conferences held contracted by 15.9 per cent from 227 in 2016 to 191 in 2017. On the other hand, local conferences held increased by 2.4 per cent from 3,755 in 2016 to 3,844 in 2017.

12.3. The number of visitors to national parks and game reserves rose by 2.6 per cent to 2,345.2 thousand in 2017. However, visitors to museums, snake parks and historical sites decreased by 15.3 per cent to 782.0 thousand in 2017 from 923.1 thousand in 2016.

Visitor Arrivals

12.4. International visitor arrivals and tourism earnings continued on the recovery path witnessed since 2016 as shown in Figure 12.1. The recovery was associated with measures put in place by the Government in the sector that resulted in tourist arrivals going up by 8.1 per cent to 1,448.8 thousand in 2017. Consequently, earnings rose by 20.3 per cent from KSh 99.7 billion in 2016 to KSh 119.9 billion in 2017.

Figure 12.1: Trends in International Visitor Arrivals and Tourism Earnings, 2013 – 2017



12.5. Figures 12.2(a) and 12.2(b) present monthly visitor arrivals through Moi International Airport (MIA) and Jomo Kenyatta International Airport (JKIA), respectively, in 2016 and 2017. The number of tourists who arrived through MIA grew by 8.0 per cent from 92.9 thousand in 2016 to 100.3 thousand in 2017. Similarly, arrivals through JKIA expanded by 10.6 per cent from 781.5 thousand in 2016 to 864.0 thousand in 2017. The highest number of arrivals at MIA were registered in December 2017 while at JKIA the peak was recorded in July 2017. Generally, month on month analysis revealed that arrivals in the two international airports were higher in most of months of 2017 compared to 2016.

Figure 12.2(a): Monthly International Visitor Arrivals through MIA, 2016 -2017

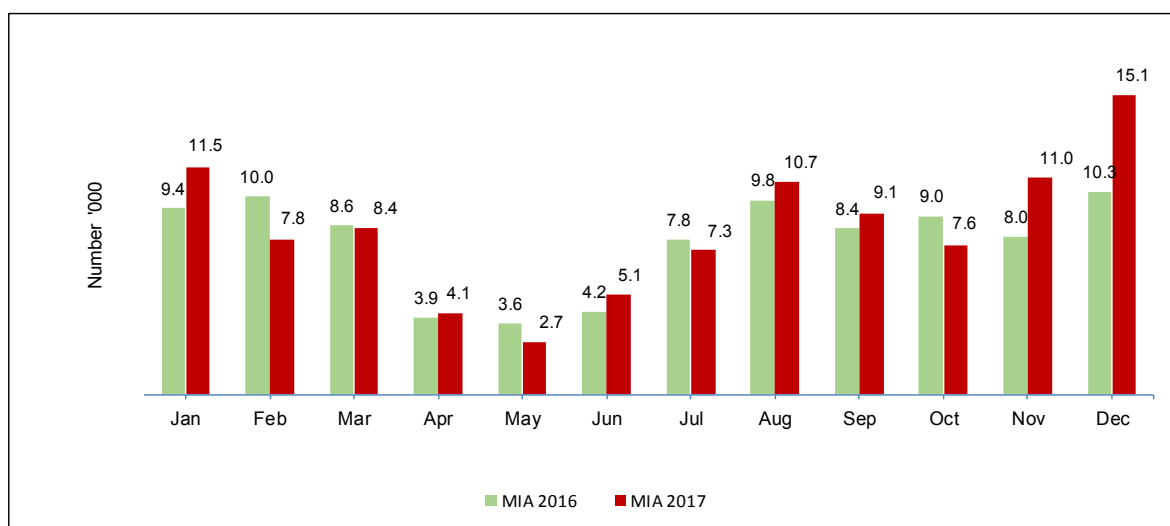
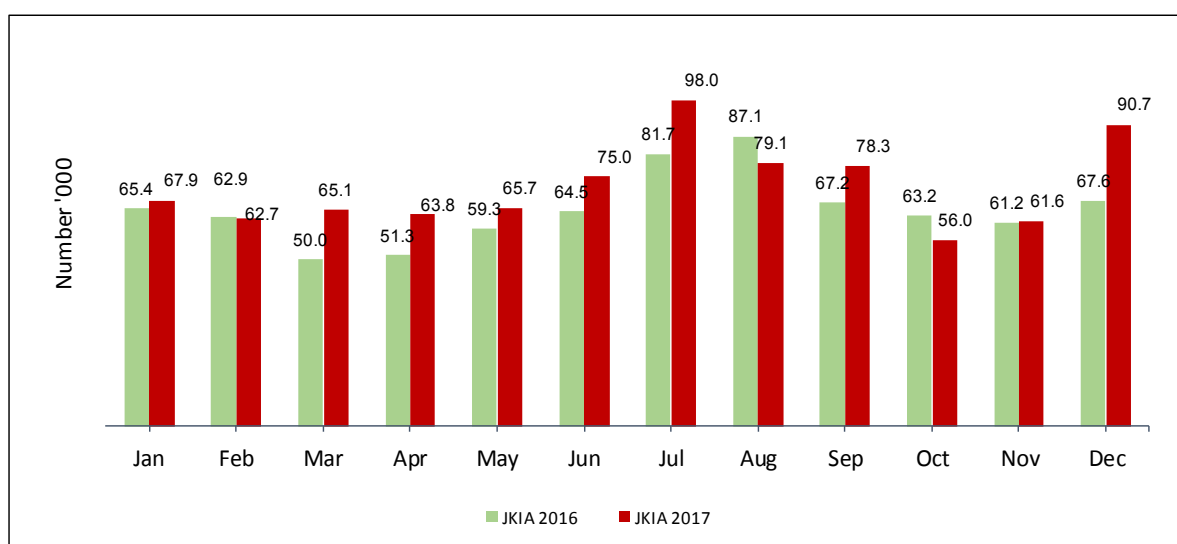
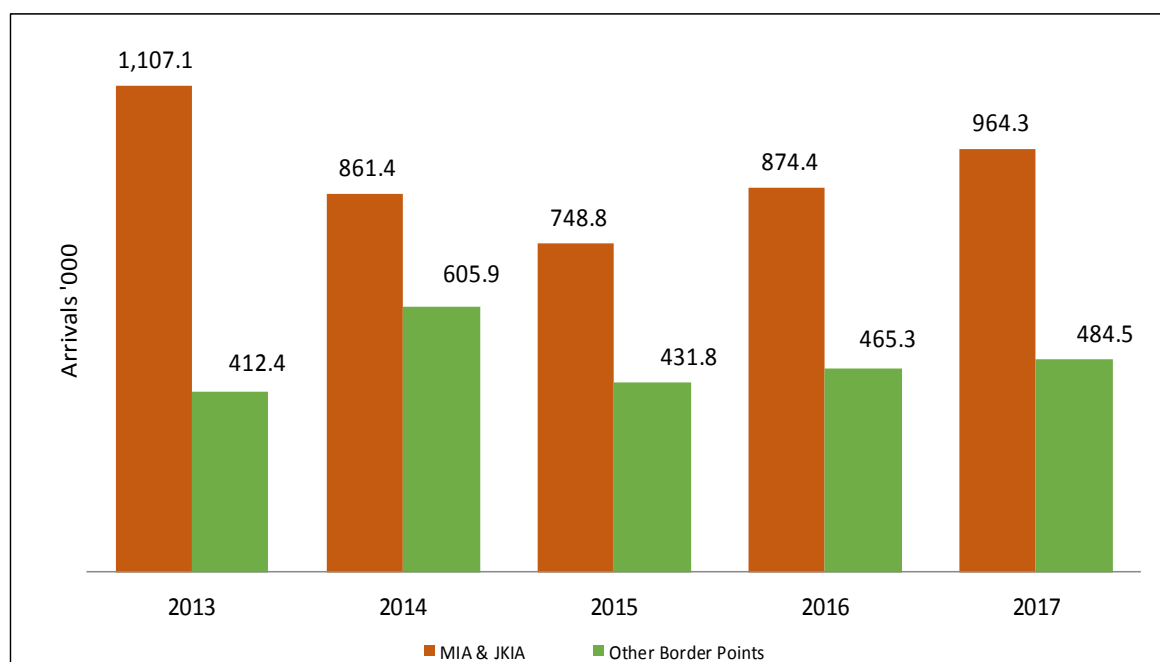


Figure 12.2(b): Monthly International Visitor Arrivals through JKIA, 2016 -2017



12.6. A comparison of international visitor arrivals through both MIA and JKIA to those through other border points from 2013 to 2017 is shown in Figure 12.2(c). The visitor arrivals through both MIA and JKIA grew at a faster rate of 10.3 per cent compared to a rise of 4.1 per cent for the other border stations during the review period. Despite the observed growth, the combined total number of visitor arrivals in 2017 was below the 2013 levels.

Figure 12.2(c): Number of International Visitor Arrivals through MIA and JKIA, and Other Border Points, 2013 -2017



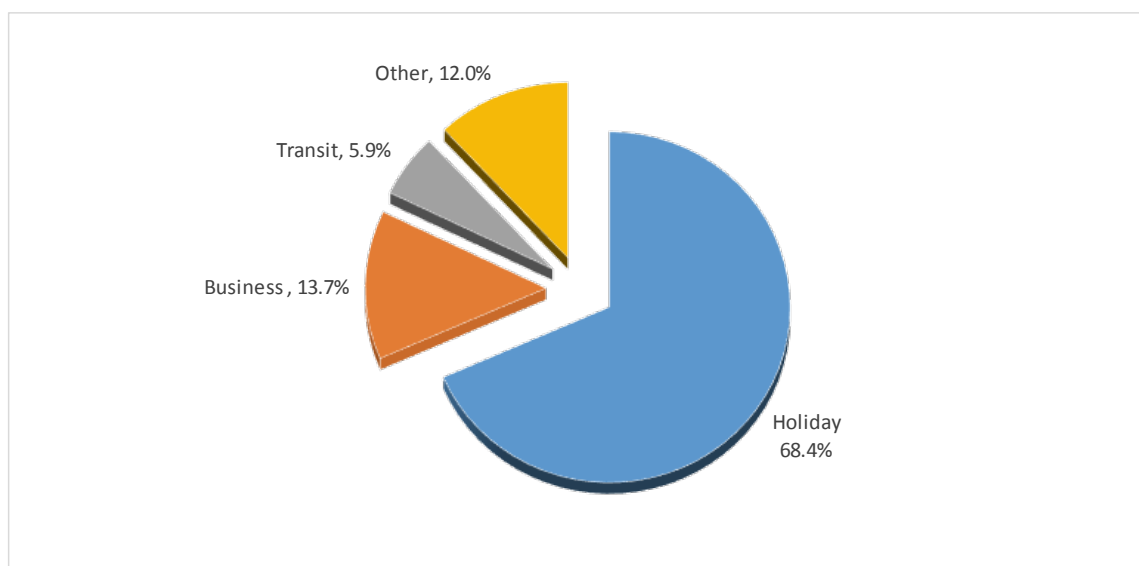
12.7. The number of international arrivals by purpose of visit and by quarter for the period 2013 to 2017 is shown in Table 12.1. Generally, these arrivals went up in all the quarters in 2017 compared to 2016. This growth was more pronounced in the second quarter, increasing by 15.5 per cent to 340.5 thousand in 2017. This was followed by the fourth quarter where the arrivals rose by 6.8 per cent from 343.3 thousand in 2016 to 366.8 thousand in 2017. Visitors who came for holiday, business and transit recorded declines during the third and fourth quarters of 2017. This could be attributed to uncertainties associated with the 2017 general elections. The number of visitor arrivals on holiday accounted for 68.4 per cent of all international arrivals in 2017, followed by business at 13.7 per cent as depicted in Figure 12.2(d). However, the share of holidaymakers was lower in 2017 compared to the previous year.

Table 12.1: International Visitor Arrivals by Purpose of Visit, 2013-2017

		'000				
Quarter	Purpose	2013	2014	2015	2016	2017*
1 st Qtr.	Holiday	257.6	266.2	210.1	231.3	243.4
	Business.....	45.9	50.1	41.3	41.5	56.2
	Transit	22.5	28.5	18.2	16.9	20.3
	Other	30.5	37.1	23.5	27.3	17.0
	TOTAL	356.4	382.0	293.1	317.0	336.9
2 nd Qtr.	Holiday	222.0	207.0	171.8	199.4	226.2
	Business.....	47.3	38.5	42.5	45.1	52.3
	Transit	21.8	22.9	14.3	18.4	35.3
	Other	39.5	24.2	30.7	31.9	26.8
	TOTAL	330.6	292.5	259.3	294.8	340.5
3 rd Qtr.	Holiday	284.2	267.9	231.4	278.3	274.0
	Business.....	41.7	43.0	37.2	53.4	51.6
	Transit	20.8	22.2	19.6	17.4	15.3
	Other	35.5	36.7	34.0	35.6	63.6
	TOTAL	382.2	369.8	322.1	384.6	404.5
4 th Qtr.	Holiday	340.1	235.7	231.5	253.6	248.0
	Business.....	55.3	35.3	37.5	40.0	38.6
	Transit	21.1	15.5	14.3	18.8	14.1
	Other	34.0	19.5	22.6	30.8	66.0
	TOTAL	450.4	306.1	306.0	343.3	366.8
Annual	Holiday	1,103.8	976.9	844.8	962.6	991.7
	Business.....	190.2	166.9	158.6	180.0	198.7
	Transit	86.1	89.2	66.4	71.5	84.9
	Other	139.5	117.5	110.7	125.6	173.5
	TOTAL	1,519.6	1,350.4	1,180.5	1,339.7	1,448.8

* Provisional

Figure 12.2(d): International Visitor Arrivals by Purpose of Visit, 2017



Visitor Departures

12.8. The total number of international departures by purpose of visit and by quarter from 2013 to 2017 is shown in Table 12.2. The number of departing visitors rose from 1,341.2 thousand in 2016 to 1,396.5 thousand in 2017, representing a 4.1 per cent rise. Departures during the first, second and third quarters of 2017 went up by 6.4, 6.9 and 7.3 per cent, respectively, compared to corresponding periods of the previous year. However, the fourth quarter of 2017 recorded a decline of 3.8 per cent in visitor departures. This was because of reduced holiday departures in 2017.

Table 12.2: International Visitor Departures by Purpose of Visit, 2013-2017

		‘000				
Quarter	Purpose....	2013	2014	2015	2016	2017*
1 st Qtr.	Holiday	264.0	234.6	222.9	215.1	223.9
	Business ...	51.7	53.6	43.8	51.2	54.9
	Transit	21.4	33.7	19.3	23.2	25.6
	Other	33.8	40.1	24.9	32.7	38.6
	TOTAL.....	370.9	362.0	310.9	322.2	342.9
2 nd Qtr.	Holiday	206.8	205.6	211.4	210.3	222.8
	Business ...	57.1	45.6	52.3	47.6	49.6
	Transit	17.3	23.7	17.6	19.4	24.9
	Other	26.8	37.0	37.7	33.6	35.3
	TOTAL.....	308.0	312.0	319.1	311.0	332.6
3 rd Qtr.	Holiday	265.7	244.9	257.9	251.7	246.6
	Business ...	40.5	45.7	44.7	50.2	58.3
	Transit	20.2	24.4	23.5	16.3	26.2
	Other	44.4	40.4	60.8	43.5	56.9
	TOTAL.....	370.7	355.4	386.9	361.7	388.0
4 th Qtr.	Holiday	323.3	260.3	250.1	260.8	234.3
	Business ...	53.0	48.1	40.6	40.4	46.6
	Transit	23.2	25.7	15.5	19.0	21.8
	Other	32.6	40.1	24.4	26.1	30.3
	TOTAL.....	432.1	374.3	330.6	346.3	333.0
Annual	Holiday	1,059.8	945.5	942.4	937.9	927.6
	Business ...	202.3	193.0	181.4	189.3	209.4
	Transit	82.1	107.6	75.9	78.0	98.5
	Other	137.6	157.6	147.9	136.0	161.1
	TOTAL.....	1,481.8	1,403.7	1,347.6	1,341.2	1,396.5

* Provisional

12.9. Table 12.3 presents the number of departing visitors by country of residence and by purpose of visit, excluding visitors whose purpose of visit was “Other”. Residents of Germany and United Kingdom jointly accounted for over half of all the departing residents of Europe. Departing residents of Canada and Switzerland recorded the highest growths of 29.6 and 26.4 per cent, respectively, in 2017. Departures by residents of African countries decreased by 8.4 per cent to 285.0 thousand in 2017. Similarly, departing residents of Tanzania declined by 21.8 per cent over the review period.

Table 12.3: Departing Visitors by Country of Residence and by Purpose of Visit¹, 2015-2017

Country of Residence	Holiday			Business			Transit			Total		
	2015	2016	2017*	2015	2016	2017*	2015	2016	2017*	2015	2016	2017*
Germany	79.3	81.0	83.8	9.1	9.3	9.7	4.8	5.0	5.3	93.3	95.2	98.8
United Kingdom	132.2	129.6	124.9	28.0	25.8	29.9	10.0	11.3	13.2	170.1	166.7	168.0
Switzerland	11.3	9.3	10.9	2.1	1.8	2.1	0.9	1.9	3.2	14.3	12.9	16.3
Italy	40.4	42.3	45.5	7.5	7.4	8.0	3.1	4.0	4.3	51.1	53.7	57.9
France	21.3	23.2	24.2	4.0	4.3	4.5	1.7	2.2	2.9	27.0	29.8	31.5
Scandinavia	31.3	33.1	34.1	5.8	6.0	6.1	2.4	3.0	5.1	39.5	42.1	45.4
Other Europe	65.6	70.3	74.7	14.0	16.1	18.0	5.9	6.0	6.7	85.5	92.5	99.4
TOTAL EUROPE	381.5	388.7	398.2	70.5	70.7	78.4	28.8	33.4	40.7	480.7	492.8	517.3
USA	116.8	118.3	120.1	15.5	17.4	18.9	8.4	8.6	9.4	140.8	144.4	148.4
Canada	22.5	19.4	24.4	4.7	4.3	5.4	1.7	1.2	2.6	28.9	25.0	32.4
TOTAL NORTH AMERICA	139.3	137.7	144.5	20.2	21.8	24.3	10.1	9.9	11.9	169.6	169.3	180.7
Uganda	37.5	39.3	39.9	9.4	9.6	9.8	3.0	4.0	6.1	49.8	53.0	55.8
Tanzania	23.1	26.0	19.4	4.4	5.0	4.5	1.8	2.0	1.8	29.3	33.0	25.8
Other Africa	191.0	177.1	149.0	36.0	39.8	41.5	15.1	8.1	13.0	242.1	225.0	203.5
TOTAL AFRICA	251.7	242.5	208.3	49.7	54.5	55.8	19.8	14.1	20.9	321.2	311.1	285.0
India	63.6	65.3	68.8	12.0	13.9	18.9	5.0	5.2	7.0	80.6	84.4	94.7
Japan	8.3	8.5	8.9	1.6	1.7	2.0	0.7	1.2	1.4	10.5	11.4	12.2
Israel	3.0	2.7	2.4	2.6	2.3	2.0	0.2	1.0	0.9	5.8	5.9	5.2
Other Asia	62.3	60.7	59.6	17.7	17.3	18.1	4.9	7.7	8.1	84.9	85.8	85.8
TOTAL ASIA	137.2	137.2	139.6	33.9	35.2	41.0	10.8	15.1	17.4	181.9	187.5	198.0
Australia and New Zealand	18.3	20.2	23.8	3.4	3.2	4.4	1.4	2.5	3.4	23.2	25.9	31.7
All Other Countries	14.4	11.7	13.1	3.7	3.9	5.4	4.9	3.0	4.1	23.0	18.6	22.6
TOTAL	942.4	937.9	927.6	181.4	189.3	209.4	75.9	78.0	98.5	1,199.7	1,205.2	1,235.4

* Provisional

¹Excludes visitors whose purpose of visit is "Other"

12.10. Details of the number of visitor-days stayed by purpose of visit together with average length of stay are shown in Table 12.4. The total number of days stayed by all categories of departing visitors excluding "Other" visitors expanded marginally from 15,884.6 thousand in 2016 to 16,057.6 thousand in 2017. However, the average length of stay dropped slightly to 13.0 days in 2017 from 13.2 days in 2016.

Table 12.4: Number of Visitor-Days Stayed¹ by Purpose of Visit, 2013-2017

Purpose					
	2013	2014	2015	2016	2017*
Holiday	14,881.8	13,276.2	13,232.9	13,170.5	13,025.1
Business	2,691.6	2,568.1	2,413.7	2,518.6	2,785.5
Transit	205.9	270.0	190.3	195.5	247.0
TOTAL	17,779.3	16,114.3	15,837.0	15,884.6	16,057.6
Average length of stay in days	13.2	12.9	13.2	13.2	13.0

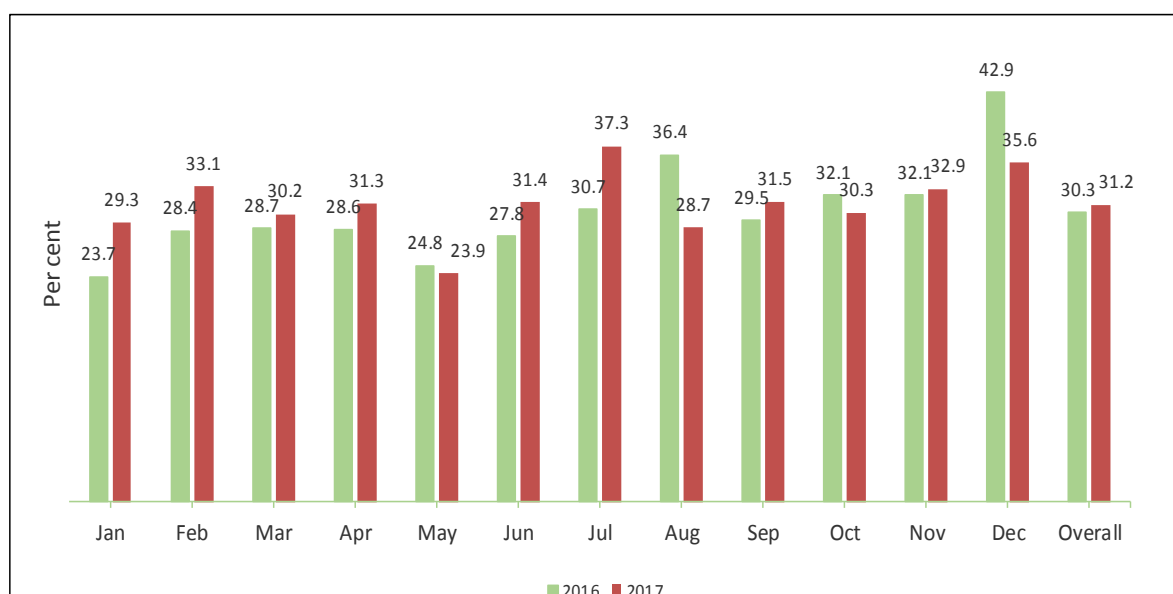
* Provisional

¹Excludes visitors whose purpose of visit is "Other"

Hotel Occupancy by Country of Residence

12.11. Trends in the monthly bed occupancy rates are depicted in Figure 12.3. The overall rate of bed occupancy increased from 30.3 per cent in 2016 to 31.2 per cent in 2017. Bed occupancy rates in July, August and December had higher disparity in 2017 compared to 2016. Bed occupancy rates in May and November were almost the same in 2017 and 2016. The peak in bed occupancy was recorded in July at 37.3 per cent followed by December at 35.6 per cent in 2017. This was in contrast with 2016 where the peak bed occupancy was in December at 42.9 per cent.

Figure 12.3: Monthly Bed Occupancy Rates, 2016-2017



12.12. The number of bed-nights occupied in hotels, lodges and other rooming houses grew by 11.3 per cent from 6,448.5 thousand in 2016 to 7,174.2 thousand in 2017 as presented in Table 12.5. Bed occupancy by residents of Europe went up by 13.1 per cent in 2017. Among the European residents, bed occupancy by the residents of Switzerland recorded the highest increase of 23.9 per cent from 63.2 thousand in 2016 to 78.3 thousand in 2017, followed by residents of United Kingdom at 22.2 per cent from 211.6 thousand in 2016 to 258.6 thousand in 2017. The bed occupancy by residents of Africa grew by 3.6 per cent to 4,091.1 thousand in 2017 with the highest increase of 25.9 per cent coming from residents of North Africa. However, residents of Tanzania, South Africa and Uganda dropped in number of hotel bed-nights occupancy. Occupancy by Asian residents grew by 27.3 per cent from 386.2 thousand in 2016 to 491.8 thousand in 2017 with Chinese residents increasing by 45.8 per cent from 131.9 thousand in 2016 to 192.3 thousand in 2017 to continue being the majority. Kenyan residents occupied more than a half of the total bed-nights, in 2017, reflecting the importance of domestic tourism. The number of hotel bed-nights capacity grew by 8.1 per cent from 21,258.5 thousand in 2016 to 22,987.1 thousand in 2017, mainly on account of expansion and refurbishment of existing facilities and construction of new ones during the period under review, an indication of continued confidence in the sector. Similarly, the proportion of bed-nights occupied to the available capacity increased from 30.3 per cent in 2016 to 31.2 per cent in 2017.

Table 12.5: Hotel Bed-Nights Occupancy by Country of Residence, 2013-2017

	'000				
Country of Residence	2013	2014	2015	2016	2017*
Permanent Occupants ¹ ...	57.6	98.7	102.3	87.0	127.5
Germany ...	751.1	751.7	617.9	685.4	762.7
Switzerland ...	96.9	82.1	80.2	63.2	78.3
United Kingdom ...	498.3	275.0	224.5	211.6	258.6
Italy ...	234.8	156.2	74.1	88.3	91.6
France ...	113.9	75.6	67.1	89.9	97.1
Scandinavia ...	143.5	120.0	71.9	76.5	80.1
Other Europe ...	482.2	341.5	240.4	344.4	395.6
EUROPE ...	2,320.6	1,802.2	1,376.1	1,559.3	1,764.1
Kenya Residents ...	2,699.1	2,948.7	3,154.1	3,495.9	3,645.1
Uganda ...	110.2	67.7	76.0	77.4	76.8
Tanzania ...	64.5	62.0	55.7	58.3	51.0
East and Central Africa ...	104.3	101.3	102.3	105.3	110.7
West Africa ...	63.3	68.0	60.7	59.3	67.0
North Africa ...	29.0	37.3	24.9	32.0	40.3
South Africa ...	91.1	75.2	88.0	70.6	65.5
Other Africa ...	37.5	37.0	57.7	49.8	34.6
AFRICA ...	3,199.0	3,397.2	3,619.3	3,948.5	4,091.1
U.S.A ...	294.6	293.9	248.5	254.3	287.3
Canada ...	61.8	59.9	46.4	43.3	54.6
Other America ...	36.8	35.2	37.0	25.6	39.4
AMERICA ...	393.3	389.0	331.9	323.2	381.3
Japan ...	48.1	38.9	33.3	39.1	42.4
India ...	101.1	110.3	115.1	120.3	165.1
Middle East ...	50.6	57.4	55.8	49.4	46.2
China ...	105.9	92.1	82.6	131.9	192.3
Other Asia ...	54.4	49.4	45.2	45.5	45.9
ASIA ...	360.1	348.1	332.1	386.2	491.8
Australia and New Zealand ...	62.3	58.4	44.3	46.9	71.1
All Other Countries ...	203.9	188.0	72.6	97.5	247.4
TOTAL-OCCUPIED ...	6,596.7	6,281.6	5,878.6	6,448.5	7,174.2
TOTAL-AVAILABLE ...	18,292.2	19,877.2	20,187.2	21,258.5	22,987.1
Occupancy Rate % ...	36.1	31.6	29.1	30.3	31.2

* Provisional

¹ Persons staying one month or more in one hotel, including some block bookings for air crew

12.13. Table 12.6 presents details of hotel bed-nights occupancy by zone for the period 2013 to 2017. The number of hotel bed-nights occupied by tourists staying in hotel establishments located at the Coastal Beach area experienced a growth of 16.8 per cent from 2,286.3 thousand in 2016 to 2,670.4 thousand in 2017. Occupancy in Coastal Other grew by 6.0 per cent to stand at 209.0 thousand over the review period. Similarly, occupancy in Nairobi High Class registered an 8.3 per cent growth from 1,076.3 thousand in 2016 to 1,165.5 thousand in 2017, partly attributed to growth in the number of local conferences held in the city during the electioneering period. Decreases of 9.3 and 2.1 per cent in hotel bed-nights were recorded in the Nyanza Basin and in the Coastal Hinterland zones, respectively, in 2017.

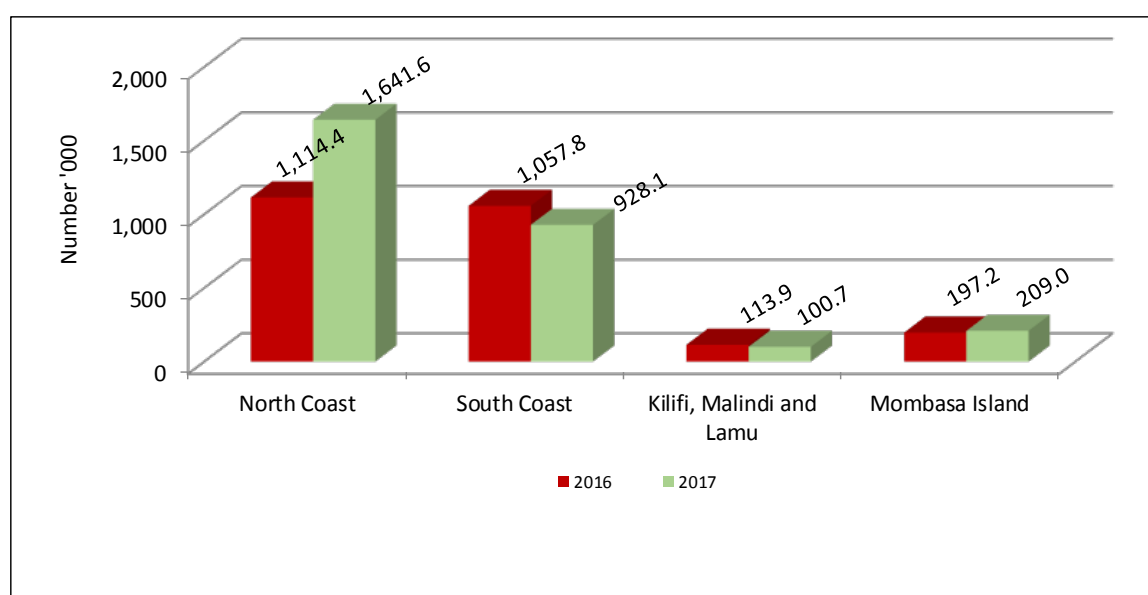
Table 12.6: Hotel Bed-Nights by Zone, 2013-2017

	'000				
Zone	2013	2014	2015	2016	2017*
Coastal Beach	2,750.3	2,527.7	2,113.8	2,286.3	2,670.4
Coastal Other	124.0	95.9	116.6	197.2	209.0
Coastal Hinterland	125.5	133.2	108.4	177.5	173.8
Nairobi High Class	1,175.3	1,119.1	1,014.9	1,076.3	1,165.5
Nairobi Other	455.7	388.0	378.0	445.1	507.3
Central	622.2	686.3	583.6	691.6	745.5
Masailand	473.0	479.5	491.6	655.5	732.1
Nyanza Basin	345.3	357.7	487.8	325.4	295.2
Western	454.1	433.3	448.8	493.6	572.0
Northern	71.2	60.9	135.1	100.0	103.3
TOTAL-OCCUPIED ...	6,596.7	6,281.6	5,878.6	6,448.5	7,174.2
TOTAL-AVAILABLE ...	18,292.2	19,877.2	20,187.2	21,258.5	22,987.1

* Provisional

12.14. The number of bed-nights occupied at the Coast by zone, excluding the Coastal Hinterland in 2016 and 2017 is illustrated in Figure 12.4. The North Coast continued to be the most preferred destination compared to the South Coast in 2017. Bed-nights occupancy in the North Coast rose from 1,114.4 thousand in 2016 to 1,641.6 thousand in 2017. Occupancy within Mombasa Island improved from 197.2 thousand bed-nights in 2016 to 209.0 thousand bed-nights in 2017. However, bed-nights occupancy in the South Coast dropped from 1,057.8 thousand in 2016 to 928.1 thousand in 2017. Occupancy in Kilifi, Malindi and Lamu have continued to remain low, dropping further during the review period.

Figure 12.4: Bed-Nights Occupancy at the Coast, 2016-2017



12.15. Table 12.7 presents the number of bed-nights occupied by area and by guests' country of residence. During the period under review, the share of hotel bed-nights occupied in lodges declined marginally from 11.7 per cent in 2016 to 11.6 per cent. The number of bed-nights occupied by residents of USA in lodges increased from 82.1 thousand in 2016 to 107.8 thousand in 2017. Similarly, the number of bed-nights occupied by Chinese residents in the lodges increased from 70.2 thousand in 2016 to 86.7 thousand in 2017. A notable improvement was recorded in the Coast region with local and Germany residents continuing to lead with 1,467.4 thousand and 685.3 thousand, respectively, in 2017. The percentage share of occupancy in Nairobi hotels declined marginally from 23.6 per cent in 2016 to 23.3 per cent in 2017.

Table 12.7: Hotel Bed-Nights Occupancy by Area and by Country of Residence, 2016-2017

Country of Residence	'000									
	Nairobi		Coast		Lodges ²		Others		Total	
	2016	2017*	2016	2017*	2016	2017*	2016	2017*	2016	2017*
Permanent Occupants ¹	10.7	7.2	12.0	50.1	2.1	2.6	62.2	67.6	87.0	127.5
Germany	31.4	31.1	615.2	685.3	29.8	34.3	9.0	12.0	685.4	762.7
Switzerland	8.4	10.0	45.8	55.8	5.9	6.8	3.1	5.7	63.2	78.3
United Kingdom	69.3	86.9	90.1	111.9	38.4	46.8	13.8	13.0	211.6	258.6
Italy	10.0	15.5	68.0	59.5	7.9	12.5	2.4	4.1	88.3	91.6
France	22.3	26.9	51.5	52.3	11.2	14.7	4.8	3.3	89.9	97.1
Scandinavia	20.6	22.8	35.0	31.4	13.5	19.4	7.5	6.5	76.5	80.1
Other Europe	84.9	85.6	199.7	248.4	48.7	46.4	11.1	15.2	344.4	395.6
Kenya	574.8	581.1	1,364.6	1,467.4	300.7	281.5	1,255.9	1,315.2	3,495.9	3,645.1
Uganda	46.5	43.2	14.4	21.1	1.5	1.4	15.0	11.1	77.4	76.8
Tanzania	38.3	33.8	10.7	11.1	2.2	1.1	7.0	5.0	58.3	51.0
East & Central Africa	86.9	88.7	12.8	15.9	0.9	2.2	4.6	4.0	105.3	110.7
West Africa	50.4	52.9	5.1	7.6	1.5	4.4	2.2	2.1	59.3	67.0
North Africa	26.1	33.5	2.6	3.5	1.3	2.6	1.9	0.7	32.0	40.3
South Africa	53.8	50.2	7.2	9.8	3.6	3.2	6.0	2.3	70.6	65.5
Other Africa	35.8	22.7	4.3	7.0	3.9	2.5	5.7	2.3	49.8	34.6
USA	127.5	121.3	21.3	31.3	82.1	107.8	23.4	26.8	254.3	287.3
Canada	18.6	25.4	6.9	7.5	14.3	17.3	3.6	4.5	43.3	54.6
Other America	10.4	18.2	3.3	5.8	8.3	10.3	3.5	5.1	25.6	39.4
Japan	19.4	19.8	2.9	5.3	9.5	11.1	7.4	6.1	39.1	42.4
India	44.0	71.9	19.0	17.4	41.9	53.6	15.3	22.2	120.3	165.1
Middle East	24.2	25.3	11.1	10.7	8.4	6.8	5.7	3.4	49.4	46.2
China	24.3	44.5	14.9	19.3	70.2	86.7	22.4	41.7	131.9	192.3
Other Asia	21.4	23.0	6.8	7.9	13.0	10.8	4.4	4.3	45.5	45.9
Australia & New Zealand	18.3	23.9	7.0	23.2	17.0	20.0	4.6	4.0	46.9	71.1
All Other Countries	42.9	107.6	28.9	87.0	17.7	28.6	8.0	24.2	97.5	247.4
TOTAL	1,521.4	1,672.8	2,661.1	3,053.3	755.4	835.4	1,510.6	1,612.7	6,448.5	7,174.2
PERCENTAGE SHARE	23.6	23.3	41.3	42.6	11.7	11.6	23.4	22.5	100.0	100.0

* Provisional

¹Persons staying one month or more in one hotel, including some block bookings for air crew²Lodges in National Parks and Game Reserves

12.16. As shown in Table 12.8, increased activities were recorded in accommodation facilities located in national parks as illustrated by the number of bed-nights occupied and type of catering offered. Bed-nights occupied in game lodges improved significantly from 755.4 thousand in 2016 to 835.4 thousand in 2017, representing 10.6 per cent rise. Occupancy in game reserves contracted to 334.6 thousand in 2017 mainly associated with reduced visitors to the Masai Mara game reserve. Over two thirds of total bed-nights occupied were by foreign residents that grew by 22.2 per cent to 551.4 thousand in 2017. Bed-nights occupied by East African residents declined from 304.4 thousand in 2016 to 284.0 thousand in 2017. The number of foreign residents that opted for full catering services increased from 382.3 thousand in 2016 to 493.2 thousand in 2017.

Table 12.8: Game Lodges¹ Occupancy, 2015 – 2017

	'000								
	Bed-Nights Occupied								
	Foreign Residents			E.A. Residents			Total		
	2015	2016	2017*	2015	2016	2017*	2015	2016	2017*
Game Reserves	117.3	176.5	170.4	175.7	187.7	164.2	293.0	364.2	334.6
National Parks	205.8	274.6	381.0	128.0	116.6	119.8	333.7	391.2	500.8
TOTAL	323.1	451.1	551.4	303.7	304.4	284.0	626.7	755.4	835.4
Of which full Catering	304.6	382.3	493.2	230.8	217.2	176.4	535.4	599.5	669.7
Self Service	18.5	68.7	58.2	72.8	87.2	107.6	91.3	155.9	165.8

* Provisional

¹Lodges in National Parks and Game Reserves

National Parks and Game Reserves 12.17. Table 12.9 presents the number of visitors to national parks and game reserves from 2013 to 2017. The number of visitors to these attraction sites rose by 2.6 per cent from 2,284.7 thousand in 2016 to 2,345.2 thousand in 2017. The number of visitors to the Impala Sanctuary, Nairobi Mini Orphanage, Lake Nakuru, Hell's Gate, Nairobi Safari Walk and Nairobi had over 150 thousand visitors each, jointly accounting for 55.9 per cent of all visitors to national parks and game reserves, in 2017. Visitors to Tsavo East recorded a significant growth of 42.1 per cent in 2017. However, the number of visitors to Lake Bogoria, Impala Sanctuary and Meru national parks declined by 25.6, 21.9 and 15.7 per cent, respectively, in the year under review. Other declines were recorded in the Nairobi Mini Orphanage, Masai Mara and Haller's Park.

Table 12.9: Number of Visitors to National Parks and Game Reserves, 2013-2017

	'000				
Park/Reserve	2013	2014	2015	2016	2017*
Nairobi	154.7	131.8	133.1	153.1	154.5
Nairobi Safari Walk	136.0	133.0	139.2	149.3	165.9
Nairobi Mini Orphanage ...	407.4	361.3	328.2	390.4	367.7
Amboseli	141.2	117.1	86.9	114.6	145.5
Tsavo (West)	68.8	51.0	31.8	50.2	55.3
Tsavo (East)	153.2	103.2	75.2	84.8	120.5
Aberdare	50.1	43.8	34.7	41.3	43.7
Lake Nakuru	262.5	226.0	188.9	214.7	216.0
Masai Mara	103.8	166.0	146.9	146.3	132.7
Haller's Park	121.5	116.2	115.4	121.1	117.9
Malindi Marine	41.9	28.9	29.3	31.5	31.6
Lake Bogoria	91.5	80.5	71.4	90.8	67.6
Meru	14.7	19.2	17.3	19.8	16.7
Shimba Hills	23.2	17.6	17.2	21.2	24.0
Mt. Kenya	24.6	20.2	18.5	19.1	20.2
Samburu	13.5	15.4	8.5	10.8	11.1
Kisite/Mpunguti	44.7	29.7	24.8	34.4	38.4
Mombasa Marine	36.8	27.4	26.2	29.5	32.2
Watamu Marine	35.1	31.3	24.3	33.9	43.5
Hell's Gate	89.0	114.1	120.2	154.4	206.5
Impala Sanctuary(Kisumu)	222.3	227.6	212.1	256.5	200.2
Mt. Longonot	43.6	50.7	53.3	64.5	88.0
Others ¹	57.5	52.6	49.5	52.6	45.6
TOTAL	2,337.7	2,164.6	1,952.8	2,284.7	2,345.2

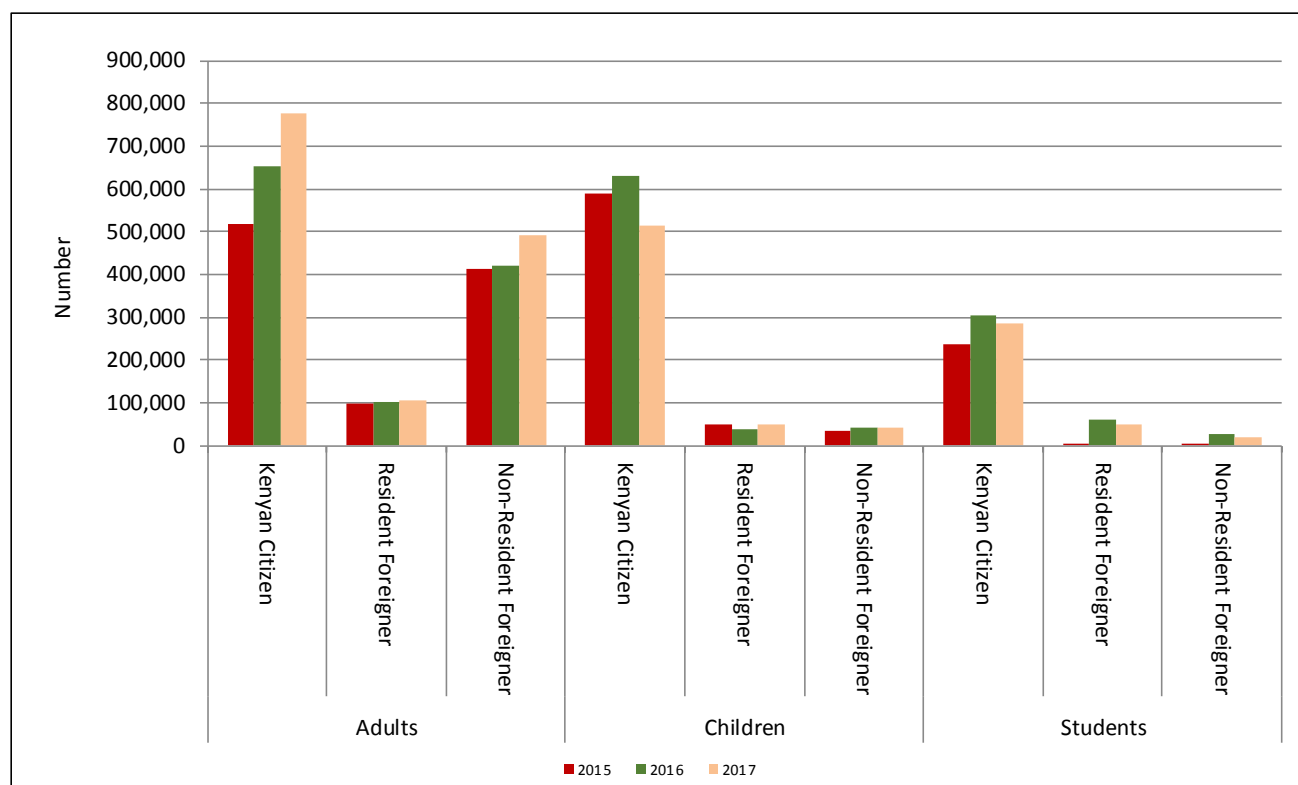
Source: Kenya Wildlife Services

* Provisional

¹ Others include Arabuko Sokoke, Ol-Donyo Sabuk, Marsabit, Saiwa swamp, Sibiloi, Bamburi, Chyulu, Ruma National Park, Mwea National Reserve, Central Island National Park, Kiunga, Mt.Elgon, Nasolot, Ndere and Kakamega.

12.18. Kenya citizens (adults and children) continued to constitute the largest number of visitors to national parks and game reserves in 2017 as presented in Figure 12.5. Among the non-residents, adults constituted the highest number of visitors to national parks and game reserves in 2017. However, the number of student visitors to the parks and game reserves contracted in 2017 compared to 2016.

Figure 12.5: Visitors to National Parks and Game Reserves, 2015-2017



Note: Residents refers to foreigners expecting and/or have stayed in Kenya for more than 12 months

Museums, Snake Parks and Historical Sites

12.19. The number of visitors to museums, snake parks and historical sites from 2013 to 2017 is shown in Table 12.10. The number of visitors to these attractions declined by 15.3 per cent from 923.5 thousand in 2016 to 782.0 thousand in 2017. Visitors to Kisumu and Nairobi National museums dropped by 35.7 and 20.0 per cent, respectively, during the year under review. However, visitors to Karen Blixen museum increased by 18.4 per cent to record 42.4 thousand visitors in 2017. Similarly, visitors to Kariandusi museum increased by 13.0 per cent from 12.3 thousand in 2016 to 13.9 thousand in 2017. The highest number of visitors to museums, snake parks and historical sites were recorded in July 2017 although August had the peak in 2016 as depicted in Figure 12.6.

Table 12.10: Number of Visitors to Museums, Snake Parks and Historical Sites, 2013-2017

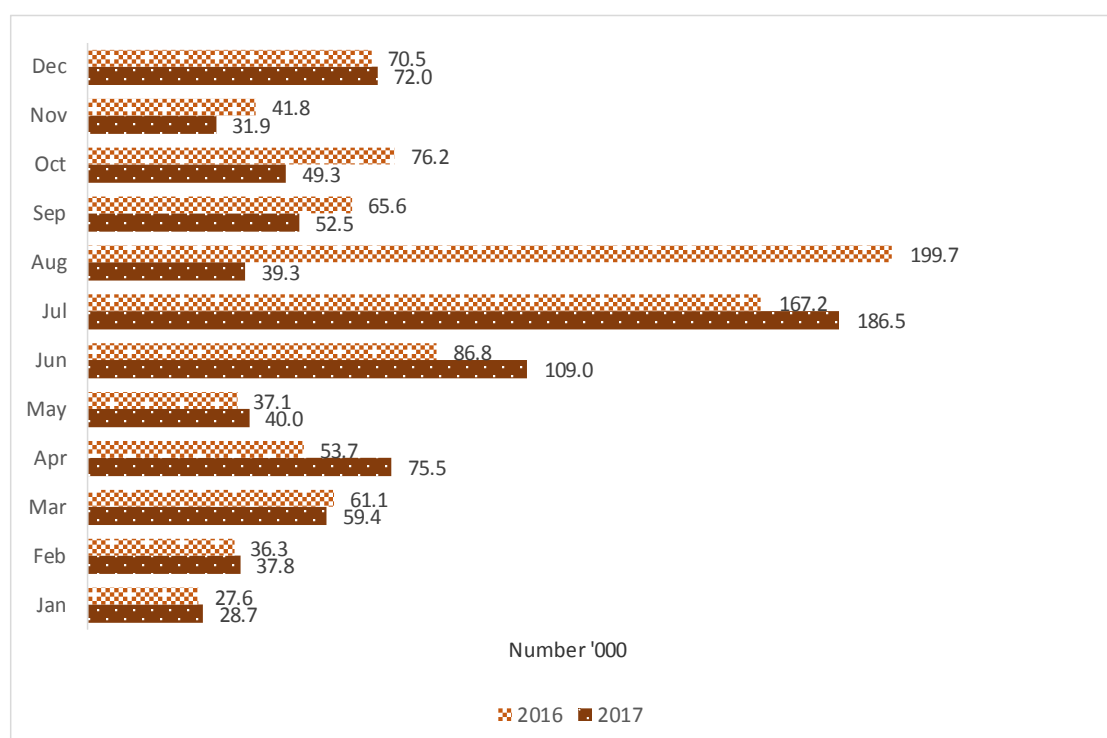
Name of Museums					
	2013	2014	2015	2016	2017*
Nairobi National	130.9	52.5	264.0	278.7	222.9
Nairobi Snake Park	94.8	33.0	24.0	26.1	28.7
Fort Jesus	152.1	113.4	121.3	150.5	130.5
Kisumu	151.2	219.4	210.6	199.2	128.1
Kitale	54.3	64.8	33.5	55.8	62.8
Gede	54.6	47.5	39.9	55.6	62.6
Meru	26.3	32.8	23.7	19.9	16.9
Lamu	2.8	1.7	1.5	2.7	2.9
Jumba la Mtwana	7.4	5.7	4.3	7.3	7.3
Ologessaile	..	2.7	1.1	0.4	2.0
Kariandusi	4.3	24.2	11.4	12.3	13.9
Hyrax Hill	5.9	11.6	8.7	29.1	20.7
Karen Blixen	44.7	45.2	25.9	35.8	42.4
Malindi	26.1	21.0	14.7	31.8	22.1
Kilifi Mnarani	0.8	2.5	1.2	0.8	1.9
Kabarnet	1.6	1.7	1.4	3.4	2.1
Kapenguria	8.7	9.7	7.3	12.4	11.5
Pete Sites	0.0	0.0	-	-	-
Swahili House	0.3	0.3	0.0	0.1	0.2
Narok	0.6	0.6	0.5	0.9	0.3
German Post	0.1	0.1	0.0	0.0	0.0
Takwa Ruins	0.6	0.6	0.2	0.4	1.4
Koobi Fora	0.0	..	..	..	..
Rabai	2.7	..	2.4	..	..
Thimlich Ohinga	0.1	..	..	..	..
Lamu Port	..	..	..	0.4	0.9
TOTAL	770.8	690.9	797.5	923.5	782.0

Source: National Museums of Kenya

* Provisional

.. Data not available

Figure 12.6: Monthly Number of Visitors to Museums, Snake Parks and Historical Sites, 2016-2017



Conference Tourism 12.20. Indicators on conference tourism for the period 2015 to 2017 are presented in Table 12.11. The number of international conferences and delegates declined by 15.9 and 36.8 per cent, respectively, in 2017. This was attributable to prolonged political activities that hindered smooth operations in international conference tourism. In addition, the regular travel advisories issued by some source markets also lowered the momentum of incoming international delegates. On the contrary, local conferences and delegates increased by 2.4 and 17.1 per cent, respectively, in 2017, partly on account of numerous political strategy activities held in the review period. Conference capacity utilization dropped from 11.6 per cent in 2016 to 11.5 per cent in 2017.

Table 12.11: Indicators on Conference Tourism, 2015-2017

	2015		2016		2017*	
	Local	International	Local	International	Local	International
No.of conferences	3,199	218	3,755	227	3,844	191
No.of delegates	465,116	71,620	532,674	101,599	623,749	64,167
No.of delegate days	561,374	124,633	634,234	166,802	693,159	120,348
No.of delegate days available	6,168,945	6,168,945	6,859,714	6,859,714	7,090,986	7,090,986
Percentage Occupancy	9.1	2.0	9.2	2.4	9.8	1.7

* Provisional

Training in Hospitality

12.21. The Kenya Utalii College (KUC) has continued to offer trainings to middle and high-level work force for the country's hospitality industry over the years. During the review period, the number of graduates who pursued various courses at KUC rose from 2,664 in 2016 to 2,861 as shown in Table 12.12. This was mainly attributed to an increase in the number of graduates who pursued refresher courses that grew by 11.5 per cent to 1,249. Similarly, graduates who pursued short courses rose by 8.7 per cent from 835 in 2016 to 908 in the review period.

Table 12.12: Kenya Utalii College Graduates, 2013-2017

Year	In- Service Courses		Professional Courses			Number
	Refresher Courses	MDP ¹	Regular Courses	Short Courses	Sub-Total	Grand Total
2013	1,450	252	541	758	1,299	3,001
2014	936	237	593	584	1,177	2,350
2015	813	258	517	736	1,253	2,324
2016	1,120	242	467	835	1,302	2,664
2017*	1,249	255	449	908	1,357	2,861

Source: Kenya Utalii College

* Provisional

¹MDP - Management Development Programmes

Chapter

13

Transport and Storage

Overview An efficient and effective transport system is a springboard for rapid and sustained economic development. During the period under review, the Government initiated a number of projects and programmes in the various transport sub-sectors including road, rail, air, maritime and non-motorised transport aimed at improving the transport system. Overall, the output of the transport and storage sector expanded by 8.8 per cent to KSh 1,115.7 billion in 2017. Output from road transport increased by 5.7 per cent to KSh 702.1 billion and accounted for 62.9 per cent of the total output in the sector in 2017.

13.2. Total cargo throughput handled at the Mombasa Port increased by 10.6 per cent from 27.4 million tonnes in 2016 to 30.3 million tonnes in 2017, with imports handled accounting for 84.6 per cent. Total import traffic handled at the Port grew by 10.8 per cent to 25.6 million tonnes while export traffic handled expanded by 2.7 per cent to 3.8 million tonnes in 2017. During the same period, the number of domestic passengers travelling by air declined by 0.7 per cent to 3,991.2 thousand passengers while international passengers increased by 6.0 per cent to 6,121.3 thousand passengers. The volume of white petroleum products transported through pipeline rose by 10.8 per cent from 5,557.9 thousand cubic metres in 2016 to 6,155.7 thousand cubic metres in 2017. At the same time, the number of reported road traffic accidents dropped by 15.9 per cent to 4,452.

Value of Output 13.3. Table 13.1 presents the value of output for the transport and storage sector from 2013 to 2017. Overall, the value of output for the sector expanded by 8.8 per cent from KSh 1,025.8 billion in 2016 to KSh 1,115.7 billion in 2017. The value of output from road transport increased by 5.7 per cent to KSh 702.1 billion, accounting for 62.9 per cent of the total output in the sector during the same period. Output from air transport sub-sector increased by 14.9 per cent to KSh 183.1 billion while that of services incidental to transport increased by 28.3 per cent to KSh 107.8 billion in the review period. On the other hand, output from the railway transport sub-sector declined by 8.8 per cent from KSh 5.7 billion in 2016 to KSh 5.2 billion in 2017.

Table 13.1: Transport and Storage - Value of Output, 2013 – 2017

	KSh Million				
	2013	2014	2015 ⁺	2016 ⁺	2017*
Road Transport	520,915	595,726	629,045	664,484	702,127
Railway Transport	4,849	5,357	6,282	5,662	5,202
Water Transport	36,537	49,840	55,712	60,845	63,823
Air Transport	131,456	139,912	147,447	159,319	183,033
Services incidental to Transport	51,930	54,097	68,246	83,996	107,841
Pipeline Transport	19,861	21,030	22,210	24,061	25,140
Postal & Courier Services	10,654	27,179	27,925	27,464	28,497
Total	776,202	893,141	956,867	1,025,831	1,115,665

* Provisional.

+ Revised

Road Transport

13.4. Details on road maintenance funds approved by Kenya Roads Board (KRB) from 2013/14 to 2017/18 are shown in Table 13.2. The disbursement of funds from KRB to various road agencies for maintenance of roads is projected to increase by 5.0 per cent from KSh 60.5 billion in 2016/17 to KSh 63.5 billion in 2017/18 mainly on account of the fuel levy. Collections from fuel levy are expected to increase by 5.0 per cent from KSh 60.0 billion in 2016/17 to KSh 63.0 billion in 2017/18 while those from transit toll are expected to reach KSh 474 million in 2017/18. The increase in fuel levy rate from KSh 12 per litre in June 2015 to KSh 18 per litre in June 2016 partly explains the increased collections from KSh 31.8 billion in 2015/16 to KSh 60.0 billion in 2016/17.

Table 13.2: Road Maintenance Funds, 2013/14 - 2017/18

	KSh Million				
	2013/14	2014/15	2015/16	2016/17*	2017/18**
Fuel Levy	24,725	25,461	31,823	60,000	63,000
Transit Toll	450	464	464	469	474
Total	25,175	25,924	32,287	60,469	63,474

Source: Kenya Roads Board

* Provisional.

** Estimates

13.5. Earnings from road traffic increased by 5.7 per cent from KSh 664.5 billion in 2016 to KSh 702.1 billion in 2017 as presented in Table 13.3. Earnings from freight traffic rose by 6.3 per cent to KSh 352.2 billion in 2017, while that from passenger traffic increased by 5.0 per cent to KSh 350.0 billion in the same period.

Table 13.3: Earnings from Road Traffic, 2013 - 2017

	KSh Million				
	2013	2014	2015	2016	2017*
Passenger Traffic	274,863	313,031	322,161	333,114	349,941
Freight Traffic ⁺	245,676	282,695	306,884	331,370	352,186
Total Road Traffic Earnings	520,539	595,726	629,045	664,484	702,127

* Provisional.

+ Revised

New Registration of Motor Vehicles and Motor Cycles 13.6. Table 13.4 presents the number of new registered motor vehicles and motor cycles for the period 2013 to 2017. During the review period, the number of units registered increased by 32.3 per cent from 213,715 in 2016 to 282,672 in 2017 mainly attributed to a surge in the number of motor cycle registrations.

Motor Vehicles

13.7. Registration of vehicles except station wagons and wheeled tractors continued on a downward trend since 2015 as presented in Table 13.4. However, the total number of newly registered motor vehicles increased by 895 units from 90,176 in 2016 to 91,071 in 2017. The number of newly registered station wagons increased by 19.9 per cent to 55,322 while wheeled tractors increased by 9.1 per cent to 2,703 in 2017. The number of newly registered saloon cars dropped by 8.9 per cent from 12,490 in 2016 to 11,376 in 2017. Similarly, the number of newly registered panel vans and pick-ups decreased by 22.4 per cent to 9,866 in 2017.

13.8. The number of newly registered lorries and trucks declined by 22.5 per cent from 9,632 in 2016 to 7,460 in 2017. Similarly, the number of newly registered buses and coaches decreased by 39.3 per cent to 1,072 units during the review period. The number of newly registered trailers fell from 2,829 in 2016 to 1,953 in 2017 while that of mini buses/matatus dropped by 11.6 per cent from 519 in 2016 to 459 in 2017.

Motor cycles

13.9. The number of newly registered motor cycles went up by 55.1 per cent from 123,539 units in 2016 to 191,601 units in 2017. This was occasioned by a 55.7 per cent rise in the number of registered motor and auto cycles over the review period. The number of newly registered three wheelers increased by 35.4 per cent from 3,815 units in 2016 to 5,167 units in 2017. The increased number of new registrations for motorcycles is partly explained by the removal of excise duty on motor cycle imports in September 2016.

Table 13.4: New Registration of Road Motor Vehicles and Motor Cycles, 2013 - 2017

Type of Vehicle/Motor Cycle	Number				
	2013	2014	2015	2016	2017*
Saloon Cars.....	16,343	15,902	14,369	12,490	11,376
Station Wagons.....	48,662	53,542	54,120	46,123	55,322
Panel Vans, Pick-ups, etc.....	9,819	12,568	13,878	12,722	9,866
Lorries/Trucks.....	9,570	10,681	13,785	9,632	7,460
Buses and Coaches.....	2,062	2,210	2,342	1,765	1,072
Mini Buses/Matatu.....	235	213	581	519	459
Trailers.....	3,973	2,925	3,905	2,829	1,953
Wheeled Tractors.....	1,902	2,032	2,259	2,478	2,703
Other vehicles.....	1,451	2,533	2,522	1,618	860
Total Motor Vehicles	94,017	102,606	107,761	90,176	91,071
Motor and Auto Cycles.....	125,058	111,124	134,645	119,724	186,434
Three Wheelers.....	3,103	4,327	4,775	3,815	5,167
Total Motor Cycles	128,161	115,451	139,420	123,539	191,601
Total Units Registered	222,178	218,057	247,181	213,715	282,672

Source: National Transport and Safety Authority

* Provisional.

Road Licenses 13.10. The number of PSV licenses issued by the National Transport and Safety Authority increased by 61.0 per cent from 33,349 in 2016 to 53,692 in 2017 as presented in Table 13.5. The number of PSV licenses issued to matatus more than doubled from 17,926 in 2016 to 37,382 in 2017 and constituted 69.6 per cent of all PSV licenses issued in the review period. The number of PSV licenses issued to buses increased by 67.3 per cent from 7,210 in 2016 to 12,064 in 2017. Passenger service vehicle licenses issued to mini buses almost halved from 8,213 in 2016 to 4,246 in 2017.

13.11. The number of driving licenses issued more than doubled from 123,386 in 2016 to 291,151 in 2017. Original driving licenses issued more than doubled to 219,333 and accounted for 75.3 per cent of the total driving licenses issued in 2017. Duplicate driving licenses increased substantially from 26,956 in 2016 to 70,689 in 2017. However, the number of foreign driving licenses issued declined by 61.1 per cent to 1,129 in 2017.

Table 13.5: Road Transport Licenses Issued, 2013 – 2017

Type of License	Number				
	2013	2014	2015	2016	2017*
PSV Licenses					
Matatus (0-14 seaters)...	9,545	15,936	17,138	17,926	37,382
Buses (34 and above seaters)...	3,792	5,155	6,182	7,210	12,064
Mini Buses ¹ (15-33 seaters)...	3,350	6,062	7,186	8,213	4,246
Total	16,687	27,153	30,506	33,349	53,692
Driving Licenses					
Original...	90,519	88,666	91,336	93,528	219,333
Duplicate...	23,069	24,563	25,854	26,956	70,689
Foreign...	2,671	2,737	2,826	2,902	1,129
Total	116,259	115,966	120,016	123,386	291,151

Source: National Transport and Safety Authority

* Provisional.

¹ Includes Tour Vans

Road Traffic Accidents 13.12. The number of reported road traffic accidents declined by 15.9 per cent from 5,296 in 2016 to 4,452 in 2017 as shown in Table 13.6 and Figure 13.1. Similarly, the number of reported casualties from the accidents decreased by 14.8 per cent from 13,159 in 2016 to 11,215 in 2017. Road traffic accident fatalities and persons seriously injured declined by 1.6 per cent to 2,919 and 15.4 per cent to 3,943 respectively, in 2017. The number of persons who were slightly injured declined by 21.3 per cent to 4,353 during the same period.

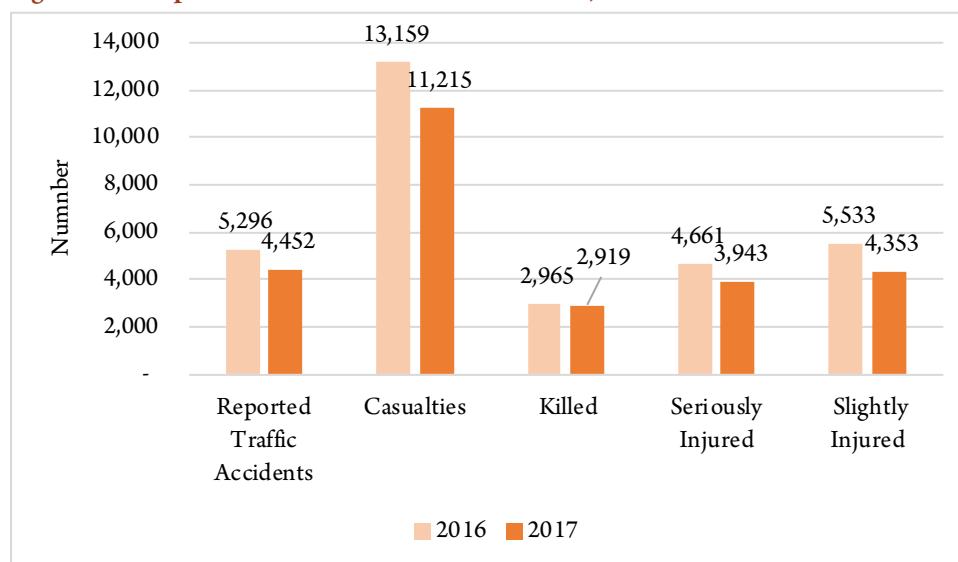
Table 13.6: Reported Road Traffic Accidents, 2013 - 2017

	Number				
	2013	2014	2015	2016	2017*
Total Number of Reported Traffic Accidents.....	6,205	5,672	5,310	5,296	4,452
Persons Killed or Injured:-	14,324	12,018	12,138	13,159	11,215
of which:					
Killed.....	3,191	2,907	3,057	2,965	2,919
Seriously Injured.....	6,299	5,140	4,731	4,661	3,943
Slightly Injured.....	4,834	3,971	4,350	5,533	4,353

Source: Kenya Police, Traffic Department

* Provisional.

Figure 13.1: Reported Traffic Accidents and Casualties, 2016 - 2017



Railway Transport 13.13. The performance of the railway transport sub-sector is presented in Table 13.7. Freight traffic decreased by 16.9 per cent from 1,380 thousand tonnes in 2016 to 1,147 thousand tonnes in 2017 due to operational challenges faced by Rift Valley Railways (RVR). Revenue from freight decreased by 37.5 per cent from KSh 4.8 billion in 2016 to KSh 3.0 billion in 2017. Passenger journeys increased by 10.8 per cent from 2,793 thousand in 2016 to 3,096 thousand in 2017. Earnings from passenger traffic increased more than five times from KSh 134 million in 2016 to KSh 700 million in 2017. The overall increase in passenger journeys and revenue from passenger service is mainly due to the Standard Gauge Railway (SGR) passenger service that commenced in the second half of 2017. The number of passengers handled by the SGR was 689,205 while revenue earned from the SGR passenger service stood at KSh 590.2 million at the end of 2017.

Table 13.7: Railway Traffic⁺, 2013 - 2017

	Unit	2013	2014	2015	2016	2017*
Freight:						
Tonnes.....	000	1,444	1,509	1,542	1,380	1,147
Tonne-km.....	Million	862	1,169	1,283	1,141	857
Revenue.....	KSh Million	4,638	5,195	6,183	4,793	3,001
Revenue per tonne-Km.....	KSh	5.38	4.44	4.82	4.20	3.50
Passenger:						
Journeys.....	000	3,785	3,715	2,288	2,793	3,096
Passenger-Km.....	Million	194	176	99	113	120
Revenue.....	KSh Million	181	162	98	134	700
Revenue per passenger-Km.....	KSh	0.93	0.92	0.99	1.18	5.84

Source: Kenya Railways Corporation

* Provisional

+ Revised

Water Transport 13.14. Total cargo throughput handled at the Mombasa Port increased by 10.6 per cent from 27.4 million tonnes in 2016 to 30.3 million tonnes in 2017, as shown in Table 13.8. The total number of vessels that docked at the Port increased by 10.0 per cent from 1,607 in 2016 to 1,767 in 2017. This resulted in a 9.0 per cent increase in the volume of container traffic handled to 1.2 million Twenty-foot Equivalent Units (TEUs) during the review period.

Table 13.8: Traffic Handled at Mombasa Port, 2013 – 2017

	Unit	2013	2014	2015	2016	2017*
Container Traffic	TEUs	894,000	1,012,002	1,076,118	1,091,371	1,189,957
Ships Docking	No.	1,768	1,832	1,694	1,607	1,767
Imports						
Dry General	000' DWT	7,700	8,354	9,099	8,992	9,505
Dry Bulk	"	4,913	5,231	6,350	6,447	7,920
Bulk Liquids	"	6,537	7,192	7,232	7,677	8,179
Total Imports	"	19,150	20,777	22,681	23,116	25,604
<i>Of which</i> Transit In	"	6,338	6,691	7,126	7,217	7,903
Motor Vehicles landed	No.	136,915	157,856	143,833	97,726	114,133
Exports						
Dry General	000' DWT	2,818	2,899	2,915	3,022	3,167
Dry Bulk	"	65	422	578	606	547
Bulk Liquids	"	100	45	40	51	80
Total Exports	"	2,983	3,366	3,533	3,679	3,794
<i>Of which</i> Transit Out	"	513	508	541	531	734
Total Imports and Exports	"	22,133	24,143	26,214	26,775	29,398
Trans-shipment	"	174	732	518	589	874
Grand Total	"	22,307	24,875	26,732	27,364	30,272

Source: Kenya Ports Authority

* Provisional.

DWT - Dead Weight Tonnes

13.15. The total import traffic handled grew by 10.8 per cent from 23.1 million tonnes in 2016 to 25.6 million tonnes in 2017. Imports of dry bulk cargo increased by 23.4 per cent from 6.4 million tonnes in 2016 to 7.9 million tonnes in 2017 while that of general dry cargo increased by 5.6 per cent to 9.5 million tonnes during the same period. The volume of bulk liquid imports increased by 6.5 per cent to 8.2 million tonnes in 2017. The number of motor vehicles landed increased by 16.8 per cent to 114,133 in 2017, reversing the observed declining trend in the last two years.

13.16. Total export traffic handled at the Port of Mombasa expanded by 2.7 per cent from 3.7 million tonnes in 2016 to 3.8 million tonnes in 2017. Dry general export cargo increased by 4.8 per cent to 3.2 million tonnes while dry bulk export cargo declined by 9.7 per cent to 0.5 million tonnes in 2017. There was however, a significant growth in the exports of bulk liquids from 51 thousand tonnes in 2016 to 80 thousand tonnes in 2017. The increase in liquid bulk exports was as a result of increased oil and gas exports and bunkering activities. The volume of trans-shipment cargo increased from 589 thousand tonnes to 874 thousand tonnes in 2017 mainly due to removal of trans-shipment bond requirements during the review period.

Pipeline Transport

13.17. Table 13.9 presents the volume of white petroleum products transported through pipeline for the period 2013 to 2017. Pipeline throughput rose by 10.8 per cent from 5,557.9 thousand cubic metres in 2016 to 6,155.7 thousand cubic metres in 2017. The volume of exports of white petroleum products rose by 6.9 per cent to 1,981.8 thousand cubic metres during the review period.

13.18. Throughput for domestic consumption increased by 3.9 per cent from 4,018.6 thousand cubic metres in 2016 to 4,173.9 thousand cubic metres in 2017. The volume of premium motor spirit transported for domestic consumption increased by 4.3 per cent from 1,177.6 thousand cubic metres in 2016 to 1,228.8 thousand cubic metres in 2017. During the review period, the volume of light diesel oil and jet fuel oil transported via the pipeline for domestic consumption increased by 5.1 per cent and 3.3 per cent, respectively. The volume of kerosene illuminating oil dropped slightly to 446.9 thousand cubic metres in 2017.

Table 13.9: Pipeline Throughput of White Petroleum Products, 2013 – 2017

	'000 Cubic Metres				
	2013	2014	2015	2016	2017*
Exports¹					
Motor Spirit (Premium)...	688.6	726.0	757.0	696.3	744.2
Kerosene Illuminating Oil...	86.1	75.8	70.1	66.2	60.4
Light Diesel Oil...	979.1	916.1	936.9	857.2	938.8
Jet Fuel...	198.3	267.6	262.4	234.6	238.4
Sub-Total	1,952.1	1,985.5	2,026.4	1,854.3	1,981.8
Domestic Consumption²					
Motor Spirit (Premium)...	897.5	1,028.8	1,103.4	1,177.6	1,228.8
Motor Spirit (Regular)...	1.3	-	-	-	-
Kerosene Illuminating Oil...	353.8	362.9	396.5	450.1	446.9
Light Diesel Oil...	1,174.0	1,314.2	1,372.6	1,537.4	1,616.4
Jet Fuel...	792.7	866.5	813.2	853.5	881.8
Sub-Total	3,219.3	3,572.4	3,685.7	4,018.6	4,173.9
Grand Total	5,171.4	5,557.9	3,712.1	5,557.9	6,155.7

Source: Kenya Pipeline Company

* Provisional.

¹ Exports in this table implies transit petroleum products destined to neighbouring countries and are different from exports reported in Chapter 6 : International Trade and Balance of Payments

² Excludes fuels transported by Kenya Railways or consumed in the Coastal region.

Note: The figures may differ from those in Chapter 9 (Energy) due to different definition and classification of throughput in the context of international trade. Furthermore Chapter 9 data are in '000 tonnes whereas conversion of cubic metres to tonnes varies with product.

Air Transport

13.19. **Passenger traffic:** Information on commercial passenger traffic by airport for the period 2013 to 2017 is presented in Table 13.10. The total number of passengers increased by 3.5 per cent from 9.8 million in 2016 to 10.1 million in 2017. During the review period, the number of domestic passengers handled was 3,991.2 thousand while that of international passengers was 6,121.3 thousand. International passenger arrivals increased by 7.0 per cent from 2.8 million in 2016 to 3.0 million in 2017 while international passenger departures increased by 6.8 per cent from 1.7 million in 2016 to 1.8 million in 2017. The number of international passengers on transit increased by 2.7 per cent from 1,217.8 thousand in 2016 to 1,251.3 thousand in 2017.

13.20. The number of passengers handled at Jomo Kenyatta International Airport (JKIA) increased by 2.2 per cent to 7.3 million in 2017 while those handled at Mombasa International Airport (MIA) remained at 1.2 million during the review period. The number of passengers handled in other airports increased from 1.4 million in 2016 to 1.6 million in 2017.

Table 13.10: Commercial Passenger Traffic¹ by Airport, 2013 - 2017

						'000 Number
Year	Category	Sub-Category	JKIA	MIA	Other Airports	Total Passenger Traffic
2013	Domestic	Arrivals	602.4	370.5	443.6	1,416.5
		Departures	408.3	361.5	418.1	1,187.9
		Sub-Total	1,010.7	732.0	861.7	2,604.4
	International	Arrivals	2,403.8	210.0	12.7	2,626.5
		Departures	1,380.2	234.0	18.2	1,632.4
		In Transit	1,152.2	103.2	112.9	1,368.3
		Sub-Total	4,936.2	547.2	143.8	5,627.2
	Total		5,946.9	1,279.2	1,005.5	8,231.6
2014	Domestic	Arrivals	761.3	438.5	495.1	1,694.9
		Departures	550.9	420.1	472.2	1,443.2
		Sub-Total	1,312.2	858.6	967.3	3,138.1
	International	Arrivals	2,491.4	220.4	10.7	2,722.5
		Departures	1,501.8	199.0	15.7	1,716.5
		In Transit	1,081.1	88.5	135.3	1,304.9
		Sub-Total	5,074.3	507.9	161.7	5,743.9
	Total		6,386.5	1,366.5	1,129.0	8,882.0
2015	Domestic	Arrivals	823.8	458.8	564.0	1,846.6
		Departures	579.2	443.8	551.1	1,574.1
		Sub-Total	1,403.0	902.6	1,115.1	3,420.7
	International	Arrivals	2,523.1	126.9	7.2	2,657.2
		Departures	1,390.7	118.1	10.8	1,519.6
		In Transit	1,163.6	84.4	147.7	1,395.7
		Sub-Total	5,077.4	329.4	165.7	5,572.5
	Total		6,480.4	1,232.0	1,280.8	8,993.2
2016	Domestic	Arrivals	900.6	479.9	716.8	2,097.2
		Departures	739.0	478.5	704.9	1,922.4
		Sub-Total	1,639.5	958.4	1,421.7	4,019.6
	International	Arrivals	2,682.4	140.1	8.8	2,831.3
		Departures	1,571.7	139.4	12.0	1,723.1
		In Transit	1,217.8	0.0	0.0	1,217.8
		Sub-Total	5,472.0	279.5	20.8	5,772.3
	Total		7,111.5	1,237.9	1,442.5	9,791.9
2017*	Domestic	Arrivals	807.4	469.4	792.3	2,069.0
		Departures	669.0	474.6	778.6	1,922.2
		Sub-Total	1,476.3	944.0	1,570.9	3,991.2
	International	Arrivals	2,868.3	149.1	11.8	3,029.2
		Departures	1,675.0	153.5	12.4	1,840.8
		In Transit	1,251.3	0.0	0.0	1,251.3
		Sub-Total	5,794.5	302.6	24.2	6,121.3
	Total		7,270.8	1,246.6	1,595.1	10,112.5

Source: Kenya Airports Authority

* Provisional

¹ Passenger traffic includes residents

13.21. Cargo and Mail Traffic: Table 13.11 presents the volume of commercial cargo and mail traffic handled at the various airports from 2013 to 2017. Volume of commercial cargo traffic handled increased by 16.6 per cent from 249.5 million tonnes in 2016 to 290.8 million tonnes in 2017. Cargo handled at JKIA increased by 18.0 per cent to 273.0 thousand tonnes

while that handled at MIA increased by 20.0 per cent to 3.6 thousand tonnes in 2017. There was a 13.8 per cent increase in the volume of mail traffic handled at all airports from 543.3 tonnes in 2016 to 617.0 tonnes in 2017. The volume of mail traffic handled at JKIA increased by 14.2 per cent to 614.2 tonnes in 2017. Mail traffic handled at MIA dropped from 5.3 tonnes in 2016 to 2.8 tonnes in 2017.

Table 13.11: Commercial Cargo and Mail Traffic by Airport, 2013 - 2017

Year	Category	Tonnes						
		Cargo Traffic				Mail Traffic		
		JKIA	MIA	Other Airports	Total Cargo	JKIA	MIA	Total Mail
2013	Landed.....	52,350.8	1,533.5	8,482.4	62,366.7	506.3	6.6	512.9
	Loaded.....	191,966.0	2,290.3	5,091.6	199,347.9	236.6	15.5	252.1
	Total	244,316.8	3,823.8	13,574.0	261,714.6	742.9	22.1	765.0
2014	Landed.....	52,336.2	1,833.7	10,472.0	64,641.9	421.2	2.3	423.5
	Loaded.....	206,291.3	2,711.1	5,736.4	214,738.8	94.5	7.2	101.7
	Total	258,627.5	4,544.8	16,208.4	279,380.7	515.7	9.5	525.2
2015	Landed.....	45,393.3	2,621.1	11,648.4	59,662.8	317.9	2.6	320.5
	Loaded.....	197,891.6	2,020.5	3,463.1	203,375.2	269.7	15.7	285.4
	Total	243,284.9	4,641.6	15,111.5	263,038.0	587.6	18.3	605.9
2016	Landed.....	32,916.2	1,684.8	11,926.6	46,527.6	247.8	1.8	249.6
	Loaded.....	198,344.0	1,295.9	3,321.8	202,961.7	290.2	3.5	293.7
	Total	231,260.2	2,980.7	15,248.4	249,489.3	538.0	5.3	543.3
2017*	Landed.....	49,443.1	2,404.0	11,631.0	63,478.2	434.7	1.8	436.5
	Loaded.....	223,565.7	1,194.6	2,533.2	227,293.6	179.5	1.0	180.5
	Total	273,008.8	3,598.6	14,164.2	290,771.8	614.2	2.8	617.0

Source: Kenya Airports Authority

* Provisional

Aircraft Movements

13.22. Details on aircraft movements by type from 2013 to 2017 are shown in Table 13.12. Overall, aircraft movements increased marginally from 344,571 in 2016 to 354,176 in 2017. Total landings increased by 1.4 per cent to 150,960 while total take-offs increased by 0.9 per cent to 150,368 in 2017. The number of over-flights however, increased by 13.1 per cent from 46,739 in 2016 to 52,848 in 2017.

13.23. Total domestic landings and take-offs increased by 1.5 per cent to 207,831 in 2017. Domestic landings increased by 1.7 per cent from 102,186 in 2016 to 103,922 in 2017. Similarly, the number of domestic take-offs increased by 1.3 per cent to 103,909 in 2017. Total international landings and take-offs rose marginally from 93,029 in 2016 to 93,497 in 2017. International landings increased from 46,685 in 2016 to 47,038 in 2017, while international take-offs increased from 46,344 to 46,459 during the same period. The share of domestic aircraft movements to total movements declined to 58.7 per cent in 2017 from 59.4 per cent recorded in 2016 while the share of international aircraft movements was 26.4 per cent during the review period. The share of over-flights however increased to 14.9 per cent in 2017 from 13.6 per cent recorded in 2016.

Table 13.12: Aircraft Movements by Type, 2013 - 2017

Type	Movement	Number				
		2013	2014	2015	2016	2017*
Domestic	Landings.....	87,457	89,820	89,611	102,186	103,922
	Take-offs.....	83,484	86,870	89,872	102,617	103,909
	Total	170,941	176,690	179,483	204,803	207,831
International	Landings.....	42,935	45,602	43,689	46,685	47,038
	Take-offs.....	45,528	47,893	43,061	46,344	46,459
	Total	88,463	93,495	86,750	93,029	93,497
Total	Landings.....	130,392	135,422	133,300	148,871	150,960
	Take-offs.....	129,012	134,763	132,933	148,961	150,368
	Sub-Total	259,404	270,185	266,233	297,832	301,328
	Over-flights.....	36,290	36,941	38,788	46,739	52,848
	Grand Total	295,694	307,126	305,021	344,571	354,176

Source: Kenya Civil Aviation Authority

* Provisional

Licensed Air Operators 13.24. Overall, the number of active licensed air operators decreased by 14.5 per cent from 339 in 2016 to 290 in 2017 as shown in Table 13.13. The decline was reported for operators in all categories except those engaged in domestic scheduled services and aerial works. Domestic non-scheduled operators decreased by 12.4 per cent and accounted for 48.6 per cent of the total licensed air operators in 2017. The number of tour charter operators dropped from 21 in 2016 to 5 in 2017. Other declines were recorded for international non-scheduled and scheduled licensed air operators at 25.0 and 3.8 per cent, respectively. The general decline in active licensed operators is partly attributed to non-renewal of licenses.

Table 13.13: Licensed Air Operators, 2013 – 2017

Operator	Number				
	2013	2014	2015	2016	2017*
Domestic scheduled.....	38	33	36	38	39
Domestic non-scheduled.....	173	146	152	161	141
International scheduled.....	21	21	26	26	25
International non-scheduled.....	23	22	22	20	15
Inclusive tour charters.....	30	22	21	21	5
Aerial work.....	38	36	40	39	44
Flying instructions.....	28	29	29	30	19
Self fly hire.....	-	4	5	4	2
Total	351	313	331	339	290

Source: Kenya Civil Aviation Authority

* Provisional

Selected Aviation Industry Indicators 13.25. Selected aviation industry indicators from 2013 to 2017 are presented in Table 13.14. The number of aviation personnel licenses increased by 5.7 per cent from 9,059 in 2016 to 9,577 in 2017. During the same period, the cabin crew member certificates increased by 7.6 per cent to 2,090, while the number of student pilot licenses increased by 6.6 per cent to 2,710. In the same period, the number of valid operational licenses decreased slightly from 1,279 in 2016 to 1,263 in 2017. The number of aircrafts with valid Certificate of Air Worthiness reduced to 749 and accounted for 59.3 per cent of the total operational licenses in 2017. On the other hand, the number of civil aviation inspectors and air traffic controllers increased by 7.1 per cent from 240 to 257 during the review period. The highest growth was recorded for air traffic controllers which increased from 159 in 2016 to 177 in 2017.

13.26. The number of aerodromes increased from 475 in 2016 to 491 in 2017 mainly due to the increase in the number of air strips during the review period. Heliports and helipads increased from 14 in 2016 to 20 in 2017 while the number of air strips increased to 440 and accounted for 89.6 per cent of the aerodromes in the review period. This development is due to efforts by the Government to ensure that every County is served by a functional air strip.

Table 13.14: Selected Aviation Industry Indicators, 2013 – 2017

	Number				
	2013	2014	2015	2016	2017*
Aviation Personnel Licenses					
Air Transport Pilot Licence (ATPL)	888	928	975	1,062	1,116
Commercial Pilot Licence (CPL)	1,244	1,394	1,517	1,563	1,607
Private Pilot Licence (PPL)	969	1,070	1,276	1,255	1,316
Student Pilot Licence (SPL)	2,083	2,189	2,580	2,543	2,710
Cabin Crew Member Certificate (CMC)	1,631	1,814	1,906	1,942	2,090
Aircraft Maintenance Engineers (AMEL)	582	604	618	694	738
Total	7,397	7,999	8,872	9,059	9,577
Valid Operational Licenses					
Aircraft with Valid Certificate of Air Worthiness (COA) ...	658	705	751	763	749
Air Operator Certificates (AOCs)	78	78	70	70	87
Approved Maintenance Organisations (AMOS)	85	118	122	139	143
Approved Training Organisations (ATOS)	5	19	19	22	19
Flight Dispatcher Licence	91	127	177	208	186
Scheduled Airlines	76	76	77	77	79
Total	993	1,123	1,216	1,279	1,263
Aerodrome Category					
International-Class A	8	8	8	8	8
Domestic (Regional)- Class B	16	23	23	23	23
Air strips-Class C	426	430	430	430	440
Heliports/Helipads-Class D	-	6	6	14	20
Total	450	467	467	475	491
CAA Inspectors and Air Traffic Controllers					
Air Traffic Controllers (ATCOs)	172	170	165	159	177
Air Worthiness Inspectors	16	18	21	27	24
Flight Operations	11	11	15	20	21
Personnel Licensing	8	8	8	9	10
Others	27	26	26	25	25
Total	234	233	235	240	257

Source: Kenya Civil Aviation Authority

* Provisional

Postal Services 13.27. Details on the performance of postal services for the period 2013 to 2017 are presented in Table 13.15. There was a 2.6 per cent increase in the number of post offices from 623 in 2016 to 639 in 2017. This growth is attributed to opening of new postal outlets in some universities and other areas. The number of licensed courier operators rose by 3.9 per cent from 179 in 2016 to 186 in 2017. Similarly, the number of private courier operator outlets increased by 2.2 per cent from 976 in 2016 to 997 in 2017. During the same period, Expedited Mail Service Items (EMS) handled declined by 1.4 per cent from 1,977 thousand to 1,950 thousand.

13.28. Total registered and insured items posted, dropped by 4.3 per cent from 921 thousand in 2016 to 881 thousand in 2017 mainly on account of a 7.1 per cent decrease in the domestic component. The total number of unregistered correspondence handled decreased by 12.9 per cent to 61 million in 2017 partly explained by a 17.2 per cent drop in domestic unregistered correspondence posted. Likewise, parcels handled decreased by 15.0 per cent from 80 thousand in 2016 to 68 thousand in 2017. These declines are attributed to competition by other players. International parcels handled almost halved from 27 million registered in 2016 to 14 million in 2017. The total number of money orders issued is estimated to decrease by 18.7 per cent from 870 thousand in 2016 to 707 thousand in 2017. This is partly attributed to competition with mobile money transfer services which has negatively affected the use of postal financial services.

Table 13.15: Postal Services, 2013 – 2017

Item	Unit	2013	2014	2015	2016	2017*
Post Offices.. .. .	No.	622	622	623	623	639
Private Courier Operator Outlets.. .. .	No.	707	2,048	2,117	976	997
Licensed Courier Operators.. .. .	No.	214	230	241	179	186
Total Private Letter Boxes:						
Installed.. .. .	'000	432	432	432	422	444
Rented.. .. .	'000	383	380	382	385	365
Private Bags Rented.. .. .	No.	846	846	846	845	846
Total EMS Items Handled:	'000	1,483	1,801	1,840	1,977	1,950
Accepted.. .. .	'000	772	933	916	990	1,000
Delivered.. .. .	'000	711	868	924	987	950
Total Registered and Insured Items Posted:	'000	1,005	1,001	812	921	881
Domestic.. .. .	'000	924	914	718	802	745
International.. .. .	'000	81	87	94	119	136
Unregistered correspondence handled :	Millions	68	69	73	70	61
Domestic.. .. .	Millions	63	64	67	64	53
International.. .. .	Millions	5	5	6	6	8
Parcels handled :	'000	36	48	49	80	68
Domestic - Posted.. .. .	'000	18	26	12	53	54
International - Posted.. .. .	'000	18	22	17	27	14
Money Orders Issued'	'000	574	1,339	1,221	870	707
Domestic (IFS)	'000	501	500	453	439	420
PostaPay	'000	73	839	768	431	287
Inter-state (IFS)	'000	0.2	0.2	0.2	0.2	0.2

Source: Postal Corporation of Kenya/Communication Authority of Kenya

*Provisional

IFS - International Financial Services

Storage Container Freight Stations

13.29. The container freight stations provide additional storage space for containerized cargo at the Port of Mombasa. During the review period, the number of Container Freight Stations (CFS) remained constant at 15 stations with a capacity of 42,784 Twenty-foot Equivalent Units (TEUs).

Developments Road Transport

in the 13.30. During the review period, the Nairobi Metropolitan Area Transport Authority
Transport and (NAMATA) was created to deal with traffic congestion within the Nairobi metropolitan area.
Storage Sector NAMATA is a policy intervention that provides a comprehensive and dynamic platform for addressing the challenges in the transport sector that have affected the Metropolitan Area. The Authority is expected to formulate a sustainable integrated public transport strategy based on the development of a sustainable urban mobility plan. This will form a basis for orderly and structured development of the proposed Metropolitan Area mass-transit system, which incorporates both bus rapid-transit and commuter rail.

Railway Transport

13.31. The construction of commuter railway stations, aimed at improving the Nairobi Commuter Rail Services System was initiated in 2017. By the end of the review period, Ruiru, Kikuyu, Kahawa, Dandora and Githurai, Embakasi village, Athi River, Donholm, Mwiki and Pipeline stations were at different stages of completion.

13.32. The Phase I of the SGR project, which entailed the construction of the Mombasa – Nairobi section comprising 472 kilometres, was completed in 2017. Passenger service of the Standard Gauge Railway (SGR) was launched on 31st May 2017 and began commercial passenger operations on 1st June 2017. In addition, Kenya Railways Corporation carried out cargo evacuation test operations on the SGR from Mombasa to Nairobi Inland Container Depot (NICD) in preparation for commercial freight operations.

Maritime Transport

13.33. During the review period, various programmes were initiated to improve maritime transport and to make Mombasa a regional port of choice. This includes development of Berth 20 and 21 and upgrading of the Nairobi Inland Container Depot (NICD). Further, to ease congestion at the Likoni Ferry crossing point, two ferries with capacity of 1,364 passengers and 60 motor vehicles were procured during the review period. In addition, the construction of three berths in Lamu Port was commenced.

Air Transport

13.34. The sub-sector continued with the expansion and modernization of aviation facilities to enhance handling capacity of the airports and to support domestic air transport in the country. The aim of the Government is to ensure that every County is served by a functional air strip. The programme on the modernisation and expansion of air strips aims at providing air connectivity across the country and to support domestic air travel. Homa Bay (Kabunde), Suneka, Nanyuki, Voi (Ikanga) and Tseikuru air strips were under construction in 2017.

13.35. During the period under review, improved levels of safety and security enabled Kenya to be granted Federal American Administration (FAA) – Inter Air Security Association (IASA) category-1 by the United States of America which allows direct flight between the two countries. Kenya initiated the process of starting direct flights to the US with Kenya Airways scheduled to commence flights in October 2018. In an effort to expand route network for the Country's designated airlines, 8 new Bilateral Air Services Agreements (BASAs) were negotiated and concluded while 16 existing BASAs were reviewed during the same period.

Information and Communication Technology

Chapter 14

Overview The expansion of the digital economy has contributed to economic growth in recent years and has transformed society as a whole. It has spurred the economy by offering services through online platforms in; the provision of government services, business and e-commerce, research and transfer of knowledge, among others. The Government has continued to invest in the National Optic Fibre Backbone Infrastructure (NOFBI) across the country, with the aim of increasing cost-effective access to internet services. These developments led to the value of ICT output increasing by 10.9 per cent to KSh 345.1 billion in 2017.

14.2. In the period under review, mobile penetration measured by subscriptions improved to 91.9 per 100 inhabitants from 85.9 in 2016. Prepaid subscriptions per 100 inhabitants increased to 88.9 in 2017 from 82.8 in 2016. Mobile commerce transactions grew by 85.5 per cent from KSh 1.8 trillion in 2016 to KSh 3.2 trillion in 2017. Total mobile money transfers increased by 8.4 per cent from KSh 3,356 billion in 2016 to KSh 3,638 billion in 2017.

14.3. Volume of domestic traffic in minutes increased from 42.2 billion in 2016 to 44.1 billion in 2017. Similarly, the number of domestic short messaging services (SMS) sent increased by 41.9 per cent to 65.7 billion in 2017 from 46.3 billion in 2016. International telephone traffic decreased by 11.7 per cent from 1.2 billion in 2016 to 1.1 billion in 2017. The total wired and wireless internet subscriptions increased by 25.0 per cent to 33.4 million in 2017 from 26.7 million in 2016. Total digital subscriptions increased by 12.4 per cent to 4.9 million in 2017 from 4.4 million in 2016. The average price of a one minute mobile to mobile call declined marginally from KSh 3.08 in 2016 to KSh 3.00 in 2017. Similarly, international calls through mobile phone to countries operating within the One Area Network had lower charges compared to those operating outside the framework which charged higher tariffs.

Value of Output 14.4. Details on value of output, intermediate consumption and value added for the ICT sector at current prices are presented in Table 14.1. The value of ICT output increased by 10.9 per cent from KSh 311.1 billion in 2016 to KSh 345.1 billion in 2017. Intermediate consumption increased by 13.6 per cent to KSh 235.7 billion in 2017. Consequently, ICT value added increased by 5.4 per cent from KSh 103.8 billion in 2016 to KSh 109.4 billion in 2017.

Table 14.1: Output, Intermediate Consumption and Value Added of the Information and Communication Sector, 2013-2017

Year	KSh Million		
	Value of Output	Intermediate Consumption	Value Added
2013	228,405.0	159,928.0	68,478.0
2014	259,000.0	193,408.0	65,592.0
2015	280,434.0	219,948.8	60,485.3
2016	311,221.4	207,414.4	103,806.9
2017	345,067.6	235,679.3	109,388.3

*Provisional

Fixed Telephone and Mobile Network Services 4.5. Analysis on the performance of fixed and mobile network services for the period 2013 to 2017 are presented in Table 14.2. Fixed line capacity decreased by 19.6 per cent to 144 thousand in 2017 from 179 thousand in 2016. The decline was mainly attributed to low usage of wireline and wireless connections. The total connections for fixed telephone continued to decline further from 72.8 thousand in 2016, to 69.9 thousand in 2017.

14.6. Mobile subscriptions increased by 9.8 per cent from 39.0 million in 2016 to 42.8 million in 2017, with pre-paid subscriptions accounting for 96.7 per cent of the total mobile subscriptions. The Mobile Numbers Ported (MNPs) increased significantly by 95.8 per cent to 2,575 in 2017, a reversal from the decline of 67.8 per cent recorded in 2016. The growth is mainly attributed to the revision of the mobile number portability service level agreements amongst the Mobile Network Operators (MNOs) and Mobile Virtual Network Operator (MVNOs), facilitated by Communications Authority of Kenya.

14.7. Total transfers through mobile money increased by 8.4 per cent from KSh 3,356 billion in 2016 to KSh 3,638 billion in 2017. Mobile money subscriptions declined by 6.2 per cent from 32.0 million in 2016 to 30.0 million in 2017. The value of mobile commerce transactions expanded by 85.5 per cent from KSh 1.8 trillion in 2016 to KSh 3.2 trillion in 2017. The growth was spurred by customer's preference for mobile commerce and the availability of these services across the country.

Table 14.2: Fixed and Mobile Network Services, 2013-2017

	2013	2014	2015	2016	2017*
Fixed Telephony					
Fixed line Capacity ('000) ¹	408	340	75	179	144
Total Connections ('000)	206.0	180.0	85.0	72.8	69.9
Wireline Connections	57.0	48.0	85.0	72.4	69.6
Wireless Connections ¹	149.0	132.0	0.0	0.4	0.3
Mobile Telephony					
Mobile Telephone Capacity ('000)	55,077	65,077	62,800	71,600	70,000
Connections ('000)	31,309	33,633	37,716	38,982	42,815
Post Paid Subscriptions ('000)	560.5	854.3	1,009.6	1,413.4	1,414.5
Pre Paid Subscriptions ('000)	30,749.0	32,778.0	36,706.0	37,569.0	41,401.0
Mobile Numbers Ported ²	1,303	2,340	2,207	1,315	2,575
Mobile Money					
Mobile Money Transfer Agents	93,689	123,703	143,946	165,908	182,472
Mobile Money Transfer Service Subscribers ('000)	26,016	26,023	26,753	31,997	30,005
Total Deposits through Agents (KSh Billion)	1,033	1,269	1,347	1,536	2,194
Total Transfer from Subscriber to Subscriber (KSh Billion)	..	..	1,339	1,818	2,204
Total Transfers, (KSh Billion)	1,902	2,372	2,816	3,356	3,638
Number of Total Transactions in Million	732.6	911.3	1,114.2	1,526.2	1,543.2
Value of Mobile Commerce Transactions (KSh Billion)	..	..	..	1,750	3,246
Number of Mobile Commerce Transactions ('000)	..	..	..	928, 174	1,609,297

Source: Communication Authority of Kenya/ Central Bank of Kenya

* Provisional

¹ Includes Local Loop Operators, the wireless connections were decommissioned end of 2015 and recommissioned in 2016

² Mobile Number Portability enables mobile users to retain their telephone numbers when migrating from one network to another

.. Data not available

Telephone call traffic 14.8. Telephone call traffic for the period 2013 to 2017 is presented in Table 14.3. In the year under review, international telephone traffic declined from 1,196.5 million minutes in 2016 to 1,056.7 million minutes. The decline may be attributed to preference for Over the Top (OTT) services e.g Whatsapp, Skype etc., and social media. International outgoing telephone traffic decreased by 6.4 per cent from 482.5 million minutes in 2016 to 453.6 million minutes in 2017. Similarly, international incoming telephone traffic decreased by 15.5 per cent from 714 million minutes in 2016 to 603 million minutes in 2017. In 2017, incoming traffic from fixed telephone grew by 7.3 per cent to 9.3 million minutes after recording declines in the last three years. The increase was partly attributed to low-priced call rates from the originating countries. During the review period, the international outgoing and incoming mobile traffic declined by 5.6 per cent and 15.8 per cent to 446.8 million minutes and 593.8 million minutes, respectively,

Table 14.3: Telephone Call Traffic, 2013-2017

	Minutes '000				
	2013	2014	2015	2016	2017*
International Calls					
Total International Outgoing Telephone Traffic	546,558	461,754	544,560	482,482	453,610
International Outgoing Mobile	530,823	446,591	534,433	473,292	446,760
International Outgoing Fixed	15,736	15,163	10,127	9,190	6,850
Total International Incoming Telephone Traffic	676,267	591,022	628,403	713,969	603,110
International Incoming Mobile	664,035	578,920	619,395	705,299	593,810
International Incoming Fixed	12,232	12,102	9,008	8,670	9,300
Total International Telephone Traffic	1,222,825	1,052,776	1,172,963	1,196,451	1,056,720
Roaming					
Roaming by Home Subscribers Abroad (Outbound Roaming)	48,011	38,251	91,171	143,529	193,622
Roaming by Foreign Subscribers in Kenya (Inbound Roaming)	41,382	48,060	103,612	122,023	79,610
Total Roaming	89,393	86,311	194,783	265,552	273,232
Domestic Calls					
Total Fixed to Fixed Telephone Traffic (a+b)	28,560	23,298	5,252	2,513	2,597
Fixed wireless to Fixed wireless (a)	18,892	21,622	3,336	877	1,314
Fixed to Fixed telephone (b)	9,668	1,676	1,916	1,636	1,283
Fixed to Mobile telephone	101,722	117,053	47,702	41,394	43,353
Mobile to Mobile telephone	29,758,949	30,473,694	39,068,816	42,070,692	43,944,431
Mobile to Fixed telephone	52,334	66,564	75,394	63,240	88,787
Total Domestic Traffic	29,960,246	30,680,916	39,197,164	42,177,839	44,079,168
International Outgoing Fixed VoIP ¹	8,101	7,335	4,785	3,938	2,865

Source: Communication Authority of Kenya

*Provisional

¹ Voice Over Internet Protocol (VoIP)

14.9. During the review period, the total roaming traffic recorded a decelerated growth of 2.9 per cent in 2017 compared to a growth of 36.3 per cent registered in 2016. The slow growth was partly attributed to low number of large international conferences held in the country during the review period. Outbound roaming traffic rose by 34.9 per cent to 193.6 million minutes in 2017 compared to a growth of 57.4 per cent recorded in 2016.

14.10. Total domestic traffic increased from 42.2 billion minutes in 2016 to 44.1 billion minutes in 2017. Mobile phone traffic, which accounted for 99.7 per cent of the total domestic traffic, increased by 4.5 per cent to 43.9 billion minutes in 2017. Fixed wireless to fixed wireless registered a higher growth of 49.8 per cent, followed by mobile to fixed traffic which recorded a 40.4 per cent growth in 2017. The increase of traffic from fixed wireless to fixed wireless was

partly attributed to discounted rates. Traffic from fixed to fixed telephone declined by 21.6 per cent to 1.3 billion minutes in the review period.

14.11. The international outgoing fixed Voice over Internet Protocol (VoIP) traffic continued to decline from 3.9 million minutes in 2016 to 2.9 million minutes in 2017. This was mainly due to a rise in the uptake of instant messaging applications and social media. The instant messaging application have incorporated VoIP capabilities on internet enabled phones.

**Message
Services
Traffic**

14.12. Information on message service traffic is presented in Table 14.4. The total number of messages sent via Short Messaging Services (SMS) has maintained an upward trend despite the availability of instant messaging applications and use of social media. Total SMSs sent increased by 41.8 per cent from 46.3 billion in 2016 to 65.7 billion in 2017. The number of SMSs sent to the rest of the world in 2017 increased marginally as shown in Figure 14.1. Similarly, SMSs received from the rest of the world increased from 38.5 million in 2016 to 41.4 million in 2017. The growth was partly attributed to availability of services such as SMS tariffs, one-bundle tariffs and provision of bulk SMS services.

Table 14.4: Message Service Traffic, 2013 -2017

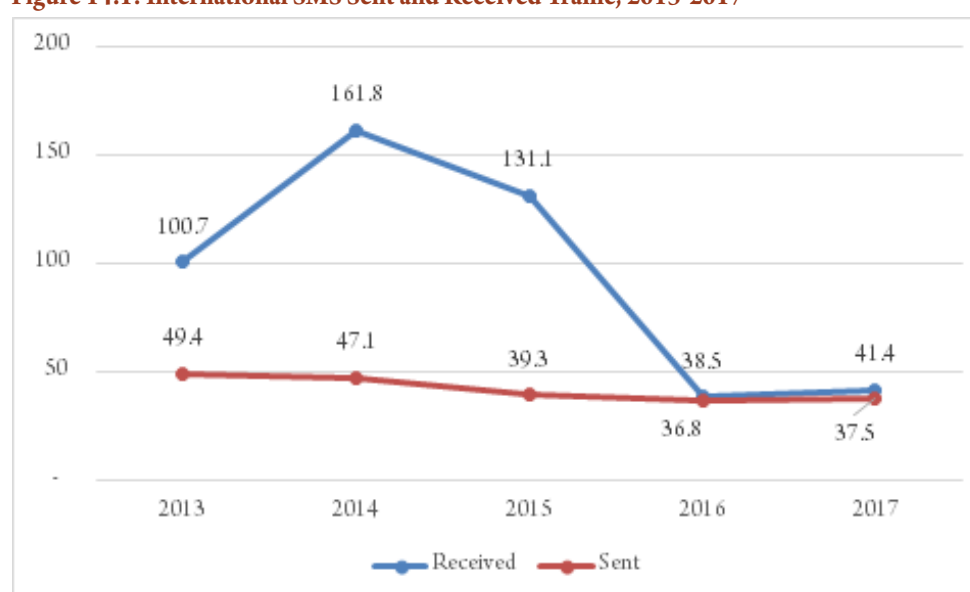
	Number '000				
Messages	2013	2014	2015	2016	2017*
Multimedia Messaging Service (MMS) ...	9,761	12,011	13,686	..	..
Total SMS sent	19,837,856	27,416,127	28,320,513	46,342,335	65,720,297
Domestic	19,788,436	27,368,995	28,281,231	46,305,545	65,682,804
International	49,420	47,132	39,282	36,790	37,493
International SMS received	100,670	161,763	131,076	38,478	41,390

Source: Communication Authority of Kenya

* Provisional

.. Data not available

Figure 14.1: International SMS Sent and Received Traffic, 2013-2017



Internet Services 14.13. The number of Internet Service Providers (ISPs) decreased from 242 in 2016 to 219 in 2017, as shown in Table 14.5. The decline was partly attributed to non-renewal of licenses by some firms in 2017. The total wireless internet subscriptions increased by 24.9 per cent to 33.2 million subscribers in 2017. Similarly, total fixed wired internet subscriptions increased by 59.2 per cent to 198,472 in 2017 from 124,637 in 2016. Fixed fiber optic subscriptions accounted for 50.2 per cent of the total fixed wired subscriptions in the year under review. This was partly attributed to the ongoing laying of fiber across the country which resulted in increased bandwidth capacity.

Table 14.5: Internet Providers and Subscriptions, 2013-2017

	Number				
	2013	2014	2015	2016	2017*
Licensed Internet Services Providers (ISPs) ¹	171	177	221	242	219
Total Wireless Internet Subscriptions...	13,107,459	16,357,239	23,814,546	26,559,184	33,166,725
Terrestrial Mobile Data	13,090,348	16,338,990	23,794,550	26,528,876	33,076,894
Terrestrial Wireless Data	16,429	17,537	19,507	29,724	89,062
Satellite Data	682	712	489	584	769
Total Fixed (Wired) Internet Subscriptions...	79,509	95,780	115,111	124,637	198,472
Fixed Digital Subscriber Line (DSL) Data	12,014	14,512	3,732	2,483	1,953
Fixed Fiber Optic Data ²	67,470	81,243	111,354	36,015	99,643
Fixed Cable Modem (Dial Up) Data ²	25	25	25	86,139	96,876
Total Fixed and Wireless Internet Subscriptions...	13,186,968	16,453,019	23,929,657	26,683,821	33,365,197

Source: Communication Authority of Kenya

* Provisional

¹ Also includes Application Service Providers (ASPs)

² Definition was changed in 2016

Broadband Services 14.14. The analysis of broadband services for the period under review is presented in Table 14.6. Bandwidth capacity increased for the third year in a row to 3.2 million Megabytes per second (Mbps) mainly due to the laying of the fiber optic cables in the country. The undersea bandwidth capacity increased by 56.9 per cent while satellite bandwidth increased by 18.2 per cent in 2017. Total bandwidth utilized stood at 916,735 Mbps in 2017 compared to 860,570 Mbps in 2016. Preference for fixed broadband speeds of 2 Mbps or more compared to speeds of less than 2 Mbps was observed in the review period.

14.15. Total fixed wired broadband increased by 55.2 per cent from 127,877 in 2016 to 198,472 in 2017, while the total wireless broadband increased by 35.2 per cent from 12.6 million in 2016 to 17.0 million in 2017. The increase was mainly attributed to the availability of affordable high internet speeds. Demand for mobile broadband increased by 34.9 per cent to 16.9 million subscribers in 2017. The Global System for Mobile Communication (GSM) mobile phone subscriptions increased by 42.9 per cent to 15.9 million, while GSM modem subscriptions decreased by 28.8 per cent to 992,499 in 2017. The decline of GSM modem subscriptions was partly attributed to availability of internet enabled phones which offer similar services to the GSM modem.

Table 14.6: Broadband Services, 2013-2017

	2013	2014	2015	2016	2017*
Capacity in Megabits Per Second (Mbps)					
Undersea Bandwidth Capacity	862,210	847,250	1,550,270	2,028,270	3,182,592
Satellite Bandwidth Capacity	264	273	498	473	559
1. Total Available Bandwidth Capacity... ..	862,474	847,523	1,550,768	2,028,743	3,183,151
Utilized Bandwidth in Mbps					
Undersea Bandwidth	365,330	498,015	854,300	860,300	916,287
Satellite Bandwidth	83	106	251	270	448
2. Total Utilized Bandwidth... ..	365,413	498,121	854,551	860,570	916,735
Broadband Subscriptions					
Copper line (Dial-up, DSL and xDSL) ...	5,967	3,388	441	2,483	1,953
Fiber to the Home	42,958	59,986	81,532	15,853	63,276
Fiber to the Office	20,215	21,257	29,156	23,402	36,367
Cable modem ... ..	..	..	..	86,139	96,876
3. Total Fixed (Wired)- Broadband	69,140	84,631	111,129	127,877	198,472
4. Satellite broadband	474	495	481	445	769
5. Terrestrial fixed wireless broadband... ..	15,367	16,687	19,507	29,556	82,362
6. Total Active mobile broadband (a+b+c)	2,395,836	4,141,498	7,112,991	12,546,559	16,926,599
GSM mobile phones (a)	1,755,116	3,417,949	6,344,226	11,151,664	15,934,100
GSM modems (b)	586,484	657,902	768,765	1,394,895	992,499
CDMA 2000 phones** (c)	54,236	65,647	0	0	0
7. Total wireless broadband (4+5+6)	2,411,677	4,158,680	7,132,979	12,576,560	17,009,730
8. Total fixed and wireless broadband (3+7)	2,480,817	4,243,311	7,244,108	12,704,437	17,208,202
Fixed Broadband by speed					
256 Kbps	482	2,272	2,500	862	854
512 Kbps	10,501	10,527	3,500	4,808	2,927
1 Mbps	51,194	62,146	18,000	22,702	14,459
2 Mbps	8,791	3,810	4,000	33,574	96,391
> 2 Mbps	12,868	9,567	69,000	91,046	173,672

Source: Communication Authority of Kenya

*Provisional

+Revised

**CDMA 2000 phones were decommissioned in 2015

.. Data not available

Tariffs 14.16. Table 14.7 presents information on fixed and mobile charges for the period 2013 to 2017. The cost of installing fixed telephone increased by 17.0 per cent from KSh 4,699 in 2016 to KSh 5,496 in 2017. The installation fee for copper solutions and fiber solutions to buildings was KSh 7,000 while that of microwave solutions was KSh 80,000. The high cost of installation for microwave solution is on account of spectrum fees. The average price of a one minute mobile to mobile call declined marginally from KSh 3.08 in 2016 to KSh 3.00 in 2017.

Table 14.7: Fixed and Mobile Charges, 2013-2017

	KSh				
	2013	2014	2015	2016	2017*
Fixed Charges					
Installation Fees					
Business and Residential Fixed Telephone Service...	3,394.00	3,394.00	3,394.00	4,699.00	5,496.00
Copper Solutions...	..	..	..	..	7,000.00
Microwave Solutions...	..	..	..	..	80,000.00
Fiber Solutions...	..	..	..	..	7,000.00
Monthly Subscription for Residential Telephone Service...	580.00	580.00	580.00	580.00	580.00
Monthly Subscription for Business Telephone Service...	580.00	580.00	580.00	1,000.00	580.00
 Average price of a one minute Fixed to Fixed local call ...	4.50	4.50	3.00	3.00	5.00
Average price of a one minute Fixed to Mobile local call ...	9.00	9.00	9.00	9.00	8.00
Mobile Charges					
Lowest recharge card value...	5.00	5.00	5.00	5.00	5.00
Average price of a one minute Mobile to Mobile local call...	3.86	3.10	3.08	3.08	3.00
Average price of a one minute Mobile to Fixed local call...	3.25	3.25	3.25	3.25	3.21
Average price of a message via SMS...	1.50	1.00	1.25	1.25	1.06

Source: Communication Authority of Kenya

* Provisional

Note: All averages are unweighted

.. Data not available

14.17. The average prices of a one-minute call originating from a mobile phone in Kenya to other countries for the period 2013 to 2017 are presented in Table 14.8. Calls to EAC countries, under the One Network Area (ONA) framework towards harmonizing call charges, were generally cheaper compared to others. In 2017, calling charges in Uganda, Rwanda and South Sudan, was KSh 7.50 per minute compared to KSh 56.25 and KSh 23.75 charged in Burundi and Tanzania, respectively. This is on account of Burundi and Tanzania not operating within the ONA framework.

Table 14.8 Average International Call Rates from Mobile Phone, 2013- 2017

Countries	KSh per Minute				
	2013	2014	2015	2016	2017*
Uganda.....	20.25	20.25	9.50	7.50	7.50
Rwanda.....	23.25	23.25	9.50	7.50	7.50
Burundi.....	25.75	25.75	13.25	33.75	56.25
Tanzania.....	23.25	23.25	16.25	23.75	23.75
Ethiopia.....	32.50	32.50	22.50	25.00	25.00
Somalia.....	32.50	32.50	20.00	40.00	45.00
South Sudan.....	50.00	50.00	17.50	12.50	7.50
South Africa.....	19.00	19.00	13.50	13.50	13.50
Other African Countries.....	32.50	32.50	22.50	22.50	22.50
USA.....	3.62	3.62	3.00	3.50	3.75
Germany.....	28.75	28.75	28.75	27.50	27.50
Switzerland.....	33.75	33.75	28.75	37.50	37.50
Italy.....	28.75	28.75	28.75	37.50	37.50
France.....	28.75	28.75	28.75	27.50	27.50
United Kingdom.....	19.00	19.00	13.50	13.50	13.50
Other European Countries.....	33.75	33.75	28.75	28.75	20.00
India.....	3.62	3.62	3.00	3.50	3.75
China.....	3.62	3.62	3.00	3.50	3.75
Japan.....	33.75	33.75	28.75	30.00	30.00

Source: Communication Authority of Kenya

Domains 14.18. The number of domains increased by 18.1 per cent from 62,636 in 2016 to 73,972 in 2017, as shown in Table 14.9. Domains under information content, mobile content and those used in network devices more than doubled to 374, 126 and 466 in 2017, respectively. This was partly attributed to enhanced uptake and use of sub-domain names as a result of awareness on the benefits.

Table 14.9 Registered Domains, 2013-2017

Subdomain	Users	Number				
		2013	2014	2015 ⁺	2016	2017 [*]
.ac.ke	Institutions of Higher Education	737	792	580	726	768
.co.ke	Companies	27,643	35,274	46,541	58,165	68,430
.go.ke	Government entities	339	314	290	363	414
.info.ke	Information e.g. blogs	98	105	115	144	374
.me.ke	Personal websites & email	413	650	260	326	386
.mobi.ke	Mobile content	37	48	35	44	126
.ne.ke	Network Devices	46	65	140	175	466
.or.ke	Non profit making organisations or NGO's ...	1,159	1,190	1,485	1,860	1,981
.sc.ke	Lower & middle institutions of learning	113	95	665	833	1,027
TOTAL		30,585	38,533	50,111	62,636	73,972
	Number of registrars	180	210	270	367	372
	Domain renewal fee	2,320	2,320	580	580	1,160
	Average annual fee to operate domain (Domain registration fee) in KSh	2,300	2,300	650	650	650

Source: Kenya Network Information Centre

⁺ Provisional^{*} Revised

Media Frequencies and Mobile Transceivers

14.19. Information on media frequencies and mobile transceivers for the period 2013 to 2017 is presented in Table 14.10. The number of self-provisioning broadcasters and the broadcast signal distributors remained unchanged. The number of homes with proximity to cable TV distribution lines increased by 5.9 per cent to 296,906 in 2017 from 280,429 in 2016. Cable TV subscriptions declined for the first time in the last three years by 16.3 per cent from 95,493 in 2016 to 79,938 in 2017. The decline is partly attributed to availability of other digital platforms such as online streaming and use of digital terrestrial services that may not require monthly subscriptions payments. Digital Terrestrial TV subscriptions increased by 11.0 per cent from 3.9 million in 2016 to 4.3 million in 2017.

14.20. The total number of mobile transceivers grew by 49.3 per cent from 123,380 in 2016 to 184,149 in 2017. The increase was partly attributed to inclusion of the fourth generation (4G) in 2017. The second generation (2G) continued to be the most widely used technology accounting for 74.7 per cent of the total transceivers in 2017.

Table 14.10: Media Frequencies and Mobile Transceivers, 2013-2017

	Number				
	2013	2014	2015	2016	2017*
TV Frequencies	336	245	302	312	333
Radio FM Frequencies	553	561	608	687	740
Digital Distributors					
Self-Provisioning Broadcast Signal Distributors	0	0	3	3	3
Broadcast Signal Distributors	2	2	2	2	2
Total Digital Signal Distributors	2	2	5	5	5
TV Stations					
Analogue TV Stations ¹	14	19	0	0	0
Digital TV stations	0	36	62	63	89
Total TV Stations	14	55	62	63	89
Number of Households passed by Cable TV	..	..	..	280,429	296,906
Digital Subscriptions					
Cable TV	..	56,106	81,118	95,493	79,938
Direct to Home Satellite	..	211,846	250,627	350,626	476,225
Digital Terrestrial Televisions (STBs)	..	1,041,656	3,712,548	3,905,656	4,334,166
Internet-Protocol TV (IPTV)	..	..	..	5	18
Total Digital Subscriptions	0	1,309,608	4,044,293	4,351,780	4,890,347
Radio Stations					
English and Kiswahili ⁺	80	85	89	110	109
All Vernacular Languages ⁺	50	50	50	63	67
Total Radio Stations	130	135	139	173	176
Mobile Transceivers by Technology					
2G	80,894	84,631	89,994	92,562	137,560
3G	12,775	15,381	19,300	30,818	42,716
4G	..	..	..	..	3,873
Total	93,669	100,012	109,294	123,380	184,149

Source: Communication Authority of Kenya

* Provisional

⁺ Revised

.. Data not available

¹Analogue TV stations closed in 2015

STBs- Set Top Boxes

Employment, Investment and Revenue 14.21. Table 15.11 presents information on employment, investment and revenue on telecommunication operators and Internet Service Providers (ISPs) for the period 2013 to 2017. Employment by telecommunication operators increased marginally from 6,178 in 2016 to 6,907 in 2017. Internet service providers increased by 583 employees to 9,031 in 2017.

14.22. The value of investment by the telecommunication operators and ISPs decreased by 25.9 per cent and 31.8 per cent to KSh 38.7 billion and KSh 1.5 billion, respectively, in 2017. The annual revenue earned by telecommunication operators increased by 12.2 per cent to KSh 241.0 billion in 2017 from KSh 214.8 billion in 2016.

Table 14.11: Employment, Investment and Revenue, 2013-2017

	Type of Operators	2013	2014	2015	2016	2017*
Employment (Number)	Telecommunication Operators ¹	5,617	6,439	6,147	6,178	6,907
	Internet Service Providers (ISPs) ²⁺	7,076	6,237	7,817	8,448	9,031
Annual Investment in KSh Billion³	Telecommunication Operators ¹	30.4	32.5	36.2	52.2	38.7
	ISPs ²	3.7	3.4	3.4	2.2	1.5
Annual Revenue in KSh Billion³	Telecommunication Operators ¹	152.5	173.6	194.5	214.8	241.0
	ISPs ²	14.6	15.7	17.0	18.6	21.3

* Provisional

¹ Include operators offering fixed, mobile and satellite telecommunication activities² Include Application Service Providers (ASPs)³ As at June

* Revised

Information Society 14.23. Table 14.12 presents indicators used for measuring information society. The penetration of most ICT indicators have been registering an upward trend in the last five years apart from the fixed telephone lines per 100 inhabitants. The mobile penetration rates for total population increased by 7.0 per cent from 85.9 in 2016 to 91.9 per 100 inhabitants in 2017. The internet penetration rose by 21.8 per cent from 58.8 in 2016 to 71.6 per 100 inhabitants in 2017. The bits per second per capita (Bps/capita) increased from 19,890.40 Bps in 2016 to 20,630.20 Bps in 2017, a reversal from the decline registered in the previous year.

14.24. Mobile and internet penetration for the population of 3 years and above increased by 6.8 per cent from 94.7 in 2016 to 101.1 per 100 inhabitants in 2017. Similarly, fixed and wired broadband penetration rates per 100 inhabitants rose from 30.9 in 2016 to 40.6 in 2017. This increase was partly attributed to the availability of the fiber optic cables across the country.

Table 14.12: Key Indicators Measuring Information Society, 2013-2017

Represents Total Population	2013	2014	2015	2016	2017*
Fixed telephone lines per 100 inhabitants...	0.65	0.52	0.19	0.16	0.15
Mobile-cellular telephone subscriptions per 100 inhabitants	74.92	78.30	85.41	85.93	91.89
Wireless internet subscribers per 100 inhabitants...	31.36	38.10	53.90	58.50	71.20
Internet subscribers per 100 inhabitants (Wireless and Fixed)	31.56	38.30	54.19	58.82	71.61
Bits per second per capita (Bps/person) ...	9,168.22	12,157.90	20,292.80	19,890.40	20,630.20
Broadband subscriptions per 100 inhabitants (wireless) ...	5.77	9.68	16.20	27.70	36.50
Broadband subscriptions per 100 inhabitants (Fixed and Wired)	5.94	9.88	16.40	28.00	36.93
Mobile money subscriptions per 100 inhabitants	62.26	60.57	60.59	70.53	64.40
Represents Population of Three (3) years and above					
Fixed telephone lines per 100 inhabitants...	0.54	0.46	0.21	0.18	0.16
Mobile-cellular telephone subscriptions per 100 inhabitants	82.50	86.20	94.20	94.70	101.10
Wireless internet subscribers per 100 inhabitants...	34.54	41.92	59.48	64.55	78.29
Internet subscribers per 100 inhabitants (Wireless and Fixed)	10.42	42.17	59.77	64.85	78.75
Bits per second per capita (Bps/person) ...	10,095.90	13,386.54	22,381.20	21,931.30	22,689.34
Broadband subscriptions per 100 inhabitants (wireless) ...	6.35	10.66	17.82	30.57	40.15
Broadband subscriptions per 100 inhabitants (Fixed and Wired)	6.54	10.88	18.10	30.88	40.62

*Provisional

International Trade in ICT Equipment 14.25. International trade in ICT equipment based on the Standard International Trade Classification (SITC) is presented in Table 14.13. During the review period, the value of ICT exports decreased by 42.7 per cent compared to 6.6 per cent growth recorded in 2016. However, the value of office machine exports increased by 22.0 per cent to KSh 80.3 million in 2017 from KSh 65.8 million in 2016.

14.26. The value of ICT imports increased by 17.4 per cent from KSh 57.0 billion in 2016 to KSh 66.9 billion in 2017. Imports of reception apparatus for radio broadcasting recorded a significant drop of 84.0 per cent to KSh 190.6 million in 2017 from KSh 1.2 billion in 2016. The decline is partly attributed to use of alternative modes of broadcasting.

Table 14.13: International Trade in ICT Equipment, 2013-2017

	KSh Million				
Exports	2013	2014	2015	2016	2017*
Office machines ¹	24.1	17.1	113.3	65.8	80.3
Automatic data processing machines, storage units etc	980.3	330.9	358.5	442.1	231.8
Part and accessories ²	63.8	68.9	76.2	55.7	29.2
Monitors and projectors and reception apparatus for television ³ ..	72.4	294.9	194.6	398.0	251.6
Reception apparatus for radio broadcasting ⁴	30.5	8.8	12.5	22.1	10.8
Recording equipments ⁵	5.7	9.5	5.9	7.0	3.0
Telecommunications equipment ⁶	1,122.6	528.2	1,303.5	1,209.3	653.3
Total	2,299.4	1,258.3	2,064.5	2,200.0	1,260.0
Imports					
Office machines ¹	834.1	804.7	1,352.1	1,298.7	2,194.8
Automatic data processing machines, storage units etc	15,018.8	9,720.0	11,211.7	18,959.4	25,233.2
Part and accessories ²	998.9	1,034.1	682.3	700.8	830.0
Monitors and projectors and reception apparatus for television ³ ..	8,621.6	5,991.5	8,049.7	5,771.0	5,857.3
Reception apparatus for radio broadcasting ⁴	488.8	134.9	118.4	1,190.8	190.6
Recording equipments ⁵	592.2	370.0	462.3	344.0	572.3
Telecommunications equipment ⁶	24,160.0	23,622.2	29,444.0	28,693.9	32,014.7
Total	50,714.4	41,677.4	51,320.5	56,958.6	66,892.9

*Provisional

¹ Electronic calculating machines, cash registers, accounting machines, postage-franking machines, ticket issuing machines, reproducing and displaying

² For office machines and data processing machines

³ Include Television sets, decoders etc

⁴ Whether or not combined with sound recording or reproducing apparatus or a clock

⁵ Sound recording, video recording or reproducing apparatus including or not including a video tuner

⁶ Such as computer, laptops, networking equipments etc plus their parts and accessories such as telephone sets, microphones, electric sound amplifier sets
Television cameras, digital or video cameras recorders, radio or tv transmission apparatus etc

Newspaper Circulation and Online Newspaper Readership 14.27. Circulation of hard copy newspapers continued to decline as shown in Table 14.14. The number of English and Kiswahili daily newspapers reduced by 5.0 per cent and 10.0 per cent, respectively, during the review period. Online readership per day increased by 20.1 per cent from 1,862,943 in 2016 to 2,237,608 in 2017.

Table 14.14: Local Daily/Weekly Newspapers in Circulation, 2013 – 2017

Newspapers**	2013	2014	2015	2016	2017*
Daily Newspapers Copies ('000)					
English	104,057	102,000	98,548	94,348	89,631
Kiswahili	5,900	5,800	5,209	4,401	3,961
Weekly Newspapers Copies ('000)					
English	16,794	15,900	14,975	13,741	12,917
Kiswahili	1,810	1,900	1,825	1,413	1,272
Average online visitors per day	793,046	1,025,043	1,575,043	1,862,943	2,237,608

Source: Various Media Houses

* Provisional

** Excludes free newspaper copies



SOCIAL SCENE

Education and Training

Chapter 15

Overview The Government has been implementing various reforms aimed at improving the quality of education. In the review period, the Government continued to fund the Free Primary and Day-Secondary Education. In addition, the Government registered more TVET institutions to increase access to vocational and technical training. During the same period, the Government increased budgetary allocation to the sector mainly on account of increased funding for basic and university education. Other reforms undertaken in the review period focused on the management of national examinations and development of a new curriculum.

15.2. The total expenditure for the Ministry of Education, which includes that of Teachers Service Commission is expected to grow by 31.6 per cent from KSh 315.6 billion in 2016/17 to KSh 415.3 billion in 2017/18. The total recurrent expenditure for the Ministry of Education is expected to increase by 30.7 per cent to KSh 385.2 billion in 2017/18. Development expenditure in the Ministry of Education is expected to increase to KSh 30.0 billion in 2017/18.

15.3. Overall, the number of educational institutions increased by 5.1 per cent to 90,587 in 2017. During this period, pre-primary schools went up by 1.3 per cent to 41,779 while primary schools rose by 6.7 per cent to 35,442. Further, the number of secondary schools increased by 7.2 per cent from 9,942 in 2016 to 10,655 in 2017, while registered Technical Vocational and Education Training (TVET) institutions rose substantially by 50.9 per cent to 1,962 in the same period.

15.4. During the review period, total enrolment in pre-primary schools rose by 2.9 per cent to 3,293.8 thousand. Total enrolment in primary schools increased from 10.3 million in 2016 to 10.4 million in 2017. In addition, enrolment in secondary schools grew by 4.1 per cent to 2,830.8 thousand in 2017. Overall teacher trainees' enrolment went up marginally from 41,707 in 2016 to 42,131 in 2017 while total enrolment in TVET institutions increased by 35.8 per cent to 275,139 in 2017. However, university student enrolment is expected to decline by 7.7 per cent from 564,507 in 2016/17 to 520,893 in 2017/18 academic year.

Education expenditure 15.5. Table 15.1 presents total expenditure by the Ministry of Education for the period 2013/14 to 2017/18. Total expenditure is expected to increase by 31.6 per cent from KSh 315.6 billion in 2016/17 to KSh 415.3 billion in 2017/18. During the review period, recurrent expenditure for State Departments of Basic Education is expected to grow substantially to KSh 84.8 billion. This increase is attributable to funding of Free Primary Education (FPE) and Free Day Secondary Education (FDSE). Recurrent expenditure for University Education is expected to more than double to KSh 96.0 billion in 2017/18. Recurrent expenditure for Teachers Service Commission (TSC) is expected to rise by 5.7 per cent to KSh 201.9 billion in 2017/18 while that of Vocational and Technical Training is expected to rise by 2.3 per cent to KSh 2.5 billion during the same period.

15.6. Total development expenditure by the Ministry of Education is expected to increase by 43.9 per cent from KSh 20.9 billion in 2016/17 to KSh 30.0 billion in 2017/18. The growth in development expenditure in the ministry is mainly attributed to the funding of Vocational and Technical Training and Teachers Service Commission. Development expenditures for State

Department of Vocational and Technical Training is expected to rise substantially from KSh 4.8 billion in 2016/17 to KSh 16.5 billion in 2017/18. During the same period, development expenditures for State Department of Basic Education and University Education are expected to decline by 2.0 per cent to KSh 8.0 billion and 31.5 per cent to KSh 5.4 billion, respectively.

Table 15.1: Expenditure for the Ministry of Education¹, 2013/14 - 2017/18

	KSh Million				
	2013/14	2014/15	2015/16	2016/17 ⁺	2017/18 ^{**}
RECURRENT EXPENDITURE					
Ministry of Education					
State Department of Basic Education.....	42,204.06	51,316.39	57,519.21	54,977.03	84,768.99
Teachers Service Commission.....	154,778.10	157,209.10	180,970.14	190,947.22	201,893.46
State Department for University Education.....	37,976.67	51,775.82	39,525.27	46,303.33	96,042.01
State Department for Vocational and Technical Training...	2,256.01	1,244.80	2,308.13	2,479.53	2,535.36
Sub Total	237,214.84	261,546.11	280,322.75	294,707.12	385,239.82
DEVELOPMENT EXPENDITURE					
Ministry of Education					
State Department of Basic Education.....	8,843.94	11,156.42	5,258.23	8,188.86	8,023.82
Teachers Service Commission.....	-	-	100.00	6.34	118.00
State Department for University Education.....	3,085.08	9,595.41	5,002.01	7,930.17	5,435.85
State Department for Vocational and Technical Training...	2,068.73	1,866.95	4,248.17	4,746.18	16,463.28
Sub Total	13,997.76	22,618.78	14,608.41	20,871.55	30,040.95
GROSS TOTAL EXPENDITURE	251,212.59	284,164.89	294,931.16	315,578.67	415,280.76

Source: The National Treasury

^{**}Estimates

⁺ Revised

15.7. Educational Institutions: The total number of educational institutions increased by 5.1 per cent from 86,179 in 2016 to 90,587 in 2017 as shown in Table 15.2. The number of pre-primary, primary and secondary schools went up by 1.3 per cent, 6.7 per cent and 7.2 per cent, respectively, in 2017. Notably, the rate of increase for private schools was higher than that of public schools during the year under review. The total number of registered Technical Vocational and Education Training (TVET) institutions rose substantially by 50.9 per cent from 1,300 in 2016 to 1,962 in 2017. The increase is partly as a result enforcement of the TVET Act where all the institutions were required to be registered. The number of public universities increased by one following the granting of charter to Garissa University College.

Table 15.2: Educational Institutions by Category, 2013 – 2017

	Number				
Category	2013	2014	2015	2016	2017*
Schools:					
Pre-Primary :					
Public	24,702	24,768	24,862	25,175	25,381
Private	15,443	15,451	15,913	16,073	16,398
Sub Total	40,145	40,219	40,775	41,248	41,779
Primary:					
Public	21,205	21,718	22,414	22,939	23,584
Private	6,821	7,742	8,919	10,263	11,858
Sub Total	28,026	29,460	31,333	33,202	35,442
Secondary:					
Public.. .. .	6,807	7,680	8,297	8,592	9,111
Private.. .. .	1,027	1,067	1,143	1,350	1,544
Sub Total	7,834	8,747	9,440	9,942	10,655
Teacher Training Colleges:					
Pre-primary:					
Public.. .. .	22	25	25	26	41
Private.. .. .	109	115	118	121	235
Sub Total	131	140	143	147	276
Primary:					
Public	22	24	24	27	27
Private.. .. .	101	101	101	105	108
Sub Total	123	125	125	132	135
Secondary ¹	2	2	3	3	3
Total	256	267	271	282	414
TVET Institutions					
Public Youth Polytechnics	701	701	816	816	1,186
Private Youth Polytechnics .. .. .	..	..	..	29	47
Public Technical and Vocational Colleges ..	49	51	55	62	91
Private Technical and Vocational Colleges ..	..	..	..	382	627
National Polytechnics	3	3	3	11	11
Sub Total	753	755	874	1,300	1,962
Universities					
Public.. .. .	22	22	23	30	31
Private.. .. .	30	31	30	28	28
Sub Total	52	53	53	58	59
GRAND TOTAL	77,197	79,641	82,889	86,179	90,587

Source : Ministry of Education

* Provisional

¹ Diploma teacher training colleges

.. Data not available

15.8. Pre-Primary Education: The pupil enrolment and number of teachers in Early Childhood Development Education (ECDE) centres from 2013 to 2017 is presented in Table 15.3. Total enrolment in ECDE centres is estimated to have increased by 2.9 per cent from 3,199.8 thousand in 2016 to 3,293.8 thousand in 2017. The total number of ECDE teachers grew by 6.7 per cent to 118,276 in 2017, while the number of trained ECDE teachers increased by 9.4 per cent from 97,717 in 2016 to 106,938 in 2017. These increases are attributed to expansion of ECDE centres and employment of more teachers by County Governments. Female teachers accounted for 83.4 per cent of pre-primary school trained teachers in 2017. Pre-primary Gross Enrolment Rate (GER) rose from 76.6 per cent in 2016 to 77.1 per cent in 2017, while the Net Enrolment Rate (NER) increased to 76.9 per cent in 2017 as shown in Figure 15.1.

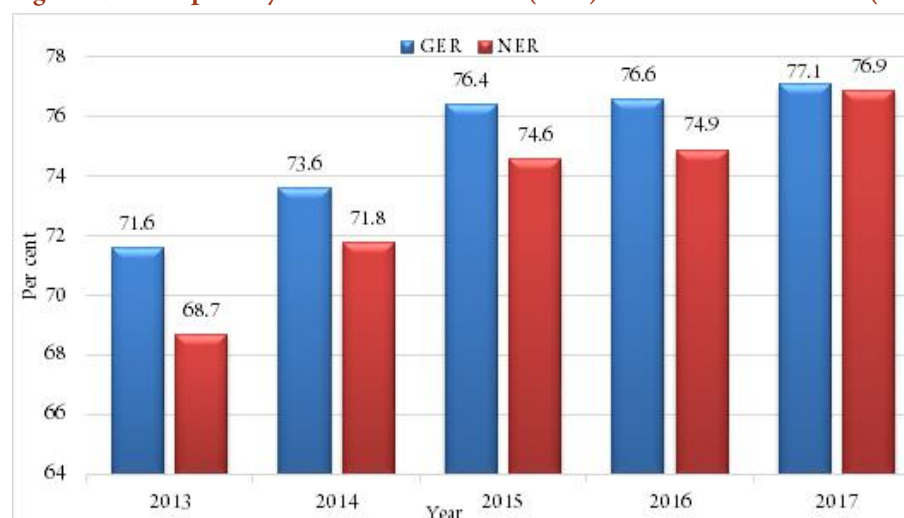
Table 15.3: Pupil Enrolment and Teacher Numbers in ECDE Centres, 2013 – 2017

	Number				
	2013	2014	2015	2016	2017*
Enrolment					
Boys... ..	1,411,309	1,476,383	1,607,353	1,634,194	1,681,530
Girls... ..	1,454,039	1,543,482	1,560,502	1,565,647	1,612,283
TOTAL... ..	2,865,348	3,019,865	3,167,855	3,199,841	3,293,813
Trained Teachers					
Male	13,854	13,968	14,721	15,366	17,746
Female	69,960	74,186	78,185	82,351	89,192
Sub Total... ..	83,814	88,154	92,906	97,717	106,938
Untrained Teachers					
Male	3,430	3,307	2,840	2,606	2,445
Female	13,818	13,323	11,441	10,496	8,893
Sub Total... ..	17,248	16,630	14,281	13,102	11,338
TOTAL... ..	101,062	104,784	107,187	110,819	118,276

Source: Ministry of Education

* Provisional

Figure 15.1: Pre-primary Gross Enrolment Rate (GER) and Net Enrolment Rate (NER), 2013-2017



15.9. Primary Education: Enrolment in primary schools by class and sex from 2013 to 2017 is shown in Table 15.4. Total enrolment increased marginally from 10.3 million in 2016 to 10.4 million in 2017. Enrolment in Standard one went up by 1.3 per cent to 1,370.3 thousand in 2017. During the same period, boy's enrolment grew by 1.4 per cent to 5,293.9 thousand while that of girls went up marginally to 5,109.8 thousand. The retention rate for boys in Std 8 declined from 78.9 per cent in 2016 to 77.0 per cent in 2017 while that of girls decreased marginally to 76.3 per cent in the review period.

Table 15.4: Primary School Enrolment by Class and Sex, 2013 – 2017

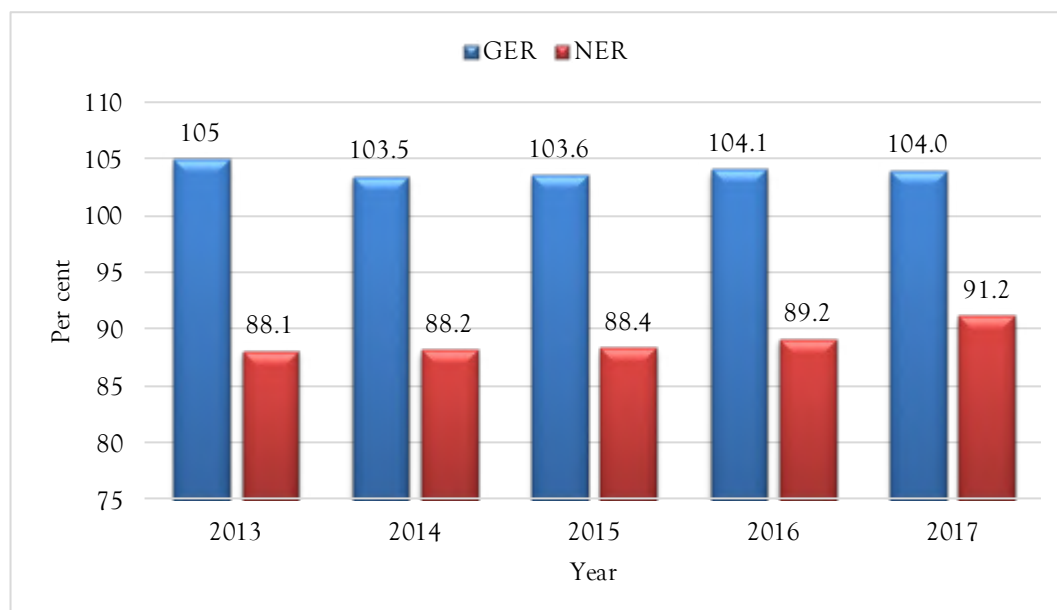
Class	2013			2014			2015			2016			2017*		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Standard 1 ..	710.5	659.1	1,369.7	712.1	670.4	1,382.5	702.0	659.4	1,361.4	696.8	655.8	1,352.6	705.9	664.4	1,370.3
Standard 2 ..	676.2	639.8	1,316.0	679.9	644.9	1,324.8	682.7	648.3	1,331.0	686.7	650.7	1,337.4	695.7	655.2	1,350.9
Standard 3 ..	676.1	652.0	1,328.1	674.5	637.7	1,312.2	675.9	641.9	1,317.8	684.3	653.9	1,338.2	693.3	652.9	1,346.2
Standard 4 ..	672.6	645.3	1,317.9	677.9	651.7	1,329.6	683.9	657.3	1,341.2	693.4	669.3	1,362.7	694.2	665.4	1,359.7
Standard 5 ..	644.8	631.5	1,276.3	640.5	628.2	1,268.7	657.4	641.1	1,298.5	667.7	651.2	1,318.9	681.1	667.5	1,348.6
Standard 6 ..	631.4	613.0	1,244.4	621.4	618.5	1,239.9	638.7	633.9	1,272.6	658.1	650.8	1,308.9	669.8	655.2	1,325.0
Standard 7 ..	560.0	560.3	1,120.3	598.2	601.0	1,199.2	616.6	619.7	1,236.3	646.1	650.9	1,297.0	656.1	652.9	1,309.0
Standard 8 ..	448.1	436.8	884.9	448.0	446.1	894.1	470.7	461.3	932.0	486.2	477.8	964.0	497.7	496.3	994.0
TOTAL	5,019.7	4,837.9	9,857.6	5,052.5	4,898.5	9,951.0	5,127.9	4,962.9	10,090.8	5,219.3	5,060.3	10,279.7	5,293.9	5,109.8	10,403.7

Source : Ministry of Education

*Provisional

15.10. Figure 15.2 presents trends in primary school GER and NER from 2013 and 2017. In 2017, the primary school GER declined marginally to 104.0 per cent while the NER increased marginally to 91.2 per cent.

Figure 15.2: Primary School Gross Enrolment Rate (GER) and Net Enrolment Rate (NER), 2013-2017



15.11. **Kenya Certificate of Primary Education (KCPE):** The number of candidates by sex and mean subject score in KCPE from 2013 to 2017 is shown in Table 15.5. In 2017, the number of KCPE candidates increased by 4.3 per cent to 993,718 from 952,390 in 2016. The number of male candidates rose by 5.3 per cent from 473,684 in 2016 to 498,775 in 2017, while that of female candidates increased by 3.4 per cent to 494,943. The national mean score decreased by 0.82 percentage points to 52.16 per cent in 2017. In the review period, performance of most subjects declined with performance in science registering the highest decline of 6.21 percentage points to 55.6 per cent. However, performance in Mathematics improved by 5.75 percentage points to 51.14 per cent in 2017.

Table 15.5: Candidates by Sex and Mean Subject Score in KCPE, 2013-2017

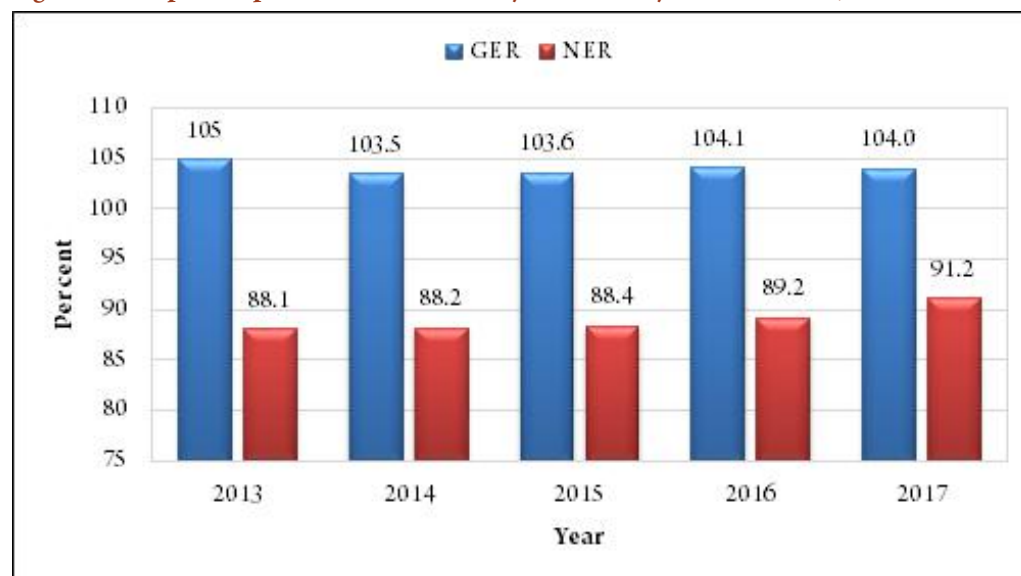
	Number				
	2013	2014	2015	2016	2017*
Number of candidates					
Male...	426,369	443,258	467,904	473,684	498,775
Female...	413,390	437,228	459,885	478,706	494,943
Total	839,759	880,486	927,789	952,390	993,718
Subject	Mean score (%)				
English Language...	53.06	47.64	49.98	50.52	47.63
English Composition...	41.90	41.47	41.38	40.26	39.60
Kiswahili Lugha...	45.78	45.04	44.68	49.20	48.38
Kiswahili Insha...	52.43	58.00	54.38	48.27	47.88
Mathematics...	52.86	52.04	56.16	45.39	51.14
Science...	61.82	66.00	55.48	61.82	55.61
Social Studies...	54.75	55.26	49.98	57.38	57.22
Religious Education...	70.43	68.97	70.20	70.99	69.79
National Mean Score	54.13	54.30	52.78	52.98	52.16

Source: Kenya National Examinations Council

* Provisional

15.12. The Pupil Completion Rate (PCR) and Primary to Secondary Transition Rate (PSTR) from 2013 to 2017 is shown in Figure 15.3. The PCR increased from 83.5 per cent in 2016 to 84.0 in 2017. The PSTR rose from 81.3 per cent in 2016 to 83.1 per cent in 2017.

Figure 15.3 Pupil Completion Rate and Primary to Secondary Transition Rate, 2013 - 2017



15.13. **Primary School Teachers:** Table 15.6 shows the number of public primary school teachers by cadre and sex from December 2013 to December 2017. The total number of teachers rose by 1.1 per cent from 214,719 in 2016 to 217,152 in 2017. The number of graduate teachers declined marginally to 21,192 in 2017, while the number of approved teachers increased by 1.7 per cent compared to a 2.8 per cent increase in 2016. The number of SI/diploma teachers increased from 39,121 in 2016 to 39,559 in 2017, mainly due to promotion of P1 teachers, while the number of P1 teachers grew by 1.2 per cent to 103,262 in 2017. The total number of male teachers decreased slightly from 107,495 in 2016 to 106,727 in 2017, while the number of female teachers grew by 3.0 per cent to 110,425 in the same period. The pupil teacher ratio worsened slightly from 40:1 in 2016 to 41:1 during the period under review.

15.14. **Secondary Education:** Table 15.7 presents enrolment in both public and private secondary schools by class and sex from 2013 to 2017. The total enrolment in secondary schools grew by 4.1 per cent from 2,720.6 thousand in 2016 to 2,830.8 thousand in 2017. Further, enrolment of girls increased by 4.3 per cent to 1,380.0 thousand while that of boys went up by 3.9 per cent to 1,450.8 thousand in 2017. The retention rate at Form 4 for boys and girls was 87.8 per cent and 85.1 per cent, respectively.

Table 15.6: Public Primary School Teachers¹ by Cadre and Sex, 2013 – 2017

Grade	2013			2014			2015			2016			2017*			Number
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Graduate.....	9,448	9,825	19,273	9,353	10,001	19,354	10,267	10,951	21,218	10,315	10,987	21,302	10,228	10,964	21,192	
Approved.....	29,964	20,195	50,159	29,010	20,722	49,732	29,669	21,050	50,719	29,770	22,352	52,122	30,255	22,745	53,000	
SI/Diploma.....	14,528	19,520	34,048	15,236	20,850	36,086	16,421	22,722	39,143	16,386	22,735	39,121	16,465	23,094	39,559	
Dip/Technical ...	-	-	-	17	26	43	18	27	45	23	32	55	37	37	74	
P1.....	48,287	47,919	96,206	48,118	47,317	95,435	48,426	49,723	98,149	50,965	51,105	102,070	49,704	53,558	103,262	
Cert./Technical	-	-	-	30	17	47	31	15	46	36	13	49	29	14	43	
Contract Teachers..	-	-	-	-	-	-	647	1,024	1,671	-	-	-	9	13	22	
TOTAL	102,227	97,459	199,686	101,764	98,933	200,697	105,479	105,512	210,991	107,495	107,224	214,719	106,727	110,425	217,152	

Source: Teachers Service Commission

*Provisional

¹ Data is exclusively for public schools and does not include teachers on study leave, disciplinary cases and those performing non-teaching duties.

Table 15.7: Enrolment in Secondary Schools by Class and Sex, 2013 – 2017

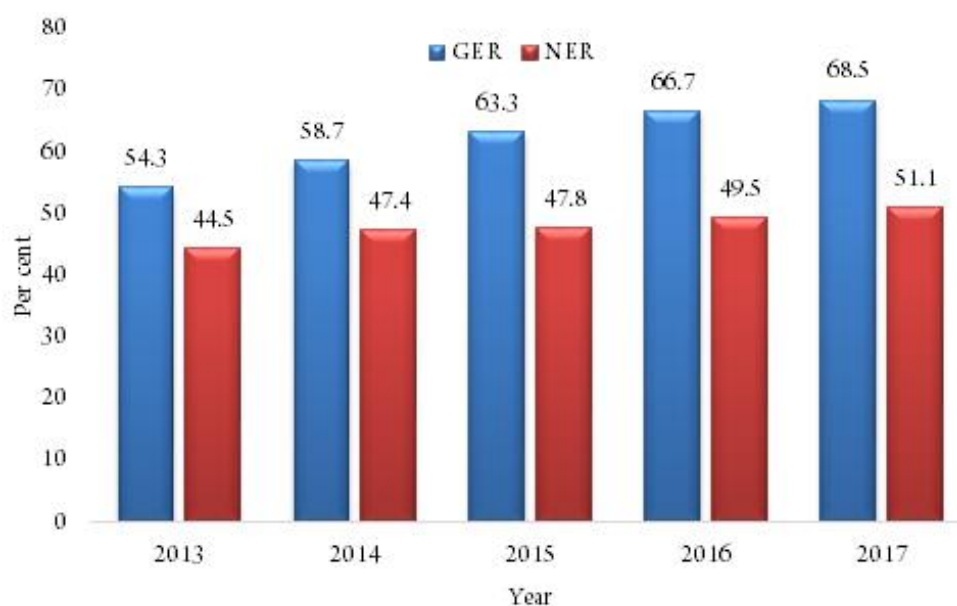
Class	2013			2014			2015			2016			2017*			Number ('000')
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
Form 1	327.8	289.8	617.5	342.4	331.0	673.4	380.4	352.2	732.7	382.8	375.1	757.9	405.5	396.1	801.5	
Form 2	288.2	253.7	542.0	326.4	307.3	633.6	359.8	331.6	691.4	372.5	357.9	730.4	386.4	372.3	758.7	
Form 3	267.2	228.9	496.1	294.3	263.7	557.9	331.1	296.4	627.5	345.0	324.3	669.4	356.0	335.7	691.7	
Form 4	244.5	204.2	448.7	250.2	216.5	466.7	277.1	230.3	507.4	296.6	266.3	562.9	303.0	275.9	578.9	
TOTAL	1,127.7	976.6	2,104.3	1,213.3	1,118.4	2,331.7	1,348.4	1,210.5	2,559.0	1,396.9	1,323.6	2,720.6	1,450.8	1,380.0	2,830.8	

Source : Ministry of Education

* Provisional

15.15. Figure 15.4 depicts the trend of secondary school GER and NER from 2013 to 2017. Secondary school GER increased from 66.7 per cent in 2016 to 68.5 per cent in 2017 while NER increased from 49.5 per cent to 51.1 per cent during the same period.

Figure 15.4: Secondary School Gross Enrolment Rate (GER) and Net Enrolment Rate (NER), 2013-2017



15.16. Kenya Certificate of Secondary Education (KCSE): The number of KCSE candidates grew by 6.9 per cent from 571,161 in 2016 to 610,501 in 2017 as shown in Table 15.8. During the review period, the number of female candidates increased by 8.7 per cent to 295,623 while that of male candidates increased by 5.2 per cent to 314,878 in 2017. The number of candidates who scored a minimum university entry score of C+ (plus) and above decreased by 21.2 per cent to 70,073 in 2017 from 88,929 in 2016. During the review period, the number of candidates who scored A- (minus) and above declined by 40.3 per cent from 4,786 in 2016 to 2,856 in 2017. The number of candidates who obtained grade C- (minus) and C plain and qualified to join diploma colleges dropped by 4.1 per cent to 101,514 in 2017. During the same period, the number of candidates who scored below grade C- (minus) increased by 16.6 per cent to 438,914.

Table 15.8: National trends in KCSE candidates mean grade by Sex, 2013-2017

KCSE Grade	2013			2014			2015			2016			2017*		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
A.....	1,855	867	2,722	2,133	940	3,073	2,024	661	2,685	58	83	141	81	61	142
A+.....	6,276	3,492	9,768	7,644	4,124	11,768	7,952	4,117	12,069	2,685	1,960	4,645	1,813	901	2,714
B+.....	10,776	6,237	17,013	12,606	7,208	19,814	13,517	8,410	21,927	6,581	4,394	10,975	4,596	2,748	7,344
B.....	15,315	9,341	24,656	17,941	11,378	29,319	19,826	13,634	33,460	10,204	7,012	17,216	7,738	4,890	12,628
B-.....	18,216	12,648	30,864	21,997	16,318	38,315	25,312	19,269	44,581	13,649	10,096	23,745	11,631	7,754	19,385
C+.....	21,836	16,515	38,351	25,978	21,450	47,428	29,556	25,214	54,770	17,238	14,969	32,207	15,828	12,032	27,860
C.....	26,492	22,079	48,571	30,699	27,989	58,688	33,437	31,476	64,913	22,960	21,832	44,792	21,506	18,968	40,474
C-.....	32,385	28,378	60,763	36,015	34,662	70,677	37,482	36,633	74,115	30,979	30,047	61,026	31,206	29,834	61,040
D+.....	37,703	34,100	71,803	38,749	37,449	76,198	40,181	38,976	79,157	41,632	39,319	80,951	45,522	42,925	88,447
D.....	39,672	38,505	78,177	37,365	36,136	73,501	40,442	39,113	79,555	57,487	54,648	112,135	68,572	66,978	135,550
D-.....	28,542	27,251	55,793	24,542	23,174	47,716	25,531	23,127	48,658	77,718	72,211	149,929	88,040	91,341	179,381
E.....	3,913	3,126	7,039	3,227	2,409	5,636	3,127	2,223	5,350	18,077	15,322	33,399	18,345	17,191	35,536
Total	242,981	202,539	445,520	258,896	223,237	482,133	278,387	242,853	521,240	299,268	271,893	571,161	314,878	295,623	610,501

Source: Kenya National Examinations Council

* Provisional

Table 15.9: Public Secondary School and Tertiary Teachers by Cadre and Sex¹, 2013 – 2017

Grade	2013			2014			2015			2016			2017*		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Trained															
Graduate	32,111	20,378	52,489	37,641	24,795	62,436	40,610	27,081	67,691	43,128	29,120	72,248	43,584	31,137	74,721
Approved	3,787	1,858	5,645	4,269	2,116	6,385	4,082	2,025	6,107	3,845	1,985	5,830	3,659	1,851	5,510
S1/Diploma	3,689	2,614	6,303	4,853	3,687	8,540	5,650	4,242	9,892	5,432	4,180	9,612	6,005	4,515	10,520
Dip/Technical	326	141	467	572	299	871	577	296	873	568	285	853	1,647	768	2,415
Cert./Technical ...	324	109	433	366	121	487	1	116	466	342	96	438	331	107	438
Contract Teachers..	-	-	-	-	-	-	81	121	202	-	-	-	12	15	27
Sub Total	40,237	25,100	65,337	47,701	31,018	78,719	51,350	33,881	85,231	53,315	35,666	88,981	55,238	38,393	93,631
Untrained															
Graduate	134	15	149	-	-	-	169	30	199	165	35	200	164	30	194
Dip/Technical	6	2	8	6	2	8	6	2	8	4	2	6	6	-	6
Sub Total	140	17	157	6	2	8	175	32	207	169	37	206	170	30	200
Grand Total	40,377	25,117	65,494	47,707	31,020	78,727	51,525	33,913	85,438	53,484	35,703	89,187	55,408	38,423	93,831

Source : Teachers Service Commission

* Provisional

¹ Data is exclusively for public schools and does not include teachers on study leave, disciplinary cases and those performing non-teaching duties.

15.17. Secondary School Teachers: The number of public secondary school and tertiary teachers by sex and cadre from December 2013 to December 2017 is presented in Table 15.9. The total number of teachers increased by 5.2 per cent from 89,187 in 2016 to 93,831 in 2017. During the review period, only 0.2 per cent of the public secondary and tertiary teachers were not trained. The total number of trained female teachers grew by 7.6 per cent to 38,393 in 2017 while that of trained male teachers rose by 3.2 per cent to 55,238 during the review period. In 2017, the number of trained S1/Diploma teachers increased by 9.4 per cent from 9,612 in 2016 to 10,520 in 2017 while the number of trained graduate teachers went up by 3.4 per cent in 2017. The increase is partly attributed to recruitment of teachers by the Government and resumption of duty by teachers after completion of their studies. In the same period, the number of approved teachers declined by 5.5 per cent to 5,510.

15.18. Enrolment in Teacher Training Institutions: The overall teacher trainees' enrolment rose marginally to 42,131 in 2017 as shown in Table 15.10. Similarly, enrolment of P1 teacher trainees grew slightly by 1.9 per cent to 39,798 in 2017. The number of teacher trainees in public colleges increased by 3.0 per cent to 21,931 in 2017, while those from private colleges grew by 0.5 per cent to 17,867. During the review period, the number of first year diploma trainees declined by 30.8 per cent while that of first year P1 trainees grew by 3.0 per cent, mainly due to lowering of minimum entry grade. Total enrolment for diploma trainees also decreased by 11.6 per cent to 2,333 in 2017.

Table 15.10: Teacher Trainees Enrolment by Year and Sex, 2013- 2017

Type of Institution/ Certification	Number									
	2013		2014		2015		2016		2017*	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Public primary (P1)										
1 st Year	5,249	5,435	4,994	5,536	5,769	6,270	4,489	5,945	4,623	6,123
2 nd Year	4,967	5,357	5,249	5,435	5,513	5,266	5,074	5,786	5,226	5,959
Sub Total	10,216	10,792	10,243	10,971	11,282	11,536	9,563	11,731	9,849	12,082
Total Public P1	21,008		21,214		22,818		21,294		21,931	
Private primary (P1) ..	6,997	7,392	7,905	8,352	8,102	8,511	8,401	9,372	8,418	9,449
Total Private P1	14,389		16,257		16,613		17,773		17,867	
Sub Total	17,213	18,184	18,148	19,323	19,384	20,047	17,964	21,103	18,267	21,531
Diploma										
1 st Year	316	269	671	516	419	411	573	558	453	330
2 nd Year	379	226	317	260	300	280	392	369	418	401
3 rd Year	327	199	387	231	305	256	404	344	402	329
Sub Total	1,022	694	1,375	1,007	1,024	947	1,369	1,271	1,273	1,060
Total	18,235	18,878	19,523	20,330	20,408	20,994	19,333	22,374	19,540	22,591
Grand Total	37,113		39,853		41,402		41,707		42,131	

Source: Ministry of Education

*Provisional

15.19. Enrolment in TVET Institutions: The enrolment in registered TVET institutions from 2013 to 2017 is shown in Table 15.11. Total enrolment in TVET institutions increased by 35.8 per cent from 202,556 in 2016 to 275,139 in 2017, mainly due to registration of more TVET institutions. During the review period, enrolment in national polytechnics and technical universities grew by 31.4 per cent from 36,915 in 2016 to 48,492. At the same time, enrolment in Vocational Training Colleges rose by 29.1 per cent from 80,905 in 2016 to 104,441.

Table 15.11: Enrolment in Technical and TVET Institutions by Sex, 2013 – 2017

Institution	2013		2014		2015		2016		2017*	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Technical University of Kenya ¹	4,814	2,607	4,432	2,769	3,911	2,517	2,425	1,249	3,226	1,432
Technical University of Mombasa ¹	3,048	1,506	3,250	1,708	2,835	1,633	1,789	1,236	1,859	1,257
Kenya Technical Trainers College	..	..	858	597	913	1,119	2,806	2,114	1,750	1,219
Kisumu National Polytechnic	2,223	1,267	2,926	1,551	2,078	1,325	2,941	1,415	3,608	1,887
Eldoret National Polytechnic	3,081	1,949	3,194	1,977	2,726	1,484	3,793	2,174	4,965	3,215
Meru National Polytechnic .....	..	..	..	..	..	..	744	287	2,727	1,990
North Eastern National Polytechnic .....	..	..	..	..	..	..	613	428	256	200
Kenya Coast National Polytechnic .....	..	..	..	..	..	..	736	1,142	822	1,318
Kitale National Polytechnic .....	..	..	..	..	..	..	907	512	978	673
Kisii National Polytechnic .....	..	..	..	..	..	..	1,733	1,217	2,219	1,810
Kabete National Polytechnic .....	..	..	..	..	..	..	2,048	979	2,607	1,051
Nyeri National Polytechnic .....	..	..	..	..	..	..	1,218	646	1,874	1,282
Sigalagala National Polytechnic .....	..	..	..	..	..	..	1,001	762	2,399	1,868
Sub Total	13,166	7,329	14,660	8,602	12,463	8,078	22,754	14,161	29,290	19,202
Total		20,495		23,262		20,541		36,915		48,492
Other TVET Institutions										
Public Technical and Vocational Colleges ²	31,956	23,989	29,632	21,232	32,221	23,087	17,589	9,569	29,584	17,982
Private Technical and Vocational Colleges ²	..	..	..	..	..	..	27,280	30,298	35,951	38,689
Vocational Training Colleges ³	42,942	28,627	45,473	28,222	47,625	29,840	46,340	34,565	59,756	44,685
Sub Total	74,898	52,616	75,105	49,454	79,846	52,927	91,209	74,432	125,291	101,356
Total		127,514		124,559		132,773		165,641		226,647
Grand Total		148,009		147,821		153,314		202,556		275,139

Source: Technical Vocational Education and Training Authority (TVETA)

* Provisional

¹ Diploma and Certificate courses only² Formerly Technical Training Institutes³ Formerly Youth Polytechnics

.. Data not available

15.20. University Education: Table 15.12 presents student enrolment in public and private universities from 2014/15 to 2017/18. University enrolment is expected to decline by 7.7 per cent from 564,507 in 2016/17 to 520,893 in 2017/18. Similarly, student enrolment in both public and private universities is expected to decrease by 8.2 per cent and 5.0 per cent, respectively in 2017/18. The decline in enrolment was mainly occasioned by reduction in the number of candidates who met the minimum university entry requirements. Half of the public universities are expected to register a drop in the number of students during the review period with the decrease in enrolment being observed for both male and female students. Apart from Cooperative University, all other universities had more male-students than female-students.

Table 15.12: Enrolment¹ by University and Sex, 2014/15 - 2017/18

University	2014/15		2015/16		2016/17		2017/18*	
	Male	Female	Male	Female	Male	Female	Male	Female
Public Universities								
Nairobi	42,328	27,618	60,103	38,612	47,137	25,661	46,172	21,655
Kenyatta	43,165	33,714	40,254	31,237	37,216	29,875	39,263	32,770
Moi	22,458	20,838	24,775	21,951	24,608	18,062	18,972	18,935
Egerton	8,661	5,267	7,087	5,433	7,178	5,623	6,917	4,676
Jomo Kenyatta (JKUAT)	20,860	11,469	21,623	12,752	24,747	15,198	25,621	15,724
Maseno	7,356	7,412	11,157	7,115	10,729	7,618	9,383	7,217
Masinde Muliro	7,480	4,213	8,619	5,612	11,344	7,542	9,842	6,985
Technical University of Kenya	5,391	2,024	7,586	2,446	7,460	2,693	8,642	3,025
Technical University of Mombasa	4,186	1,234	5,061	1,814	5,086	2,397	6,038	2,200
Dedan Kimathi	4,715	1,578	4,538	1,558	4,554	1,558	4,261	1,925
Chuka	9,716	3,931	6,469	4,074	8,689	5,844	9,032	6,067
Karatina	3,095	2,209	4,590	3,046	3,631	2,653	3,585	2,700
Kisii	4,780	3,495	7,567	5,979	13,913	8,995	11,581	8,322
Meru	2,825	1,174	3,067	1,272	4,362	2,156	3,466	1,400
Multimedia	754	346	2,568	1,373	2,902	1,753	2,986	1,746
South Eastern	3,676	2,138	4,274	2,624	4,591	3,153	4,856	3,264
Jaramogi Oginga Odinga	2,537	1,638	6,682	3,974	7,529	5,213	5,798	3,331
Laikipia	4,999	4,007	5,297	4,019	5,297	4,019	5,316	4,041
University of Eldoret	9,447	6,215	13,963	9,875	9,675	7,261	7,700	6,275
Kabanga	3,375	2,366	1,249	1,017	4,661	3,855	4,169	3,618
Pwani	2,981	1,603	3,781	2,494	3,989	2,692	2,792	2,238
Masai Mara	4,118	3,036	5,149	3,988	5,340	4,234	5,879	5,096
Kibabii .....	..	..	3,527	1,815	3,610	2,440	4,314	2,842
Embu University .....	..	..	..	..	687	677	3,046	2,394
Machakos .....	..	..	..	..	1,085	873	4,656	2,941
Murang'a University .....	..	..	..	..	1,473	871	2,068	1,304
Rongo .....	..	..	..	..	3,029	2,220	2,831	2,235
Kirinyaga University .....	..	..	..	..	317	242	1,295	989
Co-operative University .....	..	..	..	..	1,259	1,594	813	927
Taita Taveta University .....	..	..	..	..	561	280	546	234
Garissa .....	..	..	..	..	..	..	752	297
Sub Total	217,164	146,170	258,688	174,068	286,840	192,472	262,592	177,373
Private Universities	42,454	37,994	39,125	38,804	43,547	41,648	43,253	37,675
Grand Total	443,783		510,685		564,507		520,893	

Source: Individual Universities/ Commission for University Education

* Provisional

¹ Enrolment excludes Diploma/Certificate.

15.21. Number of Universities and other Institutions offering Degree Programmes: The number of registered universities and other institutions offering degree programmes from 2013 to 2017 is shown in Table 15.13. The number of public universities increased to 31 in 2017 after Garissa University College was awarded a charter. During the review period, the number of public universities' constituent colleges rose to 5 following the establishment of Bomet and Tharaka-Nithi university colleges. Further, the number of public university campuses established increased significantly from 115 in 2016 to 168 in 2017.

Table 15.13: Number of Universities and Other Institutions Offering Degree Programmes by Institution Category, 2013-2017

Institution Category	Number				
	2013	2014	2015	2016	2017*
Chartered private universities	17	17	17	18	18
Universities with Letter of Interim Authority	11	13	14	14	14
Newly Registered universities	2	1	1	-	-
Institutions approved for collaboration with universities in offering university programmes	33	33	35	35	35
Public universities	22	22	23	30	31
Public university constituent colleges	9	9	10	3	5
Private university constituent colleges	5	5	5	5	5
Public university campuses established ⁺	81	87	101	115	168

Source: Commission for University Education

* Provisional

⁺ Revised

15.22. Table 15.14 shows the number of approved degree programmes from 2013 to 2017. The number of approved public university degree programmes increased by 2.0 per cent to 2,807 while that of private universities rose by 1.6 per cent to 630 in 2017. The number of approved degree programmes for universities with a letter of interim authority increased from 64 in 2016 to 70 in 2017. The number of validated diploma programmes increased from 101 in 2016 to 103 in 2017.

Table 15.14: Number of approved Degree Programmes, 2013 - 2017

Programme	Number				
	2013	2014	2015	2016	2017*
Public University Degree Programmes.....	..	2,027	2,066	2,066	2,807
Public University Constituent Colleges Degree Programmes.....	..	..	106	106	108
Private University Degree Programmes.....	362	456	554	620	630
Private University Constituent Colleges Degree Programmes.....	..	18	18	21	22
Universities with Letter of Interim Authority.....	..	49	56	64	70
Registered Private University Degree Programmes.....	..	4	4	4	4
Degree programmes for Collaboration with Universities.....	38	38	38	41	45
Validated diploma programmes ¹ .....	..	88	94	101	103

Source: Commission for University Education

* Provisional

.. Data not available

¹Commission resumed validation in 2016

15.23. **Education Loans:** The total number of loan applicants, beneficiaries and amount of loans awarded to applicants in public and private universities and TVET institutions from 2012/13 to 2016/17 academic years is presented in Table 15.15. The total number of loan applicants increased by 23.5 per cent to 252,928 in 2016/17. During the same period, the number of loan beneficiaries increased by 24.2 per cent to 244,626. The amount of loans awarded increased by 25.0 per cent from KSh 7.6 billion in 2015/16 to KSh 9.5 billion in 2016/17.

15.24. Loan applicants in public universities increased by 15.0 per cent from 183,887 in 2015/16 to 211,501 in 2016/17. The number of beneficiaries in public universities increased by 17.3 per cent from 176,708 in 2015/16 to 207,271 in 2016/17. During the review period, total amount of loans awarded to applicants from public universities increased by 18.5 per cent

to KSh 8.3 billion in 2016/17 from KSh 7.0 billion in 2015/16. The number of loan applicants from private universities increased by 27.1 per cent to 7,044 while beneficiaries increased by 28.4 per cent to 6,410 in 2016/17. During the review period, the amount of loan awarded to private university loan applicants increased by 33.7 per cent to KSh 257.1 million. Total number of loan applicants from TVET institutions more than doubled to 34,383 in 2016/17 out of which 3,945 were awarded loans. The amount of loan awarded to TVET applicants increased from KSh 359.3 million in 2015/16 to KSh 883.0 million in 2016/17.

Table 15.15: Loan Applicants, Beneficiaries and Loans Awarded by Sex, 2012/13 – 2016/17

Year	Loan								
	Applicants			Beneficiaries			Amount Awarded (KSh Million)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
All Institutions									
2012/2013.....	84,814	45,932	130,746	77,705	40,219	117,924	3,377	1,720	5,097
2013/2014.....	108,050	57,645	165,695	97,810	51,836	149,646	4,148	2,299	6,447
2014/2015.....	120,881	64,872	185,753	117,084	60,448	177,532	4,592	2,353	6,945
2015/2016.....	132,246	72,513	204,759	127,913	69,116	197,029	4,945	2,628	7,573
2016/2017.....	163,887	89,042	252,928	158,537	86,089	244,626	6,125	3,327	9,452
Public University									
2012/2013.....	81,331	43,223	124,554	75,118	38,285	113,403	3,261	1,634	4,895
2013/2014.....	101,385	53,620	155,005	92,061	48,459	140,520	3,948.5	2,175.2	6,123.7
2014/2015.....	112,495	59,931	172,426	109,022	55,847	164,869	4,384.5	2,224.2	6,608.7
2015/2016.....	119,225	64,662	183,887	115,194	61,514	176,708	4,607.8	2,413.7	7,021.5
2016/2017.....	137,476	74,026	211,501	134,726	72,545	207,271	5,403.0	2,909.3	8,312.2
Private University									
2012/2013.....	3,483	2,709	6,192	2,587	1,934	4,521	115.9	85.9	202
2013/2014.....	3,903	2,791	6,694	2,987	2,143	5,130	127.8	90.7	218.5
2014/2015.....	3,335	2,390	5,725	3,011	2,050	5,061	118.7	80.8	199.5
2015/2016.....	3,198	2,344	5,542	2,896	2,095	4,991	112.0	80.3	192.3
2016/2017.....	4,086	2,958	7,044	3,718	2,692	6,410	149.1	108.0	257.1
TVET institutions									
2012/2013 ¹	-	-	-	-	-	-	-	-	-
2013/2014.....	2,762	1,234	3,996	2,762	1,234	3,996	71.6	33.3	104.8
2014/2015.....	5,051	2,551	7,602	5,051	2,551	7,602	88.8	48.2	137.0
2015/2016.....	9,823	5,507	15,330	9,823	5,507	15,330	224.9	134.4	359.3
2016/2017.....	22,326	12,058	34,383	20,093	10,852	30,945	573.3	309.6	883.0

Source: Higher Education Loans Board

*Provisional

¹ Awarding of bursaries to applicants from TVET institutions started in 2013/14

15.25. Table 15.16 shows the number of bursary applicants, beneficiaries and the amounts awarded to students by the Higher Education Loans Board (HELB) in public universities and TVET institutions from 2012/13 to 2016/17. The total number of bursary applicants increased significantly from 34,985 in 2015/16 to 243,532 in 2016/17, but only 35,653 were awarded bursaries. In total, the amount of bursary awarded increased by 17.6 per cent from KSh 216.3 million in 2015/16 to 254.4 million in 2016/17.

15.26. The total number of bursary applicants in public universities was 209,149 out of which 19,952 were awarded. The amount of bursary awarded to applicants from public universities increased by 46.5 per cent to KSh 133.7 million in 2016/17. The number of applicants from TVET institution more than doubled to 34,383 in 2016/17, while the number of beneficiaries increased to 15,701 during the same period. The amount of bursary awarded to applicants from TVET institutions declined from KSh 125.0 million 2015/16 to KSh 120.8 million in 2016/17. This decline is partly attributed to the Government policy of phasing out issuance of bursaries.

Table 15.16: Bursary Applicants, Beneficiaries and Amount Awarded by Sex, 2012/13 – 2016/17

Year	Bursary								
	Applicants			Beneficiaries			Amount Awarded (KSh Million)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
All Institutions									
2012/2013.....	10,058	3,489	13,547	10,083	3,489	13,572	56	20	76
2013/2014.....	10,677	4,029	14,706	11,228	4,029	15,257	86	35	121
2014/2015.....	15,842	6,934	22,776	15,704	6,934	22,638	106	49	155
2015/2016.....	24,994	9,991	34,985	20,501	9,991	30,492	143	73	216
2016/2017.....	152,953	90,580	243,532	24,309	11,344	35,653	173	81	254
Public University									
2012/2013.....	10,058	3,489	13,547	10,083	3,489	13,572	56	20	76
2013/2014.....	7,915	2,795	10,710	8,466	2,795	11,261	51.3	18.9	70.2
2014/2015.....	10,791	4,383	15,174	10,653	4,383	15,036	64.8	26.3	91.1
2015/2016.....	15,171	4,484	19,655	10,678	4,484	15,162	64.8	26.4	91.2
2016/2017.....	130,627	78,522	209,149	13,967	5,985	19,952	93.6	40.1	133.7
TVET Institutions									
2012/2013 ¹	-	-	-	-	-	-	-	-	-
2013/2014.....	2,762	1,234	3,996	2,762	1,234	3,996	34.8	16.2	51.0
2014/2015.....	5,051	2,551	7,602	5,051	2,551	7,602	41.6	22.7	64.3
2015/2016.....	9,823	5,507	15,330	9,823	5,507	15,330	78.5	46.5	125.0
2016/2017.....	22,326	12,058	34,383	10,342	5,359	15,701	79.5	41.2	120.8

Source: Higher Education Loans Board

*Provisional

¹Awarding of bursaries to applicants from TVET institutions started in 2013/14

15.27. Table 15.17 presents Government capitation, loan repayment and loans and bursaries awarded from 2012/13 to 2016/17. Total Government capitation on loans and bursaries and the loan repayments to HELB grew by 5.2 per cent to KSh 10.6 billion in 2016/17. During the review period, GOK loan capitation increased to KSh 6.2 billion, while total loan repayment increased to KSh 4.1 billion.

Table 15.17: Government Capitation, Loan Repayments and Loans / Bursaries Awarded, 2012/13-2016/17

KSh Million

Year	GOK Loans Capitation	GOK Bursaries Capitation	Total Loan Repayment	Total GOK Capitation and Loan Repayment	Total Loans Awarded	Total Bursary Awarded	Total Loan and Bursary
2012/2013.....	2,265.8	182.4	3,251.8	5,700.0	5,097.2	75.7	5,172.9
2013/2014.....	2,965.0	192.0	3,205.0	6,362.0	6,447.1	121.2	6,568.2
2014/2015.....	4,514.0	192.0	3,257.1	7,963.1	6,945.3	155.4	7,100.6
2015/2016.....	5,858.0	192.0	3,982.6	10,032.6	7,573.1	216.3	7,789.4
2016/2017*.....	6,177.8	237.0	4,143.0	10,557.8	9,452.3	254.4	9,706.7

Source: Higher Education Loans Board

*Provisional

15.28. Adult Education: Details on adult education enrolment by sex and county from 2015 to 2017 are shown in Table 15.18. Adult education enrolment continued to exhibit a declining trend since 2015. Overall enrolment decreased by 24.1 per cent from 271,769 in 2016 to 206,224 in 2017. Overall, females accounted for 70 per cent of the total adult education enrolment. Only nine counties showed some slight increase in adult education enrolment during the year in review. Marsabit, Lamu and Nyandarua had adult education enrolment below 1,000 while Nairobi County had the highest adult education enrolment at 13,307 in 2017.

15.29. Table 15.19 presents the number of adults who passed proficiency tests and those who registered for KCPE for 2016 and 2017. The number of adult learners who passed proficiency tests decreased by 15.8 per cent from 21,172 in 2016 to 17,827 in 2017. Tharaka-Nithi County recorded the highest number of adult learners who passed proficiency tests while Kwale County had the lowest number. The number of private candidates who registered for KCPE declined by 32.2 per cent from 7,552 in 2016 to 5,120 in 2017. Nairobi City County had the highest number of private candidates who registered for KCPE, whereas, Samburu County had the lowest number.

Table 15.18: Adult Education Enrolment by Sex and County, 2015 - 2017

County	2015			2016			2017*		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Mombasa.....	1,303	2,246	3,549	498	1,265	1,763	1,434	2,213	3,647
Kwale	1,482	4,844	6,326	1,157	4,029	5,186	725	3,112	3,837
Kilifi.....	1,971	8,960	10,931	1,491	8,207	9,698	844	5,802	6,646
Tana River.....	1,727	4,477	6,204	1,206	3,771	4,977	899	2,271	3,170
Lamu.....	1,115	1,950	3,065	831	1,533	2,364	276	513	789
Taita/Taveta.....	1,142	2,621	3,763	661	1,060	1,721	518	1,395	1,913
Garissa.....	3,313	3,369	6,682	4,669	3,478	8,147	3,034	2,247	5,281
Wajir.....	1,684	1,825	3,509	1,379	1,326	2,705	1,350	1,316	2,666
Mandera.....	2,336	2,831	5,167	2,062	2,696	4,758	1,487	1,913	3,400
Marsabit.....	1,002	1,726	2,728	425	1,341	1,766	119	220	339
Isiolo.....	978	2,095	3,073	473	1,342	1,815	328	913	1,241
Meru.....	3,156	8,424	11,580	3,875	11,388	15,263	2,070	5,542	7,612
Tharaka Nithi.....	1,623	4,861	6,484	446	1,606	2,052	488	1,810	2,298
Embu.....	964	2,646	3,610	1,179	4,003	5,182	740	887	1,627
Kitui.....	2,239	9,192	11,431	2,039	9,710	11,749	1,385	6,990	8,375
Machakos.....	1,558	5,842	7,400	946	5,726	6,672	951	5,073	6,024
Makueni.....	1,665	7,083	8,748	1,641	9,135	10,776	1,978	7,725	9,703
Nyandarua.....	1,458	3,865	5,323	1,154	3,661	4,815	262	702	964
Nyeri.....	1,231	4,183	5,414	852	3,348	4,200	761	2,958	3,719
Kirinyaga.....	1,312	2,346	3,658	845	2,497	3,342	363	1,024	1,387
Murang'a.....	2,244	7,775	10,019	802	2,872	3,674	705	2,585	3,290
Kiambu.....	2,216	4,155	6,371	1,596	3,509	5,105	3,426	6,510	9,936
Turkana.....	1,688	2,279	3,967	2,890	3,992	6,882	1,900	2,483	4,383
West Pokot.....	1,981	2,486	4,467	1,264	1,518	2,782	1,060	1,491	2,551
Samburu.....	1,365	2,189	3,554	1,522	2,490	4,012	1,377	2,254	3,631
Transnzoia.....	1,446	2,040	3,486	960	2,255	3,215	688	983	1,671
Uasin Gishu.....	2,087	3,897	5,984	1,451	2,827	4,278	1,267	2,439	3,706
Elgeyo/Marakwet.....	1,568	2,857	4,425	2,143	2,518	4,661	1,827	3,671	5,498
Nandi.....	2,239	4,146	6,385	1,316	4,107	5,423	2,080	3,506	5,586
Baringo.....	2,860	4,963	7,823	1,798	3,210	5,008	1,705	2,800	4,505
Laikipia.....	1,378	2,822	4,200	1,036	2,665	3,701	757	2,145	2,902
Nakuru.....	9,137	5,945	15,082	7,290	4,109	11,399	3,602	5,707	9,309
Narok.....	1,881	2,657	4,538	1,457	2,018	3,475	..	..	..
Kajiado.....	1,624	2,505	4,129	2,680	3,972	6,652	2,021	5,444	7,465
Kericho.....	2,466	4,863	7,329	2,138	5,161	7,299	1,405	3,087	4,492
Bomet.....	1,771	4,392	6,163	927	2,551	3,478	645	1,556	2,201
Kakamega.....	1,260	2,372	3,632	2,057	4,510	6,567	914	2,417	3,331
Vihiga.....	1,602	4,032	5,634	1,442	5,228	6,670	607	2,142	2,749
Bungoma.....	3,189	5,187	8,376	3,049	4,643	7,692	832	1,294	2,126
Busia.....	1,606	3,772	5,378	1,504	3,810	5,314	1,259	3,093	4,352
Siaya.....	853	1,935	2,788	536	1,839	2,375	719	1,953	2,672
Kisumu.....	2,884	6,116	9,000	2,098	4,541	6,639	2,270	4,996	7,266
Homa Bay.....	3,126	7,893	11,019	2,935	7,770	10,705	1,937	4,729	6,666
Migori.....	2,393	5,086	7,479	1,955	4,089	6,044	1,018	3,739	4,757
Kisii.....	3,925	7,598	11,523	2,298	5,278	7,576	2,148	5,356	7,504
Nyamira.....	2,664	5,599	8,263	2,905	5,314	8,219	1,728	4,002	5,730
Nairobi City.....	7,364	9,205	16,569	5,697	8,276	13,973	5,679	7,628	13,307
TOTAL	102,076	204,152	306,228	85,575	186,194	271,769	63,588	142,636	206,224

Source: Directorate of Adult Education, Ministry of Education

*Provisional

.. Data not available

Table 15.19: Adults who passed Proficiency Tests and Private Candidates Registered for KCPE by Sex and County, 2016 - 2017

County	Number							
	2016				2017			
	PTP		KCPE		PTP		KCPE	
	Male	Female	Male	Female	Male	Female	Male	Female
Mombasa.....	28	61	129	74	24	43	68	63
Kwale.....	38	139	23	16	17	46	12	7
Kilifi.....	29	191	128	71	56	321	75	62
Tana River.....	69	240	56	92	77	147	21	4
Lamu.....	71	211	10	20	80	363	16	14
Taita/Taveta.....	98	143	13	15	71	265	11	10
Garissa.....	718	533	132	21	523	112	153	37
Wajir.....	189	124	28	4	86	24	15	3
Mandera.....	273	187	68	14	173	79	48	7
Marsabit.....	-	-	-	-	0	0	26	17
Isiolo.....	24	76	24	16	16	66	12	14
Meru.....	402	655	208	133	288	953	175	117
Tharaka Nithi.....	65	245	45	21	452	900	34	11
Embu.....	99	429	80	51	31	112	32	35
Kitui.....	37	23	37	23	210	1,034	26	10
Machakos.....	136	674	34	47	141	658	32	16
Makueni.....	414	2,121	17	6	72	578	32	6
Nyandarua.....	29	191	69	52	81	368	18	16
Nyeri.....	59	234	57	26	103	277	34	15
Kirinyaga.....	48	148	192	129	86	158	251	162
Murang'a.....	193	58	15	41	50	186	27	11
Kiambu.....	88	297	269	256	148	282	89	73
Turkana.....	68	55	150	99	71	116	153	90
West Pokot.....	39	64	28	30	45	66	6	4
Samburu.....	39	97	37	23	26	52	7	2
Transnzoia.....	44	77	86	72	72	95	66	54
Uasin Gishu.....	66	70	95	77	131	199	25	26
Elgeyo/Marakwet.....	102	186	14	24	42	56	21	16
Nandi.....	73	182	214	282	96	213	146	91
Baringo.....	14	13	9	9	18	113	3	18
Laikipia.....	35	96	35	12	25	94	32	2
Nakuru.....	411	502	149	47	286	512	28	36
Narok.....	149	148	44	40	107	169	44	36
Kajiado.....	474	1,503	103	111	120	454	89	60
Kericho.....	107	290	108	77	110	390	112	168
Bomet.....	47	139	9	7	25	213	14	8
Kakamega.....	572	1,042	175	164	144	323	119	107
Vihiga.....	69	143	57	40	33	177	38	37
Bungoma.....	149	382	83	48	311	76	102	125
Busia.....	69	174	54	37	55	209	21	18
Siaya.....	67	202	41	31	54	200	39	52
Kisumu.....	66	611	32	49	147	376	110	208
Homa Bay.....	383	797	131	103	18	88	83	65
Migori.....	36	22	49	41	150	456	10	4
Kisii.....	141	343	434	360	109	285	48	38
Nyamira.....	81	214	81	71	125	379	45	16
Nairobi.....	187	245	401	317	303	136	327	234
TOTAL	6,595	14,577	4,253	3,299	5,408	12,419	2,895	2,225

Source: Directorate of Adult Education; Ministry of Education

*Provisional

PTP-Proficiency Test Pass

Health and Vital Statistics

Chapter
16

Overview

The Government has been implementing various programs and projects aimed at attaining a high standard of health as enshrined in the constitution, as well as the targets set in the country's long-term development plan, Vision 2030. This is in addition to attainment of global commitments such as goal number three of the Sustainable Development Goals. The programs undertaken in the review period included; the *Linda Mama* (formerly the Free Maternity), the Health Insurance Subsidy Program (HISP), and the Health Insurance for the Elderly and People with Severe Disabilities (E&PWSD) Program. However, during the review period the sector experienced some challenges including disruption of services due to industrial unrest by doctors and nurses.

16.2. The National Government expenditure on Health services is expected to grow by 15.9 per cent from KSh 56.6 billion in 2016/17 to KSh 65.6 billion in 2017/18. Recurrent expenditure is expected to remain at KSh 29.8 billion during the review period, while development expenditure is expected to grow by 33.6 per cent to KSh 35.8 billion.

16.3. Pneumonia, malaria and cancer remained among the top three leading causes of death in the country. The national Full Immunization Coverage (FIC) for children below one year decreased from 69 per cent in 2016 to 63 per cent in 2017.

16.4. The number of registered medical personnel increased by 9.0 per cent to 160,749 in 2017. In the same period, total enrolment of undergraduate and postgraduate medical students increased by 13.4 per cent from 7,989 in 2015/16 to 9,058 in 2016/17.

16.5. The membership in National Hospital Insurance Fund (NHIF) rose by 11.1 per cent from 6.1 million in 2015/16 to 6.8 million in 2016/17, with the bulk (56.8%) coming from the formal sector. During this period, the informal sector registered a growth of 17.0 per cent compared to a 7.0 per cent growth in the formal sector. Total contributions received from members increased by 9.3 per cent to KSh 34.9 billion in 2016/2017.

Expenditure
on Health
Services

16.6. Table 16.1 presents National government expenditure on health services from 2013/14 to 2017/18. Expenditure on health services is expected to increase by 15.9 per cent from KSh 56.6 billion in 2016/17 to KSh 65.6 billion in 2017/18. During the review period, recurrent expenditure on health services is expected to remain at KSh 29.8 billion. Recurrent expenditure on hospital services is expected to expand by 15.0 per cent to 15.1 billion and account for over half of total recurrent expenditure in 2017/18. During the review period, development expenditure on health services is expected to increase by 33.6 per cent to KSh 35.8 billion. Development expenditure on public health services is expected to grow by almost five times to KSh 23.6 billion and account for 66.0 per cent of total development expenditure in 2017/18.

Table 16.1: Expenditure on Health Services, 2013/14 - 2017/18

	KSh Million				
	2013/14	2014/15	2015/16	2016/17*	2017/18+
Recurrent					
Outpatient services	729.93	1,531.53	1,464.21	1,308.66	811.63
Hospital services	16,776.14	13,766.20	11,897.10	13,159.55	15,139.27
Public health services	1,163.04	3,651.59	1,723.59	6,365.65	7,211.27
Health expenditure not elsewhere classified	2,905.56	9,358.42	4,419.39	8,973.02	6,622.85
Sub-Total	21,574.67	28,307.73	19,504.30	29,806.89	29,785.02
Development					
Outpatient services	5,288.80	5,251.48	4,978.63	10,319.44	8,412.43
Hospital services	2,660.61	802.00	5,476.58	5,725.14	1,538.02
Public health services	8,465.28	6,967.62	4,428.18	5,103.20	23,603.39
Health expenditure not elsewhere classified	207.92	8,452.85	266.95	5,651.28	2,214.91
Sub-Total	16,622.62	21,473.95	15,150.34	26,799.07	35,768.74
TOTAL	38,197.29	49,781.69	34,654.64	56,605.96	65,553.76

Source: KNBS

* Provisional

+ Revised estimates

16.7. Information on the number of registered deaths by major causes from 2013 to 2017 is presented in Table 16.2. Pneumonia, Malaria and Cancer remained the leading causes of death, with pneumonia accounting for 22.0 per cent of the major causes of deaths in 2017. Other major causes of death included Tuberculosis, HIV/AIDS and Anaemia.

Table 16.2: Registered Deaths by Major Causes, 2013 – 2017

	Number				
Cause	2013	2014	2015	2016	2017*
Malaria	23,789	22,948	20,691	16,000	17,553
Pneumonia	22,918	21,640	22,473	21,295	21,584
Cancer	13,720	14,175	15,714	15,762	16,953
HIV/AIDS	11,448	12,235	11,131	9,471	8,758
Tuberculosis	11,186	10,986	10,183	4,735	9,081
Anaemia	8,124	8,469	8,472	8,165	8,294
Road traffic accidents ¹	4,942	4,710	5,488	4,809	3,715
Other accidents	4,857	4,187	3,887	4,166	3,874
Heart disease	4,544	5,030	5,799	5,353	4,786
Menengitis	4,265	4,555	4,499	4,374	3,540
Sub-total	109,793	108,935	108,337	94,130	98,138
Others	84,539	89,676	91,868	96,507	90,949
Total	194,332	198,611	200,205	190,637	189,087

Source: Civil Registration Service

*Provisional

¹The data includes deaths that occur after the road accidents have been reported

16.8. Table 16.3 presents FIC for children under one year by County from 2014 to 2017. The national full immunization coverage declined from 69.0 per cent in 2016 to 63.0 per cent in 2017. During this period, most of the counties experienced a decrease in the coverage with only 10 counties experiencing an increase. The highest decrease in coverage occurred in Narok and Nyamira Counties at 24.1 and 22.3 percentage points, respectively, while Laikipia and Turkana Counties had the highest increase at 22.9 and 16.5 percentage points, respectively. The lowest coverage was recorded in Mandera County at 25.4 per cent in 2017.

16.9. Health facility based incidence of disease for the period 2013 to 2017 is shown in Table 16.6. Morbidity decreased by 16.4 per cent from 50.8 million in 2016 to 42.3 million in 2017. This decrease is partly attributed to the public doctors and nurses strikes in 2017 which led to reduced number of patients visiting the public health facilities. Incidence of respiratory system diseases and malaria accounted for 34.0 per cent and 18.7 per cent, respectively of all incidences in 2017.

Table 16.3: Full Immunization Coverage (FIC), Rate of Under-One Year Old Children by County 2013-2017

County	2013		2014		2015		2016*		2017*	
	Number	%	Number	%	Number	%	Number	%	Number	%
Mombasa...	26,761	79.7	26,200	72.8	31,662	86.9	29,963	78.7	28,782	74.3
Kwale...	23,438	85.2	24,185	66.5	28,033	98.2	23,825	80.0	18,609	58.8
Kilifi...	37,051	80.9	36,522	96.0	38,844	81.3	36,866	74.1	29,022	55.1
Tana River...	6,553	57.1	6,501	56.1	6,340	60.1	6,670	60.8	6,343	48.1
Lamu...	2,990	83.2	3,462	86.5	3,504	90.3	3,012	74.9	2,916	70.4
Taita Taveta...	6,886	77.6	8,003	62.6	7,617	82.1	7,074	72.4	6,369	62.6
Garissa...	11,768	129.7	15,157	61.9	14,555	61.5	15,852	64.6	13,294	55.2
Wajir...	10,706	139.6	12,352	47.8	14,154	55.2	13,510	50.9	12,333	48.6
Mandera...	7,813	69.9	10,212	20.4	11,137	26.9	12,790	25.2	11,303	25.4
Marsabit...	7,671	92.7	9,425	71.7	9,384	71.9	8,786	71.3	7,235	56.3
Isiolo...	4,255	89.6	4,136	61.3	4,240	65.7	3,797	56.2	3,131	46.3
Meru...	24,105	59.3	28,522	57.9	27,860	64.6	26,719	60.4	24,716	58.2
Tharaka Nithi...	8,748	82.8	7,357	47.7	7,031	60.2	6,557	56.8	6,301	57.1
Embu...	13,193	96.1	11,878	73.3	12,303	84.3	11,698	78.8	11,652	81.3
Kitui...	24,480	72.2	28,282	69.6	25,160	74.0	23,388	67.8	23,165	65.2
Machakos...	25,828	83.8	27,266	77.7	27,216	78.7	27,017	79.3	24,699	76.7
Makueni...	20,361	79.7	23,603	81.0	21,983	84.0	21,983	80.6	20,561	76.9
Nyandarua...	12,919	69.5	15,030	85.5	15,129	85.7	14,237	79.2	12,348	65.5
Nyeri...	13,780	77.2	15,212	75.8	15,031	100.7	14,137	93.8	13,620	75.0
Kirinyaga...	11,169	80.0	11,166	85.2	11,662	87.6	11,699	86.2	11,341	79.9
Muranga...	14,476	56.1	21,316	85.6	20,553	85.2	18,587	79.6	17,658	67.4
Kiambu...	34,402	67.6	45,881	92.3	48,728	100.7	51,009	104.3	53,339	102.9
Turkana...	15,248	66.5	20,390	75.0	18,862	64.1	22,512	71.8	23,111	88.3
West Pokot...	11,812	48.4	14,819	63.3	13,738	65.6	11,802	54.5	10,957	39.5
Samburu...	5,313	52.9	5,797	61.3	5,531	57.7	5,464	55.2	5,402	47.3
Trans Nzoia...	18,880	55.0	22,188	59.8	23,348	57.7	23,895	56.8	17,113	43.6
Uasin Gishu...	24,653	73.8	26,780	73.6	27,980	71.9	27,539	64.5	28,595	74.7
Elgeyo Marakwet...	10,310	65.9	12,280	75.7	12,006	72.9	11,087	64.1	9,776	54.8
Nandi...	20,009	70.6	22,971	67.5	21,417	60.4	18,260	50.5	18,952	58.5
Baringo...	14,258	64.8	15,793	58.7	14,526	58.8	14,852	57.7	13,875	55.4
Laikipia...	11,755	84.3	11,453	61.9	12,944	68.9	12,512	56.2	12,623	79.1
Nakuru...	46,781	79.2	54,150	89.3	53,867	88.0	51,329	80.9	57,324	84.7
Narok...	24,394	57.0	26,216	80.0	24,405	62.6	26,092	70.6	22,659	46.5
Kajiado...	16,352	58.4	22,999	69.6	22,941	74.6	26,857	83.4	24,007	74.7
Kericho...	14,727	52.5	20,908	63.6	19,166	59.1	18,075	56.1	16,082	51.5
Bomet...	17,144	58.3	19,785	53.8	19,372	60.9	19,231	58.7	20,015	60.3
Kakamega...	56,899	85.9	59,438	79.4	54,651	78.7	53,736	75.2	47,725	69.3
Vihiga...	18,439	95.6	17,701	84.6	17,339	79.3	16,326	71.7	10,649	53.1
Bungoma...	40,314	60.5	46,262	76.0	44,131	71.3	39,143	61.0	34,836	59.6
Busia...	23,046	117.1	27,593	82.6	22,732	73.1	20,998	69.5	17,342	55.6
Kisumu...	27,079	74.2	29,981	75.8	30,178	78.0	31,865	80.5	28,088	68.4
Siaya...	24,423	76.6	26,870	76.5	25,838	78.7	26,045	77.2	22,757	63.6
Homabay...	31,377	80.5	30,786	67.2	28,540	66.4	30,914	70.2	25,447	58.1
Migori...	33,142	80.9	33,624	75.8	34,976	76.9	35,549	73.9	29,626	64.3
Kisii...	31,422	73.7	34,341	81.5	32,567	65.4	30,983	62.0	24,396	50.9
Nyamira...	20,032	97.1	20,690	98.0	20,040	89.5	20,429	89.1	15,509	66.8
Nairobi City...	96,196	75.1	113,328	72.5	109,967	77.2	116,608	75.2	119,291	84.2
Kenya...	1,003,358	76.0	1,128,811	74.0	1,113,188	73.4	1,101,279	69.0	1,014,894	63.0

Source: Ministry of Health, Division of Family Health

*Provisional

¹ Children who were born between April previous year and March current year and who received all basic vaccination

Table 16.4: Facility Based Incidence of Disease, 2013-2017

DISEASE	2013		2014		2015		2016		2017*	
	Number	%	Number	%	Number	%	Number	%	Number	%
Malaria.....	8,808,471	20.2	9,660,992	20.5	7,663,625	16.7	8,325,387	16.4	7,958,213	18.7
Disease of the Respiratory System ...	14,823,864	34.0	17,998,237	38.3	18,264,778	39.8	19,621,737	38.7	14,482,269	34.0
Diseases of the Skin (Incl. Ulcers)....	3,648,361	8.4	4,556,925	9.7	4,755,915	10.4	4,409,229	8.7	3,261,935	7.7
Diarrhoea Diseases.....	2,226,107	5.1	3,013,256	6.4	3,115,168	6.8	2,892,638	5.7	2,601,827	6.1
Intestinal Worms.....	349,632	0.8	357,319	0.8	326,297	0.7	763,793	1.5	763,463	1.8
Pneumonia.....	1,282,996	2.9	1,509,851	3.2	1,508,212	3.3	1,616,913	3.2	1,208,592	2.8
Accidents (incl. fractures, burns etc) .	927,861	2.1	1,079,953	2.3	1,154,067	2.5	1,311,911	2.6	1,135,456	2.7
Rheumatism, Joint pains etc.....	1,081,245	2.5	1,352,350	2.9	1,474,433	3.2	1,572,172	3.1	1,246,731	2.9
Urinary Tract Infections.....	1,091,371	2.5	1,361,275	2.9	1,541,276	3.4	1,697,479	3.3	1,555,733	3.7
Eye Infection.....	778,073	1.8	1,002,778	2.1	988,183	2.2	1,004,923	2.0	655,815	1.5
All Other Diseases	8,618,536	19.8	5,145,714	10.9	5,112,489	11.1	7,537,918	14.9	7,466,490	17.5
TOTAL.....	43,636,517	100	47,038,650	100.0	45,904,443	100	50,754,100	100	42,336,524	100

Source: Ministry of Health, Health Management Information System

* Provisional

16.10. Details on the number of registered health personnel and those in training from 2013 to 2017 are shown in Table 16.5. The total number of registered personnel increased from 147,439 in 2016 to 160,749 in 2017. During the review period, the number of registered health personnel in all cadres with the exception of public health technicians increased. The number of registered health personnel per 100,000 population increased from 329 in 2016 to 349 in 2017. The highest increase in the number of personnel per 100,000 population was recorded for registered nurses, from 106 in 2016 to 112 in 2017. The number of students in-training increased from 17,224 in 2015/2016 to 23,887 in 2016/2017.

Table 16.5: Registered Health Personnel and those in Training, 2016-2017

Type of Personnel ¹	Registered Health Personnel				In-Training	
	2016 ⁺		2017*			
	Number	No. Per 100,000 Population	Number	No. Per 100,000 Population	2015/2016	2016/2017*
Medical Officers... ..	10,376	23	10,921	24	3,213	3,289
Dentists... ..	1,149	3	1,206	3	251	286
Pharmacists... ..	3,169	7	3,373	7	272	491
Pharmaceutical Technologists...	8,673	19	9,358	20	783	1,021
(BSc) Nurses... ..	4,002	9	4,819	10	343	675
Registered Nurses... ..	47,480	106	51,420	112	3,142	5,026
Enrolled Nurses... ..	22,820	51	23,068	50	86	263
Clinical Officers... ..	17,092	38	18,759	41	2,600	2,960
Public Health officers... ..	12,564	28	14,855	32	3,360	5,920
Public Health Technicians... ..	6,752	15	6,752	15	88	201
Laboratory Technologists... ..	6,651	15	7,298	16	340	1,139
Laboratory Technicians... ..	1,734	4	2,024	4	396	58
Nutritionists & Dieticians... ..	2,107	5	2,598	6	1,167	1,312
Nutrition & Dietetic Technologists..	2,300	5	3,681	8	883	931
Nutrition & Dietetic Technicians..	570	1	617	1	300	315
Total... ..	147,439	329	160,749	349	17,224	23,887

Source: Kenya Medical Practitioners & Dentists Board, Pharmacy & Poisons Board, Clinical Officers' Council, Nursing Council of Kenya, Kenya Medical Laboratory Technicians & Technologists Board, Kenya Nutritionists & Dieticians Institute, Public Health Officers & Technicians Council

* Provisional

+ Revised

¹ Cumulative number of health personnel

16.11. The number of undergraduate and postgraduate medical students is expected to increase by 41.9 per cent from 13,798 in 2016/17 to 19,583 in the 2017/18 academic year as shown in Table 16.6. The number of undergraduate students pursuing medicine and surgery are expected to increase from 4,077 in 2016/17 to 4,304 in the 2017/18 academic year. During the same period, the number of undergraduate students undertaking pharmacy and nursing are expected to grow by 11.6 per cent to 1,687 and 7.3 per cent to 4,104, respectively. Postgraduate medical students are expected to increase by 3.6 per cent to 2,468 in 2017/18.

16.12. Table 16.7 shows the number of middle level medical students registered at the Kenya Medical Training College from 2012/13 to 2016/17. The total medical trainees increased by 13.4 per cent from 7,989 in 2015/16 to 9,058 in 2016/17, mainly attributable to an increase in trainees in diploma courses which accounted for 72.9 per cent of the total students. The highest number of medical trainees at the diploma level, were enrolled for Community Health Nursing in 2016/17. At the certificate level, the highest number of students were enrolled for Health Records and Information Technology.

Table 16.6: Undergraduate and Post Graduate Medical Students by Course and Sex, 2013/14-2017/18

Medical Course	2013/14			2014/15			2015/16			2016/17			2017/18*		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Medicine & Surgery	1,784	1,673	3,457	1,706	1,573	3,279	2,068	1,425	3,493	2,394	1,683	4,077	2,579	1,725	4,304
Nursing	1,042	1,531	2,573	1,197	2,781	3,978	1,041	1,841	2,882	1,414	2,411	3,825	1,543	2,561	4,104
Dental Surgery	147	144	291	201	168	369	157	163	320	204	208	412	248	264	512
Environmental Health	570	473	1,043	571	675	1,246	532	539	1,071	789	801	1,590	890	898	1,788
Pharmacy	389	265	654	550	419	969	544	454	998	822	690	1,512	929	758	1,687
Clinical Medicine	-	-	-	-	-	-	-	-	-	-	-	-	494	378	872
Public Health	-	-	-	-	-	-	-	-	-	-	-	-	338	340	678
Medical Laboratory Sciences...	-	-	-	-	-	-	-	-	-	-	-	-	887	581	1,468
Nutrition & Dietetics	-	-	-	-	-	-	-	-	-	-	-	-	215	523	738
Physiotherapy	-	-	-	-	-	-	-	-	-	-	-	-	162	157	319
Occupational Therapy	-	-	-	-	-	-	-	-	-	-	-	-	25	20	45
Medical Education /Records...	-	-	-	-	-	-	-	-	-	-	-	-	243	250	493
Medical Psychology	-	-	-	-	-	-	-	-	-	-	-	-	48	59	107
Sub-Total	3,932	4,086	8,018	4,225	5,616	9,841	4,342	4,422	8,764	5,623	5,793	11,416	8,601	8,514	17,115
Post Graduate	662	461	1,123	706	724	1,430	1,032	670	1,702	1,427	955	2,382	1,486	982	2,468
Total	4,594	4,547	9,141	4,931	6,340	11,271	5,374	5,092	10,466	7,050	6,748	13,798	10,087	9,496	19,583

*Provisional

,, Data unavailable

Table 16.7: Middle Level Medical Trainees+ in Public Medical Training Colleges by Course, 2012/13-2016/17

Course	Number				
	2012/13	2013/14	2014/15	2015/16	2016/17*
Certificate in:					
Community Nursing	278	279	280	248	245
Medical Engineering Technology	84	94	80	60	64
Health Records & Information Technology	781	528	712	857	1,125
Nutrition and Dietetics	180	318	317	341	293
Certificate in Orthopaedic Plaster Technology ...	-	30	60	54	106
Environmental Health Sciences	-	-	-	-	104
SubTotal	1,323	1,219	1,449	1,560	1,937
Diploma in:					
Community Health Nursing	2,662	2,708	2,745	2,165	2,848
Nutrition and Dietetics	138	187	317	237	322
Environmental Health Sciences	589	568	520	509	477
Medical Laboratory Sciences	411	459	459	369	404
Clinical Medicine & Surgery	1,156	1,125	1,140	1,044	991
Medical Engineering Technology	75	118	77	90	93
Community Oral Health	41	47	42	42	45
Dental Technology	39	36	34	32	33
Health Records and Information technology ...	255	381	381	524	423
Occupational Therapy	44	44	50	42	47
Orthopaedic Technology	35	25	25	20	27
Pharmacy	448	434	444	356	468
Physiotherapy	143	109	169	110	168
Medical Imaging Sciences	165	143	152	159	132
Optometry	18	21	24	22	28
Health Education & Promotion	-	-	30	60	-
Registered Nursing-Mental Health & Psychiatry	50	93	150	150	98
Neurophysiology ⁵	16	-	-	-	-
Sub Total	6,285	6,498	6,759	5,931	6,604
Higher Diploma in:					
Pharmacy	5	-	-	-	-
Environmental Health Sciences ¹	6	4	3	1	5
Medical Laboratory Sciences ²	15	18	13	17	5
Nursing ³	52	163	138	223	251
Clinical Medicine and Surgery ⁴	83	112	124	136	133
Medical Engineering ⁵	27	-	-	-	16
Ultra Sound Image Pattern Analysis	21	36	39	31	40
Radiography (Therapy)	6	3	2	5	6
Community Health & HIV/AIDS Care	58	33	12	19	4
Health Education & Promotion	18	17	11	9	-
Medical Education	17	11	12	27	27
Orthopaedic manual therapy	-	13	15	30	20
Health Systems Management	-	-	-	-	10
SubTotal	308	410	369	498	517
Total	7,916	8,127	8,577	7,989	9,058

Source: Kenya Medical Training College, Ministry of Health

* Provisional

+ Revised

¹ Includes food science and inspection, epidemiology, solid waste and occupational health² Includes clinical chemistry, haematology, histology, parasitology, virology, microbiology, bacteriology and blood transfusion sciences³ Includes mental & Psychiatry Nursing, Community Health Nursing, palliative care, nephrology, anaesthetic, intensive care, ophthalmic and PeriOperative nursing⁴ Includes paediatrics, orthopaedics, anesthesia, lungs & skin, ENT & audiology, mental health & psychiatry, reproductive health, ophthalmology, advanced refraction & low vision and ophthalmology & cataract surgery⁵ Includes Therapeutic equipment option, diagnostic equipment

16.13. National Hospital Insurance Fund (NHIF) Membership: The number of registered active members of the NHIF from 2012/13 to 2016/17 is shown in the Table 16.8 Overall, membership rose by 11.1 per cent from 6,124.3 thousand in 2015/16 to 6,804.9 thousand in 2016/17. During the year under review, the formal sector contributed the bulk of the membership with a share of 56.9 per cent. Over the same period, the informal sector membership registered a growth of 17.0 per cent compared to a 7.0 per cent rise in the formal sector.

Table 16.8 : Registered Active Members of the National Hospital Insurance Fund, 2012/13-2016/17

	Number ('000')				
	2012/13	2013/14	2014/15+	2015/16	2016/17*
Formal Sector	2,679.4	2,952.4	3,221.6	3,616.2	3,870.4
Informal Sector	1,115.4	1,498.0	1,991.6	2,508.1	2,934.4
Total	3,794.8	4,450.4	5,213.2	6,124.3	6,804.9

Source: National Hospital Insurance Fund

+ Revised

* Provisional

16.14. NHIF Receipts and Pay Outs: Table 16.9 presents NHIF receipts and pay outs from 2012/13 to 2016/17. Receipts from members increased by 9.4 per cent from KSh 32.0 billion in 2015/16 to KSh 35.0 billion in 2016/17. During the review period, the proportion of pay outs to receipts increased by 30.8 percentage points to 75.2 per cent. This increase is partly attributed to enhanced inpatient and outpatient payouts rolled out towards the end of 2016.

Table 16.9: NHIF Receipts and Pay Outs, 2012/2013-2016/2017

	KSh Million				
	2012/13	2013/14	2014/15	2015/16	2016/17*
Receipts ⁺	12,054.9	13,629.1	15,826.2	31,995.7	34,978.2
Pay outs ⁺	8,236.2	9,401.4	10,891.1	14,217.0	26,309.1
Proportion of pay outs to receipts	68.3	69.0	68.8	44.4	75.2

Source: National Hospital Insurance Fund

* Provisional

+ Revised

Governance, Peace and Security

Chapter 17

Overview

The total number of crimes reported to the police increased by 1.3 per cent from 76,986 in 2016 to 77,992 in 2017. Among the crimes reported to the police, other offences against persons: assault, creating disturbance and affray collectively accounted for 28.9 per cent of all reported cases. Stealing accounted for 14.9 per cent of all reported cases in 2017. Nairobi City County command station recorded the highest number of cases, representing 9.7 per cent of all cases reported to the police. The total number of persons reported to have committed criminal offences decreased by 2.6 per cent from 75,007 in 2016 to 73,069 in 2017.

17.2. The total number of cases handled by the Ethics and Anti-Corruption Commission (EACC) increased by 2.3 per cent from 7,917 in 2015/16 to 8,096 in 2016/17. Cases referred to other investigative agencies decreased from 215 in 2015/16 to 136 in 2016/17 while corruption cases referred for investigation declined by 3.1 per cent from 3,856 in 2015/16 to 3,735 in 2016/17. The total number of ethics and corruption reports forwarded to Office of the Director of Public Prosecution (ODPP) decreased from 167 in 2015/16 to 143 in 2016/17. In 2017, a total of 384 environmental crimes were reported to the National Environment Management Authority (NEMA), of which 253 were related to illegal movement or dumping of waste.

17.3. The number of cases filed in courts decreased by 25.6 per cent from 462,792 in 2016 to 344,180 in 2017. Cases disposed of decreased by 26.6 per cent from 426,603 in 2016 to 313,075 in 2017. Pending cases increased by 6.2 per cent from 499,341 in 2016 to 530,446 in 2017.

17.4. Total persons committed to prison decreased marginally from 210,227 in 2016 to 209,870 in 2017. The number of convicted prisoners decreased by 2.5 per cent from 82,404 to 80,404 while those remanded increased by 1.3 per cent from 127,794 in 2016 to 129,466 in 2017. Overall, 39.3 per cent of the persons committed to prison in 2017 comprised convicted prisoners. The daily average prison population increased from 50,900 in 2016 to 51,021 in 2017.

Public Safety, Law and Order

17.5. Crimes reported to police for the period 2013 to 2017 are shown in Table 17.1. The number of crimes reported to police increased by 1.3 per cent from 76,986 in 2016 to 77,992 in 2017. Other offences against persons increased by 1.0 per cent accounting for 28.9 per cent for all crimes reported to police. Reported cases of stealing increased by 12.5 per cent from 11,656, accounting for 14.9 per cent of all reported cases of crimes. Offences against morality and those involving dangerous drugs decreased by 11.8 per cent and 9.7 per cent, respectively. Cases related to dangerous drugs and offences against morality accounted for 7.1 per cent and 7.0 per cent, respectively, in 2017.

Table 17.1: Crimes Reported to the Police, 2013 - 2017

Crimes ¹	Number				
	2013	2014	2015	2016	2017*
Homicide	2,878	2,649	2,648	2,751	2,774
Offences against morality	4,779	5,184	6,164	6,228	5,492
Other offences against persons	19,344	19,911	21,174	22,295	22,515
Robbery	3,551	3,011	2,865	2,697	2,713
Breakings	6,397	5,656	5,591	5,621	6,131
Theft of stock	1,965	1,848	1,961	1,918	2,136
Stealing	11,455	10,042	9,528	10,361	11,656
Theft by servant	2,702	2,279	2,184	2,440	2,632
Theft of Vehicles and other thefts	1,631	1,239	1,111	1,355	1,404
Dangerous drugs	4,316	4,850	5,525	6,160	5,565
Traffic offences	45	100	120	139	69
Criminal damage	3,603	3,709	3,983	4,307	4,262
Economic crimes	2,750	3,038	3,244	3,503	3,695
Corruption	57	138	79	92	75
Offences involving police officers	95	53	71	57	86
Offences involving tourists	14	21	19	15	15
Other penal code offences	6,250	5,648	6,223	7,047	6,772
Total	71,832	69,376	72,490	76,986	77,992

Source: Kenya Police Service

* Provisional

¹ Refer to appendix 17.1 for detailed description of crimes

17.6. Table 17.2 shows crimes reported to police by command stations for the period 2014 to 2017. In 2017, 9.7 per cent of all reported crimes were in Nairobi city county command station. During the review period, 30 command stations recorded decline in all crimes reported to the police. Kakamega county command station recorded the highest decline of crimes reported of 33.5 per cent from 2,382 in 2016 to 1,584 in 2017.

Table 17.2: Crimes Reported to Police by Command Station, 2014 - 2017

S/No	Command station	Number			
		2014	2015	2016	2017*
1	Mombasa	2,946	3,194	3,034	2,847
2	Kwale... ..	958	1,097	1,037	851
3	Kilifi	2,362	2,199	2,254	1,692
4	Tana River... ..	525	622	453	402
5	Lamu... ..	316	492	434	385
6	Taita Taveta	1,047	961	755	679
7	Garrissa	850	638	525	452
8	Wajir... ..	438	317	343	425
9	Mandera... ..	252	271	254	446
10	Marsabit... ..	370	468	675	736
11	Isiolo... ..	219	213	507	368
12	Meru... ..	1,971	4,215	5,117	5,151
13	Tharaka-Nithi... ..	659	628	722	846
14	Embu... ..	824	848	1,433	1,633
15	Kitui... ..	722	1,573	1,679	1,946
16	Machakos	738	1,461	2,452	2,633
17	Makueni	561	1,025	1,630	1,593
18	Nyandarua... ..	1,654	1,446	1,473	1,402
19	Nyeri... ..	1,632	1,668	1,792	1,657
20	Kirinyaga... ..	1,776	1,177	1,656	1,613
21	Muranga'	2,501	2,363	2,260	2,402
22	Kiambu	4,449	4,768	6,006	5,603
23	Turkana... ..	787	974	927	1,092
24	West Pokot	739	684	795	670
25	Samburu... ..	371	355	361	432
26	Trans Nzoia... ..	1,610	1,781	1,457	1,674
27	Uasin Gishu	1,872	1,654	2,068	2,072
28	Elgeyo/Marakwet	892	571	579	633
29	Nandi... ..	1,090	989	1,105	1,148
30	Baringo... ..	923	1,035	827	821
31	Laikipia... ..	752	830	1,061	1,220
32	Nakuru	4,525	4,384	4,133	4,313
33	Narok... ..	1,626	1,335	1,308	1,110
34	Kajiado... ..	1,502	1,256	1,435	1,650
35	Kericho... ..	1,577	1,510	1,568	1,524
36	Bomet... ..	1,089	968	897	850
37	Kakamega... ..	2,444	2,514	2,382	1,584
38	Vihiga... ..	771	1,146	886	764
39	Bungoma... ..	2,150	2,852	2,422	2,269
40	Busia... ..	931	1,553	1,633	1,639
41	Siaya... ..	1,452	1,493	1,470	1,321
42	Kisumu	2,249	2,293	2,026	1,858
43	Homa Bay	1,320	1,568	1,400	1,332
44	Migori... ..	1,054	1,282	1,303	1,281
45	Kisii... ..	1,933	2,018	2,180	2,218
46	Nyamira	878	1,124	1,055	1,091
47	Nairobi City	6,732	4,383	4,954	7,434
48	KAPU ¹	148	132	141	129
49	Railways Police ¹	189	162	122	101
Kenya		69,376	72,490	76,986	77,992

Source: Kenya Police Service

* Provisional

¹ Kenya Airport Police Unit (KAPU) and Railways Police are fully fledged police command stations

17.7. Firearms and ammunition recovered or surrendered, and drugs seized for the period 2013 to 2017 are presented in Table 17.3. The number of firearms recovered was 183 in 2017 compared to 436 in 2016. Ammunition recovered were 2,653 in 2017 compared to 4,694 in 2016.

Table 17.3: Firearms and Ammunition Recovered or Surrendered, and Drugs Seized, 2013 - 2017

	Unit	2013	2014	2015	2016	2017*
Firearms Recovered						
Rifles	Number	169	210	141	85	53
Pistols	Number	77	142	81	152	65
Toy Pistols	Number	39	39	108	199	65
Total		285	391	330	436	183
Firearms Surrendered						
Rifles	Number	16	1	1	8	1
Pistols	Number	-	-	-	-	1
Toy Pistols	Number	-	-	-	-	-
Total		16	1	1	8	2
Ammunition (Rounds)						
Recovered	Number	3,712	5,166	5,000	4,694	2,653
Surrendered	Number	499	7	7	17	2
Total		4,211	5,173	5,007	4,711	2,655
Dangerous Drugs ¹ seized	Kg	17,122	4,313	4,420	..	..

Source: Kenya Police Service

* Provisional

¹ Prohibited harmful non pharmaceutical narcotic drugs and psychotropic substances listed in the First Schedule of Narcotic Drugs and Psychotropic Substances (Control) Act No. 4 of 1994

17.8. Persons reported to have committed criminal offenses by command stations and sex from 2014 to 2017 is shown in Table 17.4. The total number of persons reported to have committed criminal offenses decreased by 2.7 per cent from 75,007 in 2016 to 73,013 in 2017. The number of females reported to have committed criminal offences declined by 11.9 per cent in 2017. In Turkana county command station, the number of persons reported to have committed criminal offence more than doubled from 421 in 2016 to 1,162 in 2017. Kakamega county command station recorded the highest decrease in the number of persons reported to have committed crime from 4,577 in 2016 to 780 in 2017.

Table 17.4: Persons Reported to the Police to have Committed Crimes by sex and Command Stations, 2014 - 2017

Number													
S/No	Command station	2014			2015			2016			2017*		
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Mombasa.....	2266	620	2,886	1,045	140	1,185	2,426	806	3,232	2,435	578	3,013
2	Kwale.....	376	135	511	904	272	1,176	740	103	843	431	126	557
3	Kilifi.....	587	104	691	1,481	330	1,811	1,583	475	2,058	1,814	283	2,097
4	Tana River.....	395	109	504	415	81	496	324	70	394	374	44	418
5	Lamu.....	360	41	401	577	140	717	313	35	348	412	41	453
6	Taita Taveta.....	940	153	1,093	870	184	1,054	561	143	704	608	87	695
7	Garissa.....	399	280	679	270	23	293	71	262	333	389	154	543
8	Wajir.....	66	11	77	165	47	212	141	107	248	268	36	304
9	Mandera.....	310	29	339	259	17	276	149	29	178	271	31	302
10	Marsabit.....	468	60	528	377	69	446	695	49	744	403	105	508
11	Isiolo.....	258	80	338	93	4	97	346	78	424	276	82	358
12	Meru.....	4588	1,525	6,113	2,870	1,292	4,162	4,339	1,134	5,473	3,772	1,113	4,885
13	Tharaka-Nithi.....	665	96	761	559	129	688	721	99	820	688	184	872
14	Embu.....	1342	180	1,522	1,110	327	1,437	695	428	1,123	1,029	446	1,475
15	Kitui.....	1328	309	1,637	1,788	410	2,198	1,225	370	1,595	1,380	281	1,661
16	Machakos.....	2123	679	2,802	1,829	471	2,300	1,929	287	2,216	1,792	320	2,112
17	Makueni.....	1339	218	1,557	1,293	223	1,516	1,203	221	1,424	990	183	1,173
18	Nyandarua.....	1202	299	1,501	1,243	286	1,529	1,360	249	1,609	1,486	275	1,761
19	Nyeri.....	1519	284	1,803	1,330	709	2,039	1,257	301	1,558	1,342	247	1,589
20	Kirinyaga.....	628	343	971	423	185	608	1,171	478	1,649	1,554	314	1,868
21	Muranga'.....	1992	380	2,372	1,333	334	1,667	1,741	366	2,107	2,150	330	2,480
22	Kiambu.....	3804	1,199	5,003	4,401	1,304	5,705	3,707	1,235	4,942	3,773	1,575	5,348
23	Turkana.....	737	240	977	350	41	391	403	18	421	1,056	106	1,162
24	West Pokot.....	659	147	806	464	142	606	657	90	747	535	184	719
25	Samburu.....	35	38	73	234	53	287	276	58	334	419	165	584
26	Trans Nzoia.....	3129	818	3,947	1,751	463	2,214	1,304	171	1,475	1,189	546	1,735
27	Uasin Gishu.....	1631	406	2,037	1,439	222	1,661	1,861	396	2,257	1,434	439	1,873
28	Elgeyo/Marakwet...	644	84	728	324	60	384	471	83	554	479	100	579
29	Nandi.....	633	171	804	724	229	953	884	163	1,047	805	159	964
30	Baringo.....	721	134	855	579	133	712	698	290	988	728	114	842
31	Laikipia.....	730	114	844	739	127	866	884	188	1,072	1,159	212	1,371
32	Nakuru.....	2757	807	3,564	3,038	775	3,813	2,787	986	3,773	2,840	1,107	3,947
33	Narok.....	1156	300	1,456	292	110	402	1,260	380	1,640	1,266	210	1,476
34	Kajiado.....	322	319	641	1,108	305	1,413	1,194	125	1,319	756	186	942
35	Kericho.....	1383	183	1,566	1,075	184	1,259	1,277	243	1,520	1,020	308	1,328
36	Bomet.....	1073	162	1,235	636	78	714	820	174	994	796	112	908
37	Kakamega.....	2355	339	2,694	2,294	701	2,995	2,901	1,676	4,577	677	103	780
38	Vihiga.....	1903	217	2,120	1,045	140	1,185	882	145	1,027	498	140	638
39	Bungoma.....	2467	541	3,008	2,138	433	2,571	1,099	458	1,557	2,111	407	2,518
40	Busia.....	1191	120	1,311	1,358	537	1,895	1,195	246	1,441	1,749	423	2,172
41	Siaya.....	1030	224	1,254	1,025	145	1,170	894	394	1,288	1,226	163	1,389
42	Kisumu.....	900	146	1,046	1,775	327	2,102	1,388	371	1,759	1,409	363	1,772
43	Homa Bay.....	992	351	1,343	993	131	1,124	1,256	193	1,449	956	205	1,161
44	Migori.....	844	198	1,042	1,349	176	1,525	290	70	360	290	119	409
45	Kisii.....	1525	514	2,039	1,275	408	1,683	1,701	358	2,059	2,142	344	2,486
46	Nyamira.....	898	217	1,115	1,000	158	1,158	612	206	818	822	148	970
47	Nairobi City.....	5799	2,309	8,108	4,110	1,465	5,575	4,581	1,646	6,227	4,342	1,285	5,627
48	KAPU.....	19	2	21	62	20	82	132	22	154	85	16	101
49	Railways.....	141	13	154	129	34	163	104	24	128	84	4	88
	Total	62,629	16,248	78,877	55,941	14,574	70,515	58,508	16,499	75,007	58,510	14,503	73,013

Source: Kenya Police Service

* Provisional

17.9. The number of persons reported to have committed crime by type of offence and sex from 2013 to 2017 are shown in Table 17.5. The number of persons reported to have committed offences against morality and other offences against persons declined by 15.3 per cent and 6.0 per cent, respectively, in 2017. In the offenses against morality category, the number of persons reported to have committed defilement declined by 22.7 per cent. In the other offenses against person category, persons reported to have committed assault declined by 6.5 per cent in 2017.

17.10. The total number of persons reported to have committed homicides increased by 6.1 per cent to 2,240 in 2017 from 2,112 in 2016. The number of persons reported to have committed suicide increased by 39.4 per cent from 302 in 2016 to 421 in 2017. However, those reported to have committed murder decreased from 1,439 in 2016 to 1,435 in 2017.

17.11. The total number of persons reported to have committed an offense of stealing increased to 11,038 in 2017 from 9,876 in 2016. The number of persons who were reported to have committed offences related to theft of vehicles, theft by servant and theft of stock decreased by 10.3, 7.2 and 6.1 per cent, respectively.

17.12. The number of persons reported to have committed offences related to dangerous drugs decreased by 24.6 per cent from 5,994 in 2016 to 4,519 in 2017. Persons reported to have committed offences relating to criminal damage declined from 4,339 to 4,124 over the same period. Persons reported to have committed economic crimes increased by 3.6 per cent from 3,106 in 2016 to 3,218 in 2017 while those reported for corruption related offences increased from 97 to 275. The number of police officers reported to have been involved in crime declined from 219 in 2016 to 71 in 2017.

Table 17.5: The Number of Persons Reported to have Committed Crime by Type of Offence and Sex, 2013 - 2017

Offence	2013			2014			2015			2016			2017*		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Against morality															
Rape	772	141	913	710	145	855	758	135	893	750	173	923	694	90	784
Defilement	3,174	422	3,596	3,554	342	3,896	3,794	313	4,107	3,956	556	4,512	3,252	235	3,487
Incest	220	22	242	199	16	215	267	24	291	257	31	288	234	53	287
Unnatural/sodomy	115	9	124	107	6	113	101	8	109	74	7	81	90	17	107
Bestiality	76	55	131	23	4	27	25	5	30	39	5	44	23	3	26
Indecent assault	201	69	270	167	16	183	179	17	196	147	8	155	217	28	245
Abduction	55	15	70	60	15	75	46	16	62	48	5	53	66	72	138
Bigamy	32	13	45	6	0	6	11	1	12	11	2	13	15	53	68
Sub-total	4,645	746	5,391	4,826	544	5,370	5,181	519	5,700	5,282	787	6,069	4,591	551	5,142
Other offences against persons															
Assault	13,460	3,142	16,602	11,574	4,079	15,653	10,788	3,741	14,529	10,838	3,720	14,558	10,256	3,353	13,609
Creating disturbance	5,360	1,128	6,488	5,294	1,593	6,887	4,144	1,384	5,528	4,624	1,548	6,172	4,575	1,342	5,917
Affray (scuffle)	331	177	508	434	181	615	307	186	493	576	316	892	544	247	791
Sub-total	19,151	4,447	23,598	17,302	5,853	23,155	15,239	5,311	20,550	16,038	5,584	21,622	15,375	4,942	20,317
Homicide															
Murder	1,507	214	1,721	1,248	240	1,488	1,115	240	1,355	1,236	203	1,439	1,213	222	1,435
Manslaughter	42	11	53	30	6	36	44	13	57	49	9	58	48	11	59
Infanticide	15	45	60	6	25	31	11	19	30	9	26	35	5	21	26
Procuring abortion	5	29	34	8	37	45	8	25	33	4	28	32	17	18	35
Suicide	263	64	327	239	62	301	177	44	221	224	78	302	330	91	421
Causing death by dangerous drivin	462	32	494	205	21	226	249	37	286	218	28	246	243	21	264
Sub-total	2,294	395	2,689	1,736	391	2,127	1,604	378	1,982	1,740	372	2,112	1,856	384	2,240
Robbery, Breakings and Theft															
Robbery	4,025	307	4,332	2,983	379	3,362	2,485	298	2,783	2,096	475	2,571	2,192	317	2,509
Breakings	7,134	405	7,539	6,176	587	6,763	5,326	563	5,889	4,760	885	5,645	5,318	555	5,873
Theft of stock	2,335	126	2,461	2,091	182	2,273	1,688	223	1,911	1,682	245	1,927	1,606	203	1,809
Stealing	10,550	1,719	12,269	7,404	2,145	9,549	7,346	1,847	9,193	7,769	2,107	9,876	9,096	1,942	11,038
Theft by servant	2,134	918	3,052	1,704	841	2,545	1,504	667	2,171	1,575	834	2,409	1,553	682	2,235
Theft of vehicle & other thefts ...	2,294	293	2,587	1,029	135	1,164	820	102	922	1,050	162	1,212	958	129	1,087
Sub-total	28,472	3,768	32,240	21,387	4,269	25,656	19,169	3,700	22,869	18,932	4,708	23,640	20,723	3,828	24,551
Dangerous Drugs, Criminal Damage, Economic Crimes and Corruption															
Dangerous Drugs	3,670	562	4,232	4,424	541	4,965	4,111	718	4,829	5,071	923	5,994	3,949	570	4,519
Criminal Damage	3,471	605	4,076	3,645	878	4,523	3,126	893	4,019	3,455	884	4,339	3,302	822	4,124
Economic crimes	2,081	556	2,637	2,233	913	3,146	2,078	831	2,909	2,389	717	3,106	2,501	717	3,218
Corruption	141	24	165	78	26	104	247	84	331	82	15	97	221	54	275
Offences involving Police officers	38	24	62	913	16	146	54	32	86	126	93	219	59	12	71
Sub-total	9,401	1,771	11,172	11,293	2,374	12,884	9,616	2,558	12,174	11,123	2,632	13,755	10,032	2,175	12,207

Source: Kenya Police Service

*Provisional

Note: The number of persons reported to have committed offences may differ with that of crimes reported to the Police (Table 17.1) because a person may commit more than one crime or a crime may be committed by more than one person.

Ethics and Corruption 17.13. Table 17.6 shows the number of reports handled and action taken by the Ethics and Anti-Corruption Commission (EACC) for the period 2012/13 to 2016/17. The number of reports referred to other investigative agencies decreased from 215 in 2015/16 to 136 in 2016/17 while the number of corruption reports referred for investigation declined from 3,856 to 3,735. The number of complainants advised on the right authority to report to, increased by 14.3 per cent from 2,568 to 2,934 in the same period.

Table 17.6: Cases Handled and Action Taken by Ethics and Anti-Corruption Commission, 2012/13 - 2016/17

		Number				
		2012/13	2013/14	2014/15	2015/16	2016/17*
1	Corruption reports for investigation	1,423	1,950	2,747	3,856	3,735
2	Reports referred to other investigative agencies	111	120	117	215	136
3	Reports referred to public service organizations for administrative intervention	506	561	649	633	600
4	Reports pending for more information	18	65	80	55	64
5	Complainants advised on the right authority to report to	900	868	1,384	2,568	2,934
6	Complainants advised to seek civil redress	270	264	288	48	52
7	Reports with no further action (terminated)	127	178	395	542	575
8	Files forwarded to ODPP	70	75	117	167	143

Source: Ethics and Anti-Corruption Commission

* Provisional

17.14. Table 17.7 presents the number of reports on ethics and corruption forwarded to the Office of the Director of Public Prosecution (ODPP) and action taken for the period 2012/13 to 2016/17. The total number of reports forwarded to ODPP decreased from 167 in 2015/16 to 143 in 2016/17. The ODPP recommended 89 cases for prosecution, 25 for closure and 13 for further investigation in the period under review.

Table 17.7: Reports Forwarded to the Office of the Director of the Public Prosecution and Action Taken, 2012/13 -2016/17

		Number				
S/No	Action Taken	2012/13	2013/14	2014/15	2015/16	2016/17*
1	Recommendation to prosecute accepted	38	43	74	117	89
2	Recommendation to prosecute not accepted	4	1	1	5	8
3	Recommendation for administrative or other action accepted	5	7	8	3	7
4	Recommendation for administrative or other action not accepted	0	1	0	1	0
5	Recommendation for closure accepted	15	14	19	25	25
6	Recommendation for closure not accepted	0	3	3	2	1
7	Files returned for further investigations	6	6	12	14	13
8	Files awaiting DPP's ¹ action	2	0	0	0	0
Total		70	75	117	167	143

Source: Ethics and Anti-Corruption Commission (EACC)

* Provisional

¹ DPP - Director of Public Prosecution

17.15. The value of public assets traced, recovered and loss averted by EACC for the period 2012/13 to 2016/17 is presented in Table 17.8. In 2016/17, the value of public assets recovered stood at KSh 239.9 million compared to KSh 420.6 million in the previous financial year. The value of assets loss averted was KSh 6.3 billion in 2016/17 compared to KSh 1.2 billion in 2015/2016.

Table 17.8: Public Assets Traced, Recovered and Loss Averted by EACC, 2012/13 - 2016/17

	KSh Million		
	Value of Public Assets traced	Value of public Assets recovered	Loss Averted ¹
2012/13.....	16,380.00	567.41	55,016.50
2013/14.....	7,214.00	2,068.00	5,600.00
2014/15.....	3,669.60	140.30	1,600.00
2015/16.....	3,614.10	420.58	1,244.24
2016/17*.....	4,913.10	239.92	6,325.70

Source: Ethics and Anti-Corruption Commission

*Provisional

¹ Loss Averted refers to total value of public assets where an attempted illegal acquisition was detected and foiled through pre-emptive investigations by the EACC

Environmental Crimes 17.16. Table 17.9 presents the number of environmental crimes reported to NEMA for the period 2013 to 2017. In 2017, a total of 384 crimes were reported to NEMA out of which 253 were related to illegal movement or dumping of waste. Number of reported crimes related to air and soil pollution increased to 97 and 23, respectively in the period under review. However, reported crimes on water pollution declined to 11 in 2017.

Table 17.9: Environmental Crimes Reported to NEMA, 2013 - 2017

	Number				
Type of cases	2013	2014	2015	2016	2017*
Air Pollution	13	72	57	74	97
Water Pollution	34	79	52	17	11
Soil Pollution	11	71	44	11	23
Illegal movement or dumping of waste.....	8	46	59	229	253
Total	66	268	212	331	384

Source: National Environment Management Authority

*Provisional

Prosecution of Murder Cases 17.17. Table 17.10 presents the number of registered and convictions on murder cases at the High Court for the period 2013 to 2017. Total murder cases registered increased marginally from 940 in 2016 to 956 in 2017. During the same period, convictions for murder cases almost doubled from 208 in 2016 to 401 in 2017. The number of registered murder cases varied across High Court stations with those registered at Meru High Court being the highest at 104 in 2017.

Table 17.10: Prosecution of Murder Cases, 2013 – 2017

High Court Station	Number									
	2013		2014		2015		2016		2017*	
	R	C	R	C	R	C	R	C	R	C
Nairobi	188	18	95	15	118	25	184	11	67	27
Mombasa	95	0	43	16	57	16	40	1	25	21
Kisumu.....	131	5	5	4	30	3	30	10	32	41
Eldoret	150	41	21	4	89	21	92	13	70	10
Kitale.....	86	12	77	12	50	18	3	5	17	10
Kakamega.....	74	0	70	0	41	0	55	0	50	25
Bungoma.....	124	24	124	8	37	3	28	14	35	37
Meru.....	122	7	43	16	109	44	77	35	104	36
Machakos.....	67	79	149	6	61	7	23	1	32	9
Kericho.....	72	15	38	0	14	16	28	18	16	8
Nyeri.....	61	0	87	0	21	1	11	0	10	3
Kisii.....	212	15	30	5	79	1	34	0	27	7
Embu.....	61	4	26	12	27	4	21	6	20	20
Malindi.....	46	2	71	4	7	11	14	6	16	3
Nakuru.....	141	22	36	7	21	5	52	2	56	17
Busia.....	26	6	0	0	27	1	34	24	33	4
Garissa.....	29	6	29	12	39	0	20	1	15	0
Homa Bay.....	24	8	5	1	27	12	18	17	37	10
Murang'a			77	9	36	2	32	1	28	1
Kerugoya			200	27	28	0	19	1	10	2
Bomet					48	7	20	8	23	1
Kajiado					3	0	21	0	8	24
Kitui					13	7	15	14	18	7
Voi.....					5	0	4	1	10	3
Lodwar.....					..	..	21	11	14	11
Naivasha.....					..	..	44	8	22	2
Chuka.....									6	2
Garsen.....									3	2
Kabarnet.....									18	1
Kapenguria.....									11	0
Kiambu.....									37	0
Marsabit.....									8	3
Migori.....									17	15
Nanyuki.....									10	13
Narok.....									6	4
Nyamira.....									9	4
Siaya.....									33	18
Makueni.....									3	0
Total	1,709	264	1,226	158	987	204	940	208	956	401

Source: Office of the Director of Public Prosecutions

* Provisional

R - Registered murder cases, C - Murder convictions obtained

The Judiciary 17.18. The number of cases handled by courts of law from 2013 to 2017 is presented in Table 17.11. The number of cases filed in courts decreased by 25.6 per cent from 462,792 in 2016 to 344,180 in 2017. The number of cases disposed of by courts decreased by 26.6 per cent from 426,603 in 2016 to 313,075 in 2017. The number of pending cases increased by 6.2 per cent from 499,341 in 2016 to 530,446 in 2017.

17.19. The number of cases filed in the Magistrate courts decreased by 25.6 per cent from 404,158 in 2016 to 300,655 in 2017. Similarly cases filed in the High Court decreased from 41,999 in 2016 to 20,553 in 2017. The number of cases filed in the Kadhis' courts and Environment and Land courts increased by 47.4 per cent and 83.3 per cent, respectively. Pending cases in the Magistrate courts increased by 9.9 per cent from 333,014 in 2016 to 366,133 in 2017 while those in High court decreased by 6.4 per cent in 2017.

Table 17.11: Cases Handled by the Courts, 2013 - 2017

									Number
Year	Status of Case	Kadhis' Court	Magistrate Courts	High Court	Employment & Labour Relations Court	Environment and Land Court	Court of Appeal	Supreme Court	Total
2013 ⁺	Filed	3,462	277,666	63,950	-	-	402	70	342,088
	Pending	2,222	304,080	160,058	-	-	4,209	20	468,367
	Disposed of ..	3,677	483,693	18,718	-	-	2,427	59	482,761
2014 ⁺	Filed	2,795	461,893	37,938	-	-	446	72	500,349
	Pending	2,814	447,748	158,216	-	-	4,287	39	610,290
	Disposed of ..	2,203	318,225	39,780	-	-	368	53	358,426
2015 ⁺	Filed	1,904	308,602	38,817	3,436	5,551	1,575	61	359,946
	Pending	968	305,216	125,813	9,042	19,043	3,017	53	463,152
	Disposed of ..	3,750	451,134	71,220	1,129	2,156	2,845	47	507,084
2016	Filed	3,735	404,158	41,999	6,159	5,329	1,374	38	462,792
	Pending	3,256	333,014	127,958	11,309	20,875	2,861	68	499,341
	Disposed of ..	1,447	376,360	39,854	3,892	3,497	1,530	23	426,603
2017*	Filed	5,504	300,655	20,553	6,082	9,770	1,578	38	344,180
	Pending	3,015	366,133	119,777	13,723	24,338	3,387	73	530,446
	Disposed of ..	5,745	267,536	28,734	3,668	6,307	1,052	33	313,075

Source: Judiciary

* Provisional

+ Revised

Note:

1. Filed cases refer to all cases brought before a court during the year in reference

2. Pending cases refer to the cases which had not been determined/resolved by 30th June during the year in reference

3. Disposed of cases refers to all cases that were resolved/determined by 30th June during the year in reference.

17.20. The number of judicial officers and practicing lawyers from 2013 to 2017 is shown in Table 17.12. The number of judicial officers decreased from 611 in 2016 to 590 in 2017. The number of magistrates declined from 438 in 2016 to 421 in 2017 while the number of Kadhis increased from 45 in 2016 to 55 in 2017. The number of practicing lawyers increased by 761 to 9,000 in 2017. Female practicing lawyers grew by 12.1 per cent in 2017 compared to male lawyers who increased by 7.2 per cent.

Table 17.12: Magistrates, Judges and Practicing Lawyers, 2013 - 2017

	Number									
	2013		2014		2015		2016		2017*	
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Total
Magistrates										
Chief Magistrates... ..	27	13	40	25	24	49	28	21	49	48
Senior Principal Magistrate... ..	53	28	81	32	22	54	35	26	61	55
Principal Magistrate... ..	60	39	99	56	29	85	43	22	65	62
Senior Resident Magistrate... ..	30	42	72	58	46	104	77	79	156	154
Resident Magistrate... ..	28	60	88	68	98	166	39	68	107	102
Sub-Total	198	182	380	239	219	458	235	216	451	421
Kadhis										
Chief Kadhi... ..	1	-	1	1	-	1	1	-	1	1
Deputy Chief Kadhi... ..	1	-	1	1	-	1	1	-	1	2
Principal Kadhi... ..	2	-	2	2	-	2	2	-	2	10
Kadhi I... ..	8	-	8	11	-	11	11	-	11	19
Kadhi II... ..	18	-	18	20	-	20	30	-	30	23
Sub-Total	30	0	30	35	0	35	45	0	45	55
Total Number of Magistrates & Kadhis	228	182	410	274	219	493	270	216	483	476
Judges										
Supreme Court Judges... ..	5	2	7	5	2	7	5	2	7	7
Court of Appeal Judges... ..	18	8	26	18	8	26	18	7	25	22
High Court Judges... ..	51	35	86	60	37	97	60	37	96	85
Sub-Total	74	45	119	83	47	130	83	46	128	114
Total Judicial Officers	302	227	529	357	266	623	353	263	611	590
Practicing Lawyers	..	..	6,500	..	..	7,200	4,294	2,885	7,179	9,000

Source: Judiciary, Law Society of Kenya

* Provisional

The Prisons 17.21. Table 17.13 shows the number of persons committed to prison by sex from the 2013 to 2017. The number of persons committed to prison decreased marginally from 210,227 in 2016 to 209,870 in 2017. Convicted prisoners decreased by 2.5 per cent from 82,433 in 2016 to 80,404 in 2017. The number of persons previously convicted increased by 21.1 per cent from 14,724 in 2016 to 17,824 in 2017. About 10.0 per cent of persons committed to prison were sentenced to less than one month while 23.4 per cent were those serving prison sentences of between one month and 2 years in 2017. Convicted prisoners accounted for 38.3 per cent of the total persons committed to prison in 2017. In 2017, for every 100,000 population there were 450.4 people in prison compared to 476.1 in 2016. The number of deaths occurring in prisons declined to 176 from 187 in 2016.

Table 17.13: Persons Committed to Prison by Sex, 2013 - 2017

	2013		2014		2015		2016		2017*	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Less than 1 Month	14,736	1,644	24,374	2,053	20,597	1,847	16,956	1,337	18,758	1,531
Sentenced to less than 1 Month to < 2 yrs	43,686	5,721	53,313	7,819	43,015	9,574	42,001	8,767	43,218	5,796
Sentenced to 2 yrs or more	7,563	421	15,138	407	10,083	779	11,003	402	8,547	561
Life imprisonment	2,111	45	2,582	42	1,074	87	1,087	120	1,108	74
Death sentence	778	31	2,708	49	998	61	742	18	769	42
	68,874	7,862	98,115	10,370	75,767	12,348	71,789	10,644	72,400	8,004
Total Convicted Prisoners	76,736		108,485		88,115		82,433		80,404	
Committed for civil debt	556	113	1036	108	472	115	431	103	326	113
Committed to remand	137,974	12,539	124,795	13,966	121,097	12,175	117,687	9,573	118,905	10,122
	138,530	12,652	125,831	14,074	121,569	12,290	118,118	9,676	119,231	10,235
Total unconvicted prisoners	151,182		139,905		133,859		127,794		129,466	
	207,404	20,514	223,946	24,444	197,336	24,638	189,907	20,320	191,631	18,239
Total Persons Committed to Prisons	227,918		248,390		221,974		210,227		209,870	
Previously convicted	21,830	1,080	23,670	11,257	15,979	1,704	13,897	827	16,371	1,453
Deaths (Excluding Executions)	623	9	421	3	247	14	178	9	166	10
Prison population per 100,000 of population	556.4		578.2		502.7		467.1		450.4	

Source: Kenya Prisons Service

* Provisional

17.22. Table 17.14 presents the daily average population of prisoners by sex for the period 2013 to 2017. In 2017, the daily average of prison population increased to 51,021 from 50,900 in 2016. During the same period, the daily average convicted prison population increased to 31,749 while the daily average unconvicted population declined by 9.1 per cent.

Table 17.14: Daily Average Population of Prisoners by Sex, 2013 - 2017

	Number				
	2013	2014	2015	2016	2017*
Convicted Prisoners					
Males	30,356	30,601	28,889	27,078	30,280
Females	1,575	2,085	1,997	1,889	1,469
Sub-Total	31,931	32,686	30,886	28,967	31,749
Unconvicted Prisoners					
Males	19,166	20,896	21,760	20,060	18,156
Females	1,175	1,688	1,985	1,873	1,116
Sub -Total	20,340	22,584	23,745	21,933	19,272
Total	52,271	55,270	54,631	50,900	51,021

Source: Kenya Prisons Service

* Provisional

17.23. Table 17.15 gives the number of convicted persons committed to prison by age and sex from 2013 to 2017. The number of convicted prisoners decreased by 2.5 per cent to 80,404 in 2017. The convicted prisoners aged under 26 years accounted for 51.5 per cent of the total convicts. There was a decline in the number of female convicts across all age cohorts. The total number of female convicts declined by 24.8 per cent.

Table 17.15: Convicted Persons Committed to Prison by Age and Sex, 2013 - 2017

		Number						
		Age cohorts						
		Under 16	16 -17	18-20	21-25	26-50	Over 50	Total
2013	Male	231	2,247	13,814	20,252	27,615	4,715	68,874
	Female... ..	5	66	1,115	2,420	3,768	488	7,862
	Total... ..	236	2,313	14,929	22,672	31,383	5,203	76,736
2014	Male	139	3,198	18,002	29,662	40,439	7,711	98,115
	Female... ..	13	105	1,448	2,632	5,500	780	10,370
	Total... ..	152	3,303	19,450	32,294	45,939	8,491	108,485
2015	Male	107	2,522	14,779	22,984	30,842	4,533	75,767
	Female... ..	13	91	1,735	2,974	6,288	1,247	12,348
	Total... ..	120	2,613	16,514	25,958	37,130	5,780	88,115
2016	Male	92	1,665	12,040	22,444	29,557	5,991	71,789
	Female... ..	19	211	1,343	2,818	5,256	997	10,644
	Total... ..	111	1,876	13,383	25,262	34,813	6,988	82,433
2017*	Male	108	1,393	11,886	24,559	28,384	6,070	72,400
	Female... ..	6	31	865	2,560	3,849	693	8,004
	Total... ..	114	1,424	12,751	27,119	32,233	6,763	80,404

Source: Kenya Prisons Service

* Provisional

17.24. Table 17.16 presents the number of convicted prisoners by type of offence and sex from 2013 to 2017. Persons convicted for having committed offenses under the Liquor Act contributed 32.4 per cent of all convicted prisoners in 2017. The number of prisoners convicted for offences related to drugs increased by 23.3 per cent followed by attempts and conspiracies, and against person which increased by 22.7 per cent and 19.7 per cent, respectively. Persons convicted for offences related to order and administration of lawful authority decreased by 10.1 per cent while those imprisoned for liquor offence declined by the same margin over the same period.

Probation and Aftercare 17.25. The number of offenders serving probation sentences, community service orders, and those on aftercare service by sex are shown in Table 17.17. The number of offenders handled by the Probation and Aftercare service declined by 11.3 per cent from 50,619 in 2016 to 44,890 in 2017. During the period under review, the number of offenders sentenced to community service declined by 21.4 per cent from 37,729 to 29,667 while those placed under aftercare service dropped by 44.9 per cent from 1,604 to 884. The number of offenders on probation increased by 27.1 per cent from 11,286 in 2016 to 14,339 in 2017.

Table 17.16: Convicted Prisoners by Type of Offence and Sex, 2013 - 2017

Type of Offence ¹	2013			2014			2015			2016			2017*		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Order and administration of lawful authority	8,862	345	9,207	17,171	415	17,586	10,235	457	10,692	9,113	355	9,468	8,143	366	8,509
Injurious to public	2,947	174	3,121	4,527	188	4,715	3,231	169	3,400	3,127	132	3,259	3,186	139	3,325
Against persons on	4,838	467	5,305	7,574	496	8,070	5,771	394	6,165	5,084	369	5,453	6,211	318	6,529
Related to property	9,393	374	9,767	13,762	503	14,265	9,382	333	9,715	8,269	334	8,603	7,953	353	8,306
Attempts & conspiracies	1,554	62	1,616	3,720	106	3,826	1,312	75	1,387	1,308	23	1,331	1,593	40	1,633
Employment	2,861	611	3,472	4,375	321	4,696	5,851	253	6,104	3,992	297	4,289	4,093	169	4,262
Liquor	12,309	3,899	16,208	18,828	6,485	25,313	18,292	8,564	26,856	20,967	7,969	28,936	20,879	5,145	26,024
Drugs related	3,361	59	3,420	5,246	221	5,467	5,174	249	5,423	4,264	114	4,378	5,243	154	5,397
Various other cases	20,545	1,732	22,277	18,303	1,427	19,730	16,111	1,814	17,925	15,554	1,049	16,603	15,002	1,314	16,316
Registration of persons ²	2,204	139	2,343	4,609	208	4,817	408	40	448	111	2	113	97	6	103
Total	68,874	7,862	76,736	98,115	10,370	108,485	75,767	12,348	88,115	71,789	10,644	82,433	72,400	8,004	80,404

Source: Kenya Prisons Service

* Provisional

¹ As categorised in Appendix 17.2² refers to offences outlined in the Registration of Persons Act Cap 107 such as illegal registrations

Table 17.17: Offenders Serving Probation Sentences, Community Service and Aftercare by Sex and Type of Offence, 2016 and 2017

Offence ¹	Probation Sentence						Community Service						Serving Aftercare						Number
	2016			2017*			2016			2017*			2016			2017*			
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Murder (including attempt)	60	22	82	152	33	185	3	2	5	4	0	4	8	1	9	52	0	52	
Manslaughter	92	30	122	91	31	122	5	15	20	6	0	6	20	0	20	10	2	12	
Rape (including attempt)	217	10	227	304	8	312	118	8	126	18	0	18	139	1	140	96	0	96	
Assault	957	345	1,302	2,302	698	3,000	431	75	506	326	62	388	105	19	124	28	3	31	
Other offences against persons ..	992	284	1,276	979	309	1,288	440	84	524	312	55	367	67	12	79	67	0	67	
Robbery and Allied offences	126	15	141	218	15	233	19	3	22	9	0	9	63	2	65	36	0	36	
Breakings	502	21	523	698	18	716	256	16	272	242	7	249	150	0	150	122	0	122	
Theft of Stock	213	6	219	347	12	359	181	24	205	85	0	85	30	2	32	32	0	32	
General stealing	1,417	196	1,613	1,547	174	1,721	885	67	952	659	67	726	430	15	445	232	6	238	
Theft of M/vehicle	19	5	24	103	10	113	4	0	4	15	0	15	11	0	11	10	1	11	
Theft of M/vehicles parts	7	1	8	17	4	21	4	0	4	6	0	6	0	0	0	1	0	1	
Theft from m/vehicles	19	5	24	9	1	10	40	1	41	1	0	1	0	0	0	0	0	0	
Theft of bicycles	16	2	18	13	2	15	56	1	57	1	0	1	1	0	1	1	0	1	
Theft by servant	268	37	305	237	81	318	78	36	114	114	45	159	21	4	25	2	0	2	
Dangerous drugs	1,066	258	1,324	959	177	1,136	2,073	703	2,776	1,620	333	1,953	60	10	70	25	1	26	
Handling stolen property	163	27	190	232	83	315	216	75	291	76	10	86	18	1	19	3	1	4	
Corruption	35	23	58	26	5	31	3	0	3	6	1	7	0	2	2	0	0	0	
Causing death by dangerous driv	47	6	53	27	2	29	9	2	11	6	0	6	0	0	0	0	0	0	
Other offences against property	609	109	718	707	84	791	583	112	695	679	91	770	68	3	71	35	0	35	
All other penal code offences	2,108	951	3,059	2,848	776	3,624	26,507	4,594	31,101	21,842	2,969	24,811	299	42	341	88	30	118	
TOTAL	8,933	2,353	11,286	11,816	2,523	14,339	31,911	5,818	37,729	26,027	3,640	29,667	1,490	114	1,604	840	44	884	

Source: Probation and Aftercare Service

* Provisional

¹ See Appendix 17.1

Police, Prisons and Probation officers 17.26. The number of police, prisons and probation officers by sex for the period 2013 to 2017 is shown in Table 17.18. In the review period, the number of police officers increased by 10.0 per cent from 42,649 to 46,894. The number of prison officers increased by 11.3 per cent from 21,139 in 2016 to 23,536 in 2017 with female officers accounting for 17.9 per cent of total prison officers. Prison officers in juvenile prisons increased by 18.5 per cent from 399 in 2016 to 473 in 2017. The total number of probation officers increased by 46.8 per cent from 566 in 2016 to 831 in 2017. The number of female probation officers increased by 64.8 per cent to 417 in 2017 bringing their number to near parity with their male counterparts.

Table 17.18: Police, Prisons and Probation Officers, 2013 – 2017

Year	Sex	Police ¹ Officers	Prison Officers			Number
			in		Total	Probation Officers
			in Adult Prisons	Juvenile Prisons		
2013	Male	37,293	16,488	227	16,715	365
	Female	4,852	3,139	51	3,190	286
	Total	42,145	19,627	278	19,905	651
2014	Male	34,129	16,288	201	16,489	316
	Female	5,086	3,067	31	3,098	228
	Total	39,215	19,355	232	19,587	544
2015	Male	36,185	16,014	257	16,271	321
	Female	6,668	3,054	64	3,118	258
	Total	42,853	19,068	321	19,389	579
2016	Male	36,274	17,249	308	17,557	313
	Female	6,375	3,491	91	3,582	253
	Total	42,649	20,740	399	21,139	566
2017*	Male	39,945	18,984	341	19,325	414
	Female	6,949	4,079	132	4,211	417
	Total	46,894	23,063	473	23,536	831

Source: Kenya Police, Prisons Service and Probation and Aftercare Service

* Provisional

¹ Excludes administration police

Immigration 17.27. The number of passports and work permits issued, and foreign nationals registered for the period 2013 to 2017 is shown in Table 17.19. The number of passports issued declined by 12.2 per cent from 156,040 in 2016 to 136,990 in 2017. The number of foreign nationals registered dropped by 20.8 per cent to 29,318 in 2017. Work permits issued increased from 5,851 in 2016 to 8,366 in 2017 while work permits renewed increased from 9,547 in 2016 to 10,551 in 2017.

Table 17.19: Passports and Work Permits Issued, and Foreign Nationals Registered, 2013 - 2017

Category	Number				
	2013	2014	2015	2016	2017*
Passports issued	148,940	183,042	151,589	156,040	136,990
Foreign nationals registered	21,920	22,326	25,091	37,033	29,318
Work permits issued	10,411	10,540	7,683	5,851	8,366
Work permits renewed	9,315	10,532	11,125	9,547	10,551

Source: Department of Immigration

* Provisional

National Identity Cards

17.28. The number of applications, production and collection of national identity (ID) cards by county from 2013 to 2017 is provided in Table 17.20. The number of applicants not previously registered declined by 19.4 per cent from 1,529.4 thousand in 2016 to 1,233.3 thousand in 2017. New identity cards produced declined by 7.6 per cent while those collected increased by 1.8 per cent in 2017.

Voter Registration

17.29. Table 17.21 presents the number of registered voters in 2016 and 2017. The number of registered voters increased by 23.2 per cent from 15.9 million as at December 2016 to 19.6 million as at December 2017. The increase is partly attributed to the mass voter registration in 2017. The number of male and female voters increased by 28.6 per cent and 18.1 per cent, respectively. The number of voters in the diaspora increased from 2,537 in 2016 to 4,393 in 2017. Prisoners were registered to exercise their right to vote for the first time. Overall, 80.5 per cent of adult population registered as voters.

Table 17.20: New Identity Card Applications Made, Produced and Collected by County, 2013 - 2017

S/No	County	NPR Applications					NPRIDs Produced					NPRIDs Collected					Number
		2013	2014	2015	2016	2017*	2013	2014	2015	2016	2017*	2013	2014	2015	2016	2017*	
1	Mombasa	23,104	17,318	20,817	24,046	21,640	41,549	15,653	15,176	26,165	23,255	22,104	17,859	13,500	22,966	24,165	
2	Kwale	22,444	17,169	21,513	37,846	21,808	3,137	15,802	14,745	38,688	27,311	24,921	15,969	14,469	33,417	29,828	
3	Kilifi	38,326	36,227	41,283	54,127	41,483	26,574	29,382	30,820	50,026	41,641	40,609	29,183	32,753	55,187	43,175	
4	Tana River	11,450	4,803	9,149	12,301	6,850	9,572	4,471	5,022	10,196	9,577	5,987	5,152	4,685	6,481	11,533	
5	Lamu	1,060	735	2,357	4,539	2,408	24,657	1,625	119	6,129	9,827	3,063	1,513	292	4,069	4,149	
6	Taita Taveta	8,263	7,245	6,354	9,566	9,258	10,219	7,323	5,315	10,556	3,248	9,667	6,063	6,316	9,728	9,649	
7	Garissa	5,154	6,879	8,060	19,831	6,242	4,088	4,476	4,563	13,813	18,341	4,966	2,832	3,842	7,785	8,781	
8	Wajir	6,591	4,225	14,157	20,386	9,189	5,147	3,454	5,033	17,188	15,187	7,961	1,748	1,866	14,201	9,248	
9	Mandera	8,845	675	26,585	16,901	13,563	5,935	2,147	2,694	33,518	18,977	5,832	1,778	2,678	24,926	8,539	
10	Marsabit	7,551	8,282	8,882	11,667	6,656	8,258	7,307	5,053	12,930	10,599	7,368	5,665	5,090	9,858	7,513	
11	Isiolo	3,926	2,071	2,717	3,728	3,446	3,501	1,620	1,554	4,094	5,414	3,042	1,687	1,429	2,221	5,131	
12	Meru	43,069	30,646	39,380	73,747	25,892	43,118	27,523	30,079	70,354	47,667	34,093	24,221	22,634	36,206	24,309	
13	Tharaka Nithi	7,115	7,457	14,468	20,736	7,557	9,702	7,451	7,321	21,680	9,805	7,672	6,438	4,702	18,920	9,284	
14	Embu	12,870	12,329	13,467	26,404	13,670	10,178	10,752	12,021	24,742	15,929	15,783	10,623	10,714	17,101	17,011	
15	Kitui	30,138	29,626	32,969	46,591	38,491	32,307	24,728	29,031	48,371	38,547	34,959	26,227	25,142	45,740	39,898	
16	Machakos	32,532	29,781	31,036	41,294	37,870	31,998	23,555	24,259	36,323	37,535	32,689	24,875	23,522	30,487	37,450	
17	Makueni	28,185	26,248	26,660	33,376	36,014	31,261	21,879	24,419	37,069	36,002	31,972	21,227	20,720	33,468	36,313	
18	Nyandarua	11,425	15,526	15,340	29,285	21,095	16,258	12,113	13,881	25,114	21,368	14,449	12,867	13,301	22,892	21,335	
19	Nyeri	12,614	16,950	17,641	30,081	18,006	20,730	13,660	16,273	26,764	19,628	16,648	15,137	15,933	23,090	17,865	
20	Kirinyaga	9,602	12,102	11,623	27,517	16,164	14,327	9,455	11,578	21,869	18,733	7,970	9,395	10,173	15,581	16,186	
21	Muranga	18,772	23,021	24,745	54,021	31,176	15,610	19,526	21,749	43,570	33,699	21,358	20,206	20,204	36,605	53,748	
22	Kiambu	29,055	36,921	39,555	64,134	47,335	35,979	30,150	36,354	58,070	52,095	31,551	30,676	33,341	47,227	48,415	
23	Turkana	10,397	14,162	24,058	26,556	18,396	15,262	11,546	14,232	15,026	15,567	11,534	6,118	10,386	16,611	13,721	
24	West Pokot	11,895	12,363	16,323	34,517	19,050	18,051	6,762	5,865	29,275	22,019	13,898	5,698	5,433	23,094	23,039	
25	Samburu	2,699	3,831	6,341	8,868	7,964	3,443	2,222	4,661	8,125	6,982	4,253	2,180	3,149	7,058	6,275	
26	Trans Nzoia	16,104	20,593	23,499	28,092	30,731	20,378	14,679	15,952	28,586	31,169	17,841	10,635	15,014	23,019	26,701	
27	Uasin Gishu	17,194	20,456	20,138	31,005	31,223	15,558	14,512	16,551	25,288	33,989	14,813	15,979	16,636	24,026	31,792	
28	Elgeyo Marakwet	7,985	9,511	10,042	17,368	12,319	8,048	7,409	7,761	14,214	15,931	9,461	8,148	7,701	14,778	14,851	
29	Nandi	11,508	9,339	21,113	32,215	29,253	15,194	10,507	13,946	22,143	33,559	13,960	8,284	12,944	20,637	31,696	
30	Baringo	8,833	10,746	13,562	25,833	20,979	9,061	7,423	10,556	16,275	24,455	7,918	6,355	15,099	16,716	23,074	

Table 17.20: New Identity Card Applications Made, Produced and Collected by County, 2013 - 2017 cont...

S/No	County	NPR Applications					NPR IDs Produced					NPR IDs Collected					Number
		2013	2014	2015	2016	2017*	2013	2014	2015	2016	2017*	2013	2014	2015	2016	2017*	
31	Laikipia	8,914	9,814	7,984	18,137	12,059	10,219	7,963	8,693	17,597	13,434	9,476	5,859	9,441	15,601	14,310	
32	Nakuru	31,589	45,660	55,237	76,607	59,682	34,782	32,579	36,520	62,504	60,685	32,970	32,800	42,429	56,198	57,533	
33	Narok	12,664	15,549	21,469	30,753	23,007	22,101	12,517	9,897	31,614	29,905	17,831	8,529	9,310	27,515	25,886	
34	Kajiado	6,451	8,759	10,259	18,529	19,447	18,209	13,349	13,454	20,600	18,430	7,897	6,475	14,334	15,152	18,179	
35	Kericho	21,329	23,160	23,077	30,801	28,353	11,586	14,450	16,928	23,979	30,260	22,611	17,509	28,171	23,086	29,638	
36	Bomet	11,029	13,896	15,009	24,076	27,136	16,113	12,823	14,767	22,741	28,717	11,598	9,620	14,743	19,357	29,545	
37	Kakamega	44,652	55,590	50,910	59,574	62,483	45,618	39,908	44,432	55,388	59,022	44,719	41,456	38,417	51,356	58,715	
38	Vihiga	13,653	18,932	17,352	19,812	17,932	45,584	12,291	15,107	19,585	19,481	12,782	12,972	11,941	14,093	18,104	
39	Bungoma	40,551	43,971	47,915	55,514	53,513	23,145	39,086	30,013	52,781	50,665	34,669	26,511	25,117	42,983	50,029	
40	Busia	18,511	21,667	28,017	30,280	25,726	15,256	21,098	21,377	33,511	30,074	20,052	15,381	16,329	32,681	32,577	
41	Siaya	20,591	25,457	35,071	45,097	35,677	34,866	19,430	26,613	41,453	36,528	24,558	19,003	25,691	38,887	34,140	
42	Kisumu	26,429	27,123	37,333	39,774	46,898	25,644	21,711	27,062	39,613	43,027	29,627	20,500	26,652	35,158	40,842	
43	Homabay	15,360	23,987	33,553	34,782	43,788	20,814	18,321	26,903	36,599	43,094	22,688	17,299	23,640	33,881	38,296	
44	Migori	23,001	23,594	33,279	40,649	37,348	30,507	18,047	20,014	41,090	34,270	24,241	14,003	18,263	36,770	31,805	
45	Kisii	22,298	31,799	32,752	40,140	40,732	20,887	22,662	27,739	40,567	38,418	31,316	21,890	24,230	37,381	41,478	
46	Nyamira	13,951	20,617	23,066	24,085	22,443	15,758	14,347	16,237	19,506	18,824	15,238	14,780	14,072	18,342	18,010	
47	Nairobi City ... ¹	51,950	56,275	61,150	74,233	71,316	53,901	47,901	53,470	75,273	69,203	58,840	70,248	49,554	78,569	69,095	
48	Foreign Office ¹	..	..	..	..	..	127	469	668	532	654	127	469	668	532	654	
Total		841,629	913,087	1,097,267	1,529,421	1,233,268	954,217	738,064	816,477	1,431,094	1,322,747	899,582	710,042	766,670	1,241,637	1,263,510	

Source: National Registration Bureau

NPR - Not Previously Registered

¹ These are produced in Nairobi for Kenyans abroad who applied through foreign office

Table 17.21: Registered Voters, 2016 - 2017

S/no	Name of County, Special domains	No. of constituencies	Registered Voters as at 31.12.2016			Registered Voters as at 31.12.2017			Number		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Mombasa.....	6	257,767	192,761	450,528	305,521	274,702	580,223	74.3	75.8	75.0
2	Kwale.....	4	98,207	104,594	202,801	146,178	134,863	281,041	78.1	62.0	69.5
3	Kilifi.....	7	180,093	204,532	384,625	263,598	244,470	508,068	83.5	64.7	73.3
4	Tana River.....	3	46,853	49,791	96,644	61,668	56,659	118,327	91.8	78.2	84.7
5	Lamu.....	2	29,999	26,042	56,041	38,554	31,222	69,776	103.0	93.3	98.4
6	Taita Taveta.....	4	65,718	59,585	125,303	86,506	69,210	155,716	80.5	65.9	73.3
7	Garissa.....	6	64,729	59,584	124,313	87,910	75,440	163,350	70.3	62.2	66.3
8	Wajir.....	6	64,863	61,170	126,033	88,619	74,283	162,902	70.4	63.8	67.2
9	Mandera.....	6	62,845	62,043	124,888	94,786	80,856	175,642	51.3	46.8	49.1
10	Marsabit.....	4	63,009	61,593	124,602	77,390	64,318	141,708	100.5	93.1	97.0
11	Isiolo.....	2	29,494	30,165	59,659	41,533	33,805	75,338	103.7	91.7	97.9
12	Meru.....	9	281,455	254,919	536,374	382,022	320,458	702,480	96.3	79.4	87.8
13	Tharaka-Nithi.....	3	85,412	83,550	168,962	117,039	96,115	213,154	111.0	85.3	97.8
14	Embu.....	4	124,236	119,118	243,354	166,099	143,369	309,468	106.4	88.4	97.2
15	Kitui.....	8	182,840	208,902	391,742	257,010	217,502	474,512	114.1	77.4	93.7
16	Machakos.....	8	263,129	246,473	509,602	347,041	273,213	620,254	109.2	82.1	95.4
17	Makueni.....	6	169,734	170,903	340,637	239,824	183,486	423,310	108.3	73.6	89.9
18	Nyan darua.....	5	139,922	141,399	281,321	175,956	159,678	335,634	100.9	85.2	92.8
19	Nyeri.....	6	193,499	195,081	388,580	245,497	211,452	456,949	99.7	82.7	91.0
20	Kirinyaga.....	4	148,479	140,582	289,061	184,060	165,776	349,836	94.2	85.2	89.7
21	Murang'a.....	7	244,168	244,686	488,854	329,825	257,301	587,126	107.6	77.6	92.0
22	Kiambu.....	12	478,754	468,003	946,757	592,700	588,220	1,180,920	100.4	102.4	101.3
23	Turkana.....	6	62,946	90,429	153,375	97,496	93,939	191,435	35.4	35.0	35.2
24	West Pokot.....	4	65,719	69,021	134,740	93,477	86,755	180,232	66.1	56.5	61.1
25	Samburu.....	3	31,400	37,902	69,302	42,173	40,614	82,787	64.9	58.7	61.7
26	Trans Nzoia.....	5	145,896	128,437	274,333	184,800	154,822	339,622	71.2	57.7	64.3
27	Uasin Gishu.....	6	187,170	163,881	351,051	237,952	212,103	450,055	72.5	66.4	69.5
28	Elgeyo/Marakwet.....	4	73,939	70,761	144,700	100,250	80,414	180,664	85.1	65.8	75.3
29	Nandi.....	6	147,083	132,342	279,425	188,494	157,513	346,007	74.4	61.9	68.1
30	Baringo.....	6	95,019	95,015	190,034	126,962	105,296	232,258	76.0	59.9	67.8

Table 17.21: Registered Voters, 2016 - 2017 cont.

S/no	Name of County, Special domains	No. of constituencies	Registered Voters as at 31.12.2016			Registered Voters as at 31.12.2017			Number		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
31	Laikipia.....	3	99,014	93,985	192,999	131,232	115,255	246,487	93.6	78.5	85.9
32	Nakuru.....	11	401,080	368,459	769,539	493,646	455,972	949,618	85.1	78.5	81.8
33	Narok.....	6	146,338	137,155	283,493	180,316	161,414	341,730	69.9	62.0	65.9
34	Kajiado.....	5	175,062	153,793	328,855	210,068	201,125	411,193	83.0	80.6	81.8
35	Kericho.....	6	165,639	147,903	313,542	205,131	170,537	375,668	83.7	72.5	78.2
36	Bomet.....	5	138,726	131,684	270,410	177,924	144,088	322,012	82.5	65.6	74.0
37	Kakamega.....	12	312,331	315,511	627,842	401,742	341,994	743,736	95.8	72.2	83.3
38	Vihiga.....	5	103,987	119,090	223,077	154,746	117,663	272,409	111.4	69.0	88.1
39	Bungoma.....	9	242,632	228,001	470,633	306,106	253,744	559,850	91.2	69.4	79.8
40	Busia.....	7	141,809	147,463	289,272	189,671	161,377	351,048	108.3	78.0	91.9
41	Siaya.....	6	172,845	202,778	375,623	254,660	203,293	457,953	115.1	73.7	92.1
42	Kisumu.....	7	223,408	223,282	446,690	289,661	249,549	539,210	99.9	82.4	91.0
43	Homa Bay.....	8	178,715	203,688	382,403	254,957	221,918	476,875	105.0	76.5	89.5
44	Migori.....	8	155,895	166,875	322,770	206,881	181,752	388,633	89.1	69.0	78.4
45	Kisii.....	9	228,889	224,857	453,746	298,723	247,857	546,580	95.6	66.9	80.0
46	Nyamira.....	4	120,347	115,363	235,710	151,426	127,427	278,853	90.2	65.4	76.9
47	Nairobi City.....	17	1,045,503	789,613	1,835,116	1,154,482	1,096,371	2,250,853	81.8	74.8	78.2
Sub-Total			8,136,597	7,742,764	15,879,361	10,462,312	9,139,190	19,601,502	88.2	73.3	80.5
48	Diaspora.....	10	1,783	754	2,537	2,272	2,121	4,393	..	..	..
49	Prisons.....	103	-	-	-	4,564	964	5,528	..	..	..
Total			8,138,380	7,743,518	15,881,898	10,469,148	9,142,275	19,611,423	-	-	-

Source: Independent Electoral and Boundaries Commission

Refugees in Kenya 17.30. Table 17.22 presents the number of refugees by age and sex from 2013 to 2017. The registered refugee population declined by 1.3 per cent from 494,863 in 2016 to 488,415 in 2017. This was partly due to the voluntary repatriation of refugees from Dadaab camp. Adult refugee population increased by 2.2 per cent from 210,718 to 215,312 while child refugee population reduced by 3.9 per cent to 273,103 in 2017.

Table 17.22: Refugees and Asylum Seekers by Age and Sex, 2013 - 2017

Category	Number				
	2013	2014	2015	2016	2017*
Children (< 18 yrs)					
Male	173,544	173,573	174,344	149,972	134,109
Female.....	157,070	155,350	157,276	134,173	138,994
Sub Total-children	330,614	328,923	331,620	284,145	273,103
Adults (18+ yrs)					
Male	151,227	123,991	129,616	100,781	103,299
Female.....	135,382	132,449	132,645	109,937	112,013
Sub Total-adults	286,609	256,440	262,261	210,718	215,312
Total (all ages)					
Male	324,771	297,564	303,960	250,753	237,408
Female.....	292,452	287,799	289,921	244,110	251,007
Total	617,223	585,363	593,881	494,863	488,415

Source: Refugee Affairs Secretariat

*Provisional

Gender and Development

17.31. The Government continues to commit itself to socially equitable society through various affirmative actions such as empowerment of women. Women group registration, contributions and source of loans is shown in Table 17.23. The number of registered women groups is expected to grow by 1.3 per cent to 158,768 in 2017/18 from 156,792 in 2016/17. The total membership of women groups is expected to increase from 6.3 million in 2016/17 to 6.4 million in 2017/18. The group contributions increased by 1.1 per cent to KSh 639.5 million in 2017/18.

Table 17.23: Women Groups Registration, Contributions and Source of Loans, 2013/14 - 2017/18

	Women Groups			Uwezo Fund		Women Enterprise Fund	
	Number of Groups	Number of Members	Group contributions (KSh Million)	Number of Beneficiaries	Fund disbursed ¹ (KSh Millions)	Number of Beneficiaries	Fund disbursed (KSh Million)
2013/14.....	148,190	5,872,172	585.2			159,248	1,055.6
2014/15.....	150,857	6,024,848	603.3	491,352	4,240.4	176,615	1,604.8
2015/16.....	154,425	6,177,492	625.0	373,693	874.7	178,375	2,285.6
2016/17.....	156,792	6,297,320	632.4	63,245	439.5	143,205	2,212.4
2017/18*....	158,768	6,357,428	639.5	65,000	500.0	151,258	2,225.0

Source: Ministry of Labour and Social Protection, Uwezo Oversight Board and Women Enterprise Fund

*Provisional

¹Funds disbursed from Uwezo fund for 2016/17 are provisional while 2017/18 are budget estimates

17.32. Funds disbursed by the Government through the Uwezo Fund is expected to increase from KSh 439.5 million in 2016/17 to KSh 500.0 million in 2017/18. The number of beneficiaries is expected to increase to 65,000 in 2017/18.

17.33. Women Enterprise Fund provides business support services such as start-ups, expansion, capacity building, marketing, promotion of linkages and infrastructure support to women groups. In 2017/18, the loans disbursed by the Women Enterprise Fund are expected to go up by 0.6 per cent from KSh 2,212.4 million in 2016/17 to KSh 2,225.0 million in 2017/18. The number of beneficiaries is expected to increase by 5.6 per cent to 151,258 in 2017/18.

17.34 Participation of women and men in key decision making positions is shown in Table 17.24. The number of women in the Parliament increased from 87 in 2016 to 97 in 2017. Number of women Cabinet Secretaries increased from 5 in 2016 to 6 in 2017. The proportion of women Principal Secretaries decreased from 36.6 per cent in 2016 to 20.0 per cent in 2017. For the first time women were elected as Governors during the August 2017 General election.

Table 17.24: Key Decision Making Positions by Sex, 2016 - 2017

Position	2016				2017*			
	Number			(%)Female	Number			(%)Female
	Female	Male	Total		Female	Male	Total	
Cabinet Secretary.....	5	15	20	25.0	6	16	22	27.3
Principal Secretary.....	15	26	41	36.6	8	32	40	20.0
Diplomatic Corp.....	18	46	64	28.1	16	42	58	27.6
Deputy Secretary.....	66	149	215	30.7	74	156	230	32.2
Governor.....	-	47	47	-	3	44	47	6.4
Deputy Governor.....	9	38	47	19.2	7	40	47	14.9
National Assembly.....	69	280	349	19.8	76	273	349	21.8
Senator.....	18	49	67	26.9	21	46	67	31.3
Member of the County Assembly.....	761	1,463	2,224	34.2	745	1,479	2,224	33.5
Supreme Court Judge.....	2	5	7	28.6	2	5	7	28.6
Court of Appeal Judge.....	7	18	25	28.0	7	15	22	31.8
High Court Judge.....	37	59	96	38.5	54	77	131	41.2
Magistrate.....	216	222	438	49.3	207	214	421	49.2
Kadhis.....	-	45	45	-	-	55	55	-
County Commissioner.....	18	29	47	38.3	17	30	47	36.1
Sub County Commissioner.....	40	255	295	13.6	44	251	295	14.9
Chiefs.....	126	2,464	2,590	4.9	137	2,453	2,590	5.3
Assistant Chief.....	489	5,397	5,886	8.3	504	5,382	5,886	8.6

Source: Ministry of Interior and Coordination of National Government, National Assembly, Foreign Affairs, Judicial commission service and Office of the Attorney General

Social Protection 17.35. The social protection fund was established to benefit the elderly of age 65 years and above, Orphaned and Vulnerable Children (OVC), with an aim of reducing poverty and improve access to essential services. Allocation and disbursement of funds for social protection by the National Government is as shown in Table 17.25. The funds allocated to older persons is expected to increase by 8.6 per cent from KSh 7,329.5 million in 2016/17 to KSh 7,962.3 million in 2017/18. Direct cash disbursement is expected to increase by 9.5 per cent from KSh 6,699.6 million in 2016/17 to KSh 7,334.5 million in 2017/18. The funds allocated for the Orphans and Vulnerable Children (OVC) is expected to increase by 5.4 per cent from KSh 8,071.6 million in 2016/17 to KSh 8,507.6 million in 2017/18 while direct cash disbursed is expected to increase by 11.5 per cent to KSh 7,925.0 million in 2017/18.

Table 17.25: Funds for Older Persons and, Orphaned and Vulnerable Children, 2013/14 – 2017/18

	Older Persons			Orphans and Vulnerable Children		
	Number of Beneficiary Households	Allocation (KSh Million)	Direct cash Disbursement (KSh Million)	Number of Beneficiary Households ¹	Allocation (KSh Million)	Direct cash Disbursement (KSh Million)
2013/14.....	121,625	3,168.0	2,919.0	188,538	4,763.1	4,524.9
2014/15.....	218,497	5,501.5	5,243.9	255,470	5,957.6	6,131.3
2015/16.....	310,223	7,966.3	7,445.3	351,650	9,746.3	8,439.6
2016/17.....	279,150	7,329.5	6,699.6	353,000	8,071.6	7,106.0
2017/18*.....	310,000	7,962.3	7,334.5	353,000	8,507.6	7,925.0

Source: Ministry of Labour and Social Protection

* Provisional

¹ The beneficiaries are paid in 6 bi-monthly payment cycles. Not all the beneficiaries might have gotten all the payments

Developments 17.36. The Government continued to implement reforms in the governance justice law and order sector. In the Judiciary, more high court stations were opened while the Judiciary Committee on Elections revised and gazetted election rules of procedure for the different courts. The Judiciary also conducted intensive refresher training for the Judges and Magistrates to handle electoral disputes. In 2017, the Judiciary opened 12 new High Court stations increasing the number of counties with High Court station to 38.

17.37. On security, the National Police Service acquired anti-personnel carriers, helicopters, vehicles and recruited more police officers. Other reforms in the NPS included career progression guidelines and review of basic training curriculum.

17.38. National Environmental Management Authority implemented a National Solid Waste Management Strategy to guide sustainable solid waste management in the country to ensure a healthy, safe and secure environment for all. It is in this regard that all plastic carrier bags used as secondary packages were banned with effect from August 2017.

Appendix 17.1: Classification of Offences by the Kenya Police Service Based on the Kenyan Penal Code

CODE	OFFENCES	CATEGORY OF OFFENCES	CODE	OFFENCES	CATEGORY OF OFFENCES
1	HOMICIDE	a) Murder b) Manslaughter c) Infanticide d) Procuring Abortion e) Concealing Birth f) Suicide g) Causing Death by dangerous Driving	8	THEFT BY SERVANT	a) Stealing by Directors b) Stealing by employee/servant
			9	VEHICLE AND OTHER THEFTS	a) Theft of M/V b) Theft from M/V c) Theft of M/V part d) Theft of M/Cycle
2	OFFENCES AGAINST MORALITY	a) Rape b) Defilement c) Incest d) Unnatural Offences(Sodomy) e) Bestiality f) Indecent assault g) Abduction h) Bigamy	10	DANGEROUS DRUGS	a) Possession b) Handling c) Trafficking d) Cultivating e) Usage
			11	TRAFFIC OFFENCES	a) Taking and Driving Motor Vehicle without Authority b) Driving under influence of alcohol
3	OTHER OFFENCES AGAINST PERSONS	a) Assault b) Creating Disturbance c) Affray	12	CRIMINAL DAMAGE	a) Malicious Damage b) Arson c) Negligent Acts
4	ROBBERY	a) Robbery b) Robbery with Violence c) Carjacking d) Robbed of M/V e) Cattle Rustling	13	ECONOMIC CRIMES	a) Obtaining by False Pretence b) Currency Forgery c) Other Fraud/Forgery Offences
5	BREAKING	a) House Breaking b) Burglary c) Other Breakings	14	CORRUPTION	a) Soliciting for Bribe b) Accepting Bribe c) Accept Free Gifts d) Demanding by false pretence e) Other Corruption Offences
6	THEFT OF STOCK		15	OFFENCES INVOLVING POLICE OFFICERS	a) Soliciting for Bribe b) Accepting Bribe c) Accept Free Gifts d) Demanding by false pretence e) Other Criminal Offences
7	STEALING	a) Handling Stolen Property b) Stealing from Person c) Stealing by Tenants/lodgers d) Stealing from a building e) General Stealing	16	OFFENCES INVOLVING TOURIST	a) Bag Snatching b) Other offences Against Tourists c) Other Offences involving Tourist

Appendix 17.2: Description of Offences

Order and administration of lawful authority	Treason, incitement to mutiny, aiding civil disobedience
Injurious to public	Stealing government property, stealing by person in public service, stealing from state c
Against person	Assault, grievous harm, murder etc
Related to property	Theft, robbery with violence, arson
Attempts and conspiracies	Attempts to commit offences, neglect to prevent offence, conspiracies to commit offe
Employment Act	Employment of aliens without permit
Drugs related	Possession, manufacture, trafficking etc of any quantity
Various cases	By-laws under the Local Government Act, Traffic Act, Tax Act etc

D

EMERGING ISSUES

Environmental Economic Accounts: Energy Accounts

Chapter 18

Overview

Kenya's economy relies largely on natural resources which supports a variety of economic sectors. However, there has been a challenge in establishing the actual contribution and value of these natural resources to the economy. In efforts to address this challenge, it was deemed necessary that energy accounts be piloted to understand the interactions between energy and the economy to inform policy decisions.

18.2. During the review period, the total net supply of Energy in the country was 995,658.06 Terajoules (TJ), out of which 97.6 per cent was domestically produced. Transmission and distribution losses of the total electricity produced was 6,975.16 TJ, accounting for 18.7 per cent of total electricity distributed in 2017. The volume of imports, mainly drawn from petroleum products was 27,705.49 TJ while total exports which include re-exports was 3,592.72 TJ in the review period. Total Consumption of Petroleum products was 22,069.43 TJ in 2017.

Introduction 18.3. The System of Environmental-Economic Accounting (SEEA) is an internationally agreed statistical framework to measure the environment and its interactions with the economy. It was adopted by the United Nations Statistical Commission (UNSC) in 2012 as the first international statistical standard for environmental-economic accounting. It forms part of broader measures aimed at complementing GDP in order to inform policy decisions. The SEEA Central Framework (SEEA-CF) is a multipurpose conceptual framework for understanding the interactions between the economy and the environment by describing physical flows and changes in stocks of environmental assets. Sustainable development requires formulation of right policies which are evidence based. To achieve sustainable development, there is need for analysis of impacts of economic policies on the environment and how environmental assets contribute to the economic production.

18.4. The framework utilizes accounting concepts, structures, rules and principles of the 2008 System of National Accounts (SNA, 2008). However, unlike SNA, SEEA-CF allows for integration of environmental information measured in physical terms with economic information measured in monetary terms into a single framework in addition to expanding the asset boundary defined in SNA. The SEEA-CF covers measurement in three main areas namely; physical flows of materials and energy within the economy and between the economy and the environment, stocks of environmental assets and changes in these stocks; and economic activity and transactions related to the environment.

18.5. These measurements are done through a series of accounts: *Physical flow accounts* comprising of Physical Supply and Use Tables (PSUT) for Energy and Water; and physical flow accounts for materials, including emissions to air and water. *Environmental asset accounts* which entail accounting for changes in stocks of mineral and energy resources and other environmental assets such as land, soil, timber, aquatic resources and other biological resources. *Environmental activity accounts* include environmental activity statistics such as Environmental Protection Expenditure Accounts (EPEA) and Environmental Goods and Services Sector (EGSS); and accounting for other environmental transactions, i.e. environmental subsidies and taxes.

Rationale 18.6. In 2013, the United Nations published guidelines on integrated economic statistics outlining the need to move from the traditional silo approach to a more integrated approach to produce statistics. Integrated economic statistics provide a consistent and coherent picture of the economic activities for policy, business and other analytical uses. In the recent past, several initiatives on sustainability, social progress and well-being have raised the need for integrated and coherent official statistics. This has in turn created demand for integrated and coherent official statistics necessitating statistics agencies to generate integrated economic, environmental and socio-demographic statistics. SEEA is used to measure natural capital, environment, biodiversity and sustainable development related initiatives.

Objectives 18.7. The main objective of environmental-economic accounting is to measure the interactions between the economic processes and the environmental resources. The specific objectives are to identify the socio-economic drivers, pressures, impacts and responses affecting the environment; to provide indicators that express the relationship between the environment and the economy; to support accurate and precise environmental regulations and resource management policies; environmental sustainability and social equity; and to provide quantitative basis for policy design formulation.

Implementation of SEEA in Kenya 18.8. Kenya was among four countries selected by United Nations Statistics Division (UNSD) to develop and strengthen environmental economic accounting. The other countries were Uganda, Malaysia and Indonesia. The aim of the project was to develop a national plan for implementation of SEEA framework and compile a pilot account for a policy relevant area. Kenya and Uganda agreed to develop national plans to guide compilation of environmental economic accounts and compile a pilot account.

18.9. Consultative meetings with stakeholders were held to create awareness about SEEA and its applications as well as to explore the availability of the required data. There was a general consensus to pilot energy accounts on the basis of their importance in the country's economy and on the availability and ease of collecting data.

Supply and Use Tables Monetary Supply and Use Table

18.10. Monetary supply and use table consists of two parts namely; supply table and use table. The table records flows of products in monetary terms relating to the use of inputs from the environment or expenditure associated with the environment. The supply table includes: output from production within the domestic economy and imports (products brought from the rest of the world). All products supplied to the economy must be recorded as used to account for all resources derived from the environment. The use table includes intermediate consumption (products used to produce other products); household final consumption (products consumed by households); government final consumption expenditure (products consumed by government); exports (products sold to the rest of the world); gross fixed capital formation (products used as assets) and inventories. The flows are classified by type of product, type of economic unit and accumulation. Total supply of each product must be equal to total use of the same product.

Box1: Monetary Supply and Use Table

	Industries	Households	Government	Accumulation	Rest of the World	Total
Supply Table						
Product	Output				Imports	Total Supply
Use Table						
Product	Intermediate Consumption	Household final consumption expenditure	Government final consumption expenditure	Gross capital formation ¹	Exports	Total Use
	Value added ²					

¹Gross capital formation is gross fixed capital formation plus changes in inventories

²Value added is computed by netting intermediate consumption from the value of output

Physical Supply and Use Table

18.11. The Physical Supply and Use Table (PSUT) records all flows of products and natural inputs from the environment to the economy, residuals from the economy to the environment and within the economy, in physical terms. The structure of the physical supply and use table is the same as that of monetary supply and use table with an extension to include flows from and to the environment. The column for government is omitted in the PSUT since it is included in the industries column.

18.12. The households in the PSUT involve the consumption of goods. Households undertake several activities for own consumption including collection of water and firewood. All the activities recorded as consumption in the household should be recorded as produced from the environment. Production activities and associated flows of natural inputs are recorded in the industries. Residues are generated as a by-product of consumption by economic units.

18.13. The input output identity states that total flows to the economy over an accounting period are either returned to the environment or accumulated. Physical flows are measured in different units depending on the material. Industries are classified using the International Standard Industrial Classification of all economic activities (ISIC Rev.4) while products are classified using the Central Product Classification (CPC V.2).

Box2: Structure of Physical Supply and Use Table

	Industries	Households	Accumulation	Rest of the World	Environment	Total
Supply Table						
Natural inputs					flow from the environment	Total Supply of natural input
Product	Output			Imports		Total Supply
Residuals	Residuals generated from industry	Residuals generated by final household consumption	Residuals from scrapping and demolition of produced assets			Total Supply of residuals
Use Table						
Natural inputs	Extraction of natural inputs					Total Use of natural inputs
Product	Intermediate Consumption	Household final consumption expenditure	Gross capital formation	Exports		Total Use
Residuals	Collection and treatment of waste and other residuals		Accumulation of waste in controlled landfill sites		Residuals flow directly to the environment	Total Uses of residuals

Energy Physical Supply and Use Table

18.14. The energy physical supply and use table is an accounting construct for compiling and presenting all energy entering, leaving and used within the national economy of a given country for a period of time. It expresses energy flows in a common unit called Terajoules and shows the relationship between inputs to and outputs from energy transformation processes. The physical supply and use table for energy aims to be comprehensive and records all energy flows within the economy and the environment.

18.15. Physical flows of energy are organized according to whether they represent supply or use of energy. Energy is supplied when it is produced (either when extracted directly from the environment for example the capture of energy using solar panels); or created from another source (transformation of wind to electricity) or imported, for example petroleum products.

18.16. An energy PSUT is used to assess how an economy supplies and uses energy and can also be used to examine changes in production and consumption patterns over time. Energy PSUT when combined with data from Monetary Supply and Use Tables can be used to examine changes in productivity and intensity in the use of energy natural inputs and the release of residuals.

18.17. The supply and use identity applies within the PSUT for energy. Thus, for each product measured in physical terms, the quantity of domestic production (output) and imports (total supply of products) must equal the consumption (both intermediate and final), changes in inventories and exports (total use of products). The equality between supply and use also applies to the total supply and use of natural inputs and the total supply and use of residuals.

Energy Balance 18.18. The 2017 Energy Balance for the country is presented in Tables 18.1a, 18.1b and 18.1c. All Energy supplied and used is measured in Terajoules. Total net supply of Energy in the country was 995,658.06 TJ in 2017. Domestically produced energy accounted for 97.6 per cent of total supply at 971,545.29 TJ in the review period, mainly drawn from firewood, charcoal and electricity generation sources. Firewood, charcoal and other waste production contributed 96.3 per cent of all energy produced locally in 2017. The volume of imports, mainly drawn from petroleum products, stood at 27,705.49 TJ in the review period while total exports which includes re-exports was 3,592.72 TJ. Total Consumption of Petroleum products was 22,069.43 TJ in 2017.

18.19. All electricity produced was used by the various customer categories except 6,975.16 TJ reported as transmission and distribution loss, accounting for 18.7 per cent of total electricity distributed in 2017. Total Energy transformation by the Kenya Electricity Generating Company (Kengen) was 26,575.15 TJ, contributing 72.9 per cent of total energy transformed over the same period. Energy transformed by Independent Power Producers was 9,736.22 TJ while 158.04 TJ of energy was transformed by Off-grid electricity plants in the review period.

18.20. In 2017, electricity consumption was 30,276.52 TJ. Consumption by Domestic and Small Commercial; and Large and Medium Commercial consumers was 27,818.13 TJ accounting for 91.9 per cent of total electricity demand.

Chapter 18: Environmental Economic Accounts: Energy Accounts

Table 18.1a: Supply and Demand for Coal, Coke and Non-Renewable Feedstocks, 2017

Tera Joules (TJ)					
Energy Products CPC Definition	Coal and Coke	Non-renewable feedstocks			
		Wood charcoal	Fuelwood, in logs, in billets, in twigs, in faggots or in similar forms	Wastes or scraps	Sub-Total
CPC Code	110	34510	0313	391	
Domestic Production	-	62,286.33	847,588.5	25,201.07	935,075.89
Imports	19.38				-
Domestic Exports					-
Re-Exports					-
Stock changes					-
Sub-total: Supply	19.38	62,286.33	847,588.49	25,201.07	935,075.89
Statistical differences	19.38	-	1,146.64	-	1,146.64
Sub-total: Demand	-	62,286.33	846,441.85	25,201.07	933,929.25
Sub-total: Energy transformation	-	-	-	-	-
Electricity plants (Kengen)					-
Electricity plants (Independent Power Producers (IPPs))					-
Electricity plants (Emergency Power Producers (EPPs))					-
Electricity plants (Off-grid)					-
Oil refineries	-	-	-	-	-
Charcoal manufacturing/burning					-
Firewood					-
Other transformation					-
Energy industry own use					-
Sub-total: Energy demand	-	62,286.33	846,441.85	25,201.07	933,929.25
Electricity:					-
Domestic and Small Commercial-IC					-
Large and Medium Commercial-IC					-
Street Lighting-F					-
Off peak					-
Rural electrification-F					-
Industry:					-
Agriculture					-
Mining & Quarrying					-
Manufacturing			122,550.00		122,550.00
Electricity, Gas, Steam and Air Conditioning Supply					-
Construction					-
Road Transport					-
Rail Transport					-
Air Transport					-
Other Transport					-
Accommodation and Food Service Activities					-
Other Commercial Sectors					-
Public Administration and Defense					-
Households		62,286.33	723,891.85	25,201.07	811,379.25

1 Terajoule (TJ)=10¹² Joules

1000 Tonnes=4.184 TJ

1GWh=3.6 TJ

Table 18.1b: Supply and Demand for Electricity, 2017

Tera Joules (TJ)							
Energy Products	Power Generation						Electricity energy distribution
CPC Definition	Hydro	Geothermal	Solar	Wind	Thermal	Co-Generation	
CPC Code	171	171	171	171	171	171	171
Domestic Production	9,996.56	17,122.75	1.09	219.55	9,122.70	6.73	36,469.40
Imports							826.42
Domestic Exports							44.14
Re-Exports							
Stock changes							
Sub-total: Supply	9,996.56	17,122.75	1.09	219.55	9,122.70	6.73	37,251.68
Statistical differences	-	-	-	(0.01)	-	-	(0.01)
Sub-total: Demand	9,996.56	17,122.75	1.09	219.56	9,122.70	6.73	30,276.52
Sub-total: Energy transformation	9,996.56	17,122.75	1.09	219.56	9,122.70	6.73	36,469.41
Electricity plants (Kengen)	9,924.84	12,994.02	-	219.55	3,436.73		26,575.15
Electricity plants (Independent Power Producers (IPPs))	71.72	4,128.73	-	-	5,529.03	6.73	9,736.22
Electricity plants (Emergency Power Producers (EPPs))	-	-	-	-	-	-	-
Electricity plants (Off-grid)			1.09	0.01	156.94		158.04
Oil refineries	-	-	-	-	-		-
Charcoal manufacturing/burning							
Firewood							
Other transformation							
Energy industry own use							
Sub-total: Energy demand	-	-	-	-	-	-	30,276.52
Electricity:							
Domestic and Small Commercial-IC							12,701.82
Large and Medium Commercial-IC							15,116.30
Street Lighting-F							151.87
Off peak							216.28
Rural electrification-F							2,090.24
Industry:							
Agriculture							
Mining & Quarrying							
Manufacturing							
Electricity, Gas, Steam and Air Conditioning Supply							
Construction							
Road Transport							
Rail Transport							
Air Transport							
Other Transport							
Accommodation and Food Service Activities							
Other Commercial Sectors							
Public Administration and Defense							
Households							

1 TeraJoule (TJ)=10¹² Joules

1000 Tonnes=4,184 TJ

1GWh=3.6 TJ

Energy Products		Refinery products													Sub-Total		Total
CPC Definition		Motor Spirit (Premium and Regular)	Aviation gasoline	Jet fuel	Jet fuel	Jet fuel	Jet fuel	Jet fuel	Jet fuel	Jet fuel	Jet fuel	Jet fuel	Jet fuel	Jet fuel	Jet fuel	Jet fuel	Jet fuel
CPC Code		33311	33312	33342	33349	33350	33360	33360	33360	33360	33360	33360	33360	33360	33360	33360	33360
Domestic Production																	
Imports		6,946.8	12.5	5,776.1	146.0	13.2	9,894.4	4.8	2.8	2,887.5	7.4	10.4	327.3	830.4	0.0	26,859.69	27,705.49
Domestic Exports		0.0	-	3.7	2.2	0.4	4.5	0.0	0.0	1.1	108.2	0.3	2.2	4.2	0.0	137.91	182.04
Re-Exports		2.4	1.1	3,182.7	1.5	0.1	56.2	0.0	2.0	128.4	1.0	0.1	21.6	13.5	-	3,410.67	3,410.67
Stock changes																	
Sub-total Supply		6,944	11	2,590	142	13	9,834	5	1	2,747	(102)	10	304	813	0	23,311.11	995,658.06
Statistical differences		1,641.8	(4.6)	(128.7)	(1,732.2)	12.7	1,105.1	(0.4)	0.7	550.5	(297.9)	10.1	302.0	(217.2)	0.0	1,241.68	9,382.85
Sub-total Demand		5,302.6	16.0	2,718.4	1,874.6	-	8,728.6	5.2	-	2,196.5	196.0	-	1.5	1,029.9	-	22,069.43	1,022,744.61
Sub-total Energy transformation		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electricity plants (Kengen)																	
Electricity plants (Independent Power Producers (IPPs))																	
Electricity plants (Emergency Power Producers (EPPs))																	
Electricity plants (Off-grid)																	
Oil refineries																	
Charcoal manufacturing/burning																	
Firewood																	
Other transformation																	
Energy industry own use																	
Sub-total Energy demand		5,302.6	16.0	2,718.4	1,874.6	-	8,728.6	5.2	-	2,196.5	196.0	-	1.5	1,029.9	-	22,069.43	986,275.20
Electricity:																	
Domestic and Small Commercial IC																	
Large and Medium Commercial IC																	
Street Lighting-F																	
Offpeak																	
Rural electrification-F																	
Industry:																	
Agriculture		15.8	-	-	4.0	-	232.1	-	-	104.9	11.2	-	-	2.4	-	370.35	370.35
Mining & Quarrying		1.0	-	-	0.2	-	102.6	-	-	64.2	3.9	-	-	0.7	-	172.58	172.58
Manufacturing		31.8	0.8	-	12.2	-	1,020.9	0.2	-	1,039.9	35.2	-	-	64.3	-	2,205.23	124,755.23
Electricity, Gas, Steam and Air Conditioning Supply		-	-	-	177.6	-	3.5	2.9	-	52.4	25.7	-	1.5	14.1	-	277.78	277.78
Construction		5.6	-	-	71.1	-	42.6	-	-	1.4	10.9	-	-	-	-	511.61	511.61
Transport and storage		5,185.8	15.2	2,708.9	20.3	-	6,025.4	-	-	10.9	70.3	-	-	10.7	-	14,047.57	14,047.57
Accommodation and Food service Activities		0.2	-	-	6.2	-	25.9	-	-	0.4	0.7	-	-	20.0	-	53.52	53.52
Other Commercial Sectors		43.9	-	-	109.0	-	754.2	2.0	-	920.2	30.8	-	-	55.6	-	1,915.57	1,915.57
Public Administration and Defense		18.5	-	9.5	0.0	-	141.4	-	-	2.3	7.4	-	-	3.6	-	182.75	182.75
Households					1,474.0	-								888.5	-	2,332.47	813,711.71

1 Total column is a summation of Tables 17.1(a), 17.1(b) and 17.1(c)

1 Terajoule (TJ)=10¹² Joules

1000 Terae=4.184 TJ

1 GWh=3.6 TJ

Energy Physical Supply and Use Table (PSUT) 18.22. Physical flows of energy are presented in Tables 18.2a and 18.2b. Total Energy Supply was 1,936,459.06 TJ out of which, 937,221.51 TJ was extracted from the environment while 27,692.25 TJ was imported. The Agriculture industry transformed 908,728.18 TJ to energy products, mainly from firewood while Electricity, Gas, Steam and Air Conditioning industry transformed 36,469.41 TJ to energy products in 2017.

18.23. Total electricity consumption (excluding losses) was 30,320.66 TJ while total petroleum consumption stood at 26,859.69 TJ during the review period. Electricity sales to households and agriculture sectors recorded a share of 34.6 per cent and 8.4 per cent to total electricity use, respectively in 2017.

Table 18.2a: Pilot Physical Supply Table for Energy, 2017

INDUSTRIES	CPC	Agriculture	Mining & Quarrying	Manufacturing	Electricity, Gas, Steam and Air Conditioning Supply	Construction	Transport and Storage	Accommodation and Food Service Activities	Other Commercial Sectors	Public Administration and Defense	Undefined	Households	Accumulation/Stock	Rest of the World	Flows from / to the environment	Total	Terajoules (TJ)
NATURAL INPUTS:																	
Solar	17100														1.09	1.09	
Wind	17100														219.55	219.55	
Hydro	17100														9,996.56	9,996.56	
Geothermal	17100														17,122.75	17,122.75	
Biogas	39140														6.73	6.73	
Biomass Wood	03110														909,874.82	909,874.82	
ENERGY PRODUCTS:																	
Electricity (Kengen)	17100				26,575.15											26,575.15	
Electricity (Independent Power Producers (IPPs))	17100				9,736.22											9,736.22	
Electricity (Emergency Power Producers (EPPs))	17100																
Electricity (Off-grid)	17100																
Oil refineries					158.04											158.04	
Charcoal	34510	62,286.33														62,286.33	
Firewood	03131	846,441.85														846,441.85	
Other transformation																	
Energy industry own use																	
Electricity	17100																
Coal and Coke	11010														826.42	826.42	
Motor Spirit Premium	33311														19.38	19.38	
Aviation gasoline	33312														6,946.82	6,946.82	
Jet fuel	33320														12.47	12.47	
Illuminating Kerosene	33341														5,776.12	5,776.12	
White spirit and special boiling point industrial spirits	33350														146.02	146.02	
Light Diesel Oil	33360														9,894.41	9,894.41	
Heavy Diesel Oil	33360														4.77	4.77	
Other Gas Oils n.e.c															2.76	2.76	
Fuel oils n.e.c.	33370														2,887.51	2,887.51	
Lubricating Oils	33380														7.38	7.38	
Lubricating Greases	33380														10.43	10.43	
Other petroleum oils n.e.c.																	
Liquified Petroleum Gas (L.P.G.)	33390														327.31	327.31	
RESIDUALS:																830.45	
Extraction		1,146.64															
Transformation																	
Losses																	
Other		25,201.07															
TOTAL SUPPLY		935,075.89			36,469.41									27,692.25	937,221.51		1,936,459.06

1 Terajoule (TJ) = 10¹² Joules

1000 Tonnes = 4,184 TJ

IGWB-3.6 TJ

The column refers to unallocated consumption or consumption that cannot be allocated to a specific industry or to a combination of more than one industry

Accumulation refers to net inventories

INDUSTRIES	CPC	Agriculture	Mining & Quarrying	Manufacturing	Electricity, Gas, Steam and Air Conditioning Supply	Construction and Storage	Transport	Accommodation and Food Service Activities	Other Commercial Sectors	Public Administration and Defense	Undefined	Households	Accumulation Stock	Rest of the World	Flows from / to the environment	Total
NATURAL INPUTS:																
Solar	17100				1.09											1.09
Wind	17100				219.55											219.55
Hydro	17100				9,996.56											9,996.56
Geo-Thermal	17100				17,122.75											17,122.75
Co-Generation	17100				6.73											6.73
Biomass Wood				122,550.00								787,324.82				909,874.82
ENERGY PRODUCTS																
CONSUMPTION:																
Petroleum:																
Motor Spirit Premium	33100	15.80	1.01	31.80	-	5.62	5,185.82	0.21	43.86	18.51			1,641.78	2.39		6,946.82
Aviation gasoline	33100	-	-	0.80	-	-	15.16	-	-	-			(4.63)	1.14		12.47
Jet fuel	33200	-	-	-	-	-	2,708.92	-	-	9.47			(128.74)	3,186.47		5,776.12
Illuminating Kerosene	33341	3.99	0.15	12.15	177.61	71.11	20.29	6.25	109.00	0.04			(1,732.24)	3.66		146.02
White spirit and special boiling point industrial spirits	33350	-	-	-	-	-	-	-	-	-						13.20
Light Diesel Oil	33360	232.09	102.64	1,020.86	3.54	422.61	6,025.42	25.90	754.16	141.42			1,105.11	60.65		9,894.41
Heavy Diesel Oil	33370	-	-	0.25	2.94	-	-	-	1.98	-			(0.42)	0.01		4.77
Other Gas Oil n.e.c													0.71	2.05		2.76
Fuel oils n.e.c.	33370	104.89	64.18	1,039.93	52.36	1.36	10.94	0.41	920.18	2.26			550.46	140.53		2,887.51
Lubricating Oils	33370	11.19	3.86	35.18	25.66	10.91	70.27	0.75	30.80	7.41			(297.92)	109.27		7.38
Lubricating Greases	33370	-	-	-	-	-	-	-	-	-			10.07	0.36		10.43
Other petroleum oils n.e.c.																
Other petroleum oils n.e.c.	33380	-	-	-	1.54	-	-	-	-	-			302.01	23.76		327.31
Liquefied Petroleum Gas (L.P.G.)	33410	2.38	0.74	64.25	14.12	-	10.74	20.01	55.58	3.64			(217.23)	17.76		830.45
Undefined													0.00	0.04		0.04
Electricity:	17100															-
Domestic and Small Commercial EC																
Large and Medium Commercial EC		2,560.37										4,287.50	8,414.32			12,701.82
Street Lighting-F																
Off peak																
Rural electrification-F																
Other																
Biomass:																
Firewood	03131			122,550.00												
Charcoal																
Wood/Process Waste	39280															
Farm residue/Animal crop residue	34654															
RESIDUALS:																
Extraction																
Transformation																
Losses																
TOTAL USE		2,930.72	172.58	247,302.23	27,624.47	511.61	14,047.57	53.52	1,915.57	182.75	17,211.60	1,612,687.74	1,241.68	3,592.72	6,981.31	1,936,459.06

1 Tera joule (TJ)=10¹² Joules

1000 Tonnes=4,184 TJ

1 GWh=3.6 TJ

The undefined refers to unallocated consumption or consumption that cannot be allocated to a specific industry or is a combination of more than one industry

Accumulation refers to changes in inventories

Highlights of 2015/16 Basic Report on Well-Being in Kenya

Introduction This chapter presents highlights of the poverty situation in Kenya based on the 2015/16 Kenya Integrated Household Budget Survey (2015/16 KIHBS). The 2015/16 KIHBS provides data on a wide range of indicators to assess the progress made in improving the living standards of the population as well as provide the basis of resource allocation at national and county levels. Previously, the Kenya National Bureau of Statistics (formerly Central Bureau of Statistics) conducted the first KIHBS in 2005/06.

19.2. Household Budget Surveys (HBS) are the best sources of data for measurement of money metric poverty and inequality. Earlier, a series of Welfare Monitoring Surveys (WMS,) were conducted in 1992, 1994 and 1997. Besides WMSs, the Rural Household Budget Survey (RHBS) was conducted in 1981/82 while the Urban Household Budget Surveys (UHBSs) were conducted in 1983/84 and 1993/94.

Survey Objectives 19.3. The 2015/16 KIHBS was conducted from September 2015 to August 2016 to generate data towards meeting multiple statistical production objectives and provide benchmark indicators to; inform the development of the third Medium Term Plan (MTP III) and monitor Kenya's progress towards achieving the Sustainable Development Goals (SDGs).

19.4. Specifically, the survey objectives were to: update the poverty and inequality indicators at national and county levels; provide monetary, non-monetary and multi-dimensional indicators and socio-economic profiles of living standards; update labour force indicators; update consumption basket to produce new Consumer Price Index (CPI) series, and provide data to update the household sector input-output structure of the System of National Accounts (SNA).

Survey Methodology 19.5. The 2015/16 KIHBS was designed to provide estimates for various socio-economic indicators at national, rural/urban and county levels. The survey sample was drawn from the fifth National Sample Survey and Evaluation Programme (NASSEP V). A total of 2,400 clusters were selected proportionally from both rural and urban areas in the first stage and 10 households from each of the clusters in the second stage, culminating in a total sample of 24,000 households.

19.6. The survey utilized a set of seven questionnaires (three main, two diaries, one market prices and one community). The questionnaires were used to collect the required data from the respondents through face to face interviews. The data capture for the survey was done alongside data collection.

Poverty Measurement Approach 19.7. The measure of welfare used in the 2015/16 KIHBS was based on consumption expenditures rather than income. In the survey, household consumption expenditure refers to the value of goods and services acquired for final consumption plus those received in kind and consumed by the household. Consumption includes all goods and services that were acquired or purchased for use by households, but excludes those used for business purposes or accumulation of wealth.

19.8. This is in line with the previous welfare reports for Kenya (GoK, 1997, 2000 and 2007) and international best practices. The measure of nominal household total consumption expenditure, an aggregate measure consisting of expenditures on food and non-food consumption, was computed following guidelines provided by Deaton and Zaidi (2002).

19.9. The 2015/16 KIHBS collected information on food and non-food consumption. The food consumption component included four sub-components; purchases, own production, stocks, and gifts on food items, with a recall period of seven days. The non-food consumption by households was collected in separate sections of the survey questionnaire with recall periods of one month, three months or one year, depending on the frequency of acquiring the item.

19.10. The household final consumption expenditure aggregate excluded the lumpy health expenditures (except regular purchases over the counter medication), user value of consumable durables, and infrequent expenses such as legal fees and expenses, home repair and improvements, as well as expenditure on; social ceremonies, marriages, births, funerals, and rent in rural areas.

Adjusting for Differences in Needs 19.11. The aim of poverty measurements is to obtain a measure of an individual's wellbeing in order to make welfare comparison across households with different sizes and demographic composition. The households' composition have different consumption needs based on their demographic characteristics. These needs are taken into account when making welfare comparison across households. The aggregate consumption therefore, needed to be adjusted to make it comparable across households. Equivalence scales were used to convert household consumption aggregates into money metric measures of an individual's welfare. To adjust for intra-household differences in needs, the equivalence scales developed by Anzagi and Bernard (1977a, 1977b) were used. These adult equivalence scales weigh an individual; aged 0-4 years as 0.24 of an adult, aged 5-14 as 0.65 of an adult and older than 14 years as an adult.

Computing Poverty Lines 19.12. The poverty lines were derived from the 2015/16 KIHBS data using the Cost-of-Basic Needs (CBN) method. The food poverty line was estimated as the cost, in monetary terms, of consuming 2,250 kilocalories per day per adult equivalent. Using this approach, the food poverty lines per adult equivalent per month were computed as KSh 1,954 for rural areas and KSh 2,551 for urban areas, respectively. The overall (absolute) poverty lines per adult per month were computed as KSh 3,252 for rural areas and KSh 5,995 for urban areas.

Adjusting for Spatial and Seasonal Price Variation 19.13. The respondents in 2015/16 KIHBS paid different prices for comparable goods during the survey period. Due to both temporal and spatial variations, it was necessary to construct an index that would simultaneously adjust the final consumption aggregate for differences in the cost of living. A Paasche price index referenced to national median prices in urban and rural areas was developed to adjust each household's nominal consumption aggregate. The median prices used for referencing the price index were identical to those used for computing and valuing the rural and urban food basket and poverty lines.

Poverty Estimates 19.14. Food Poverty refers to households and individuals whose monthly adult equivalent food consumption expenditure per person is less than KSh 1,954 in rural and peri-urban areas, and less than KSh 2,551 in core-urban areas.

19.15. Overall Poverty refers to households and individuals whose monthly adult equivalent total consumption expenditure per person is less than KSh 3,252 in rural and peri-urban areas, and less than KSh 5,995 in core-urban areas.

19.16. Hardcore or Extreme Poverty refers to households and individuals whose monthly adult equivalent total food and non-food consumption expenditure per person is less than KSh 1,954 in rural and peri-urban areas, and less than KSh 2,551 in core-urban areas.

Expenditure patterns

19.17. The mean monthly expenditure patterns on food and non-food items by residence and county are presented in Table 19.1. The mean monthly expenditure at national level stood at KSh 7,811, with KSh 4,239 spent on food and KSh 3,572 on non-food. The total mean expenditure per adult equivalent on both food and non-food in core-urban households was on average more than double that of households in rural areas. Households in rural areas spent more than 60 per cent of their income on food which is higher than the 48.8 per cent spent on food by households in core-urban areas.

19.18. The mean monthly food expenditure per adult equivalent share accounted for 54.3 per cent of household consumption expenditure at the national level. The analysis by counties shows that households in Turkana had the highest mean monthly expenditure per adult equivalent share on food at 76.2 per cent while Nairobi City registered the lowest share of 43.0 per cent. The highest average monthly total expenditure was KSh 14,311 in Nairobi City County and the least was KSh 3,461 in Mandera County.

19.19. In addition, results by counties indicate that food expenditure accounted for a higher share of the overall average monthly total expenditure per adult equivalent in; Wajir (71.0%), Siaya (68.9%) and Samburu (67.8%) counties. On the other hand, the least share of average monthly total expenditure on food was recorded in Kiambu (47.6%), Kajiado (49.0%) and Mombasa (49.8%) counties. Further analysis shows that Mombasa, Kiambu and Machakos counties recorded relatively high average monthly total expenditure of KSh 10,970, KSh 9,594 and KSh 8,455, respectively. However, Wajir, West Pokot and Busia counties recorded the least average monthly total expenditure of KSh 3,784, KSh 3,914 and KSh 3,924, respectively.

Table 19.1: Mean Monthly Food and Non-Food Expenditure per Adult Equivalent, 2015/16

Residence / County	Mean Expenditure (KSh)			Percentage share	
	Food	Non-food	Total	Food	Nonfood
National.....	4,239	3,572	7,811	54.3	45.7
Rural.....	3,447	1,879	5,326	64.7	35.3
Peri-urban.....	3,792	2,749	6,540	58.0	42.0
Core urban.....	5,550	6,349	11,900	46.6	53.4
Mombasa.....	5,459	5,510	10,970	49.8	50.2
Kwale.....	3,924	2,546	6,470	60.6	39.4
Kilifi.....	4,081	3,828	7,908	51.6	48.4
Tana River.....	2,935	2,017	4,952	59.3	40.7
Lamu.....	5,006	2,719	7,725	64.8	35.2
Taita / Taveta.....	4,023	2,893	6,917	58.2	41.8
Garissa.....	2,954	1,668	4,622	63.9	36.1
Wajir.....	2,686	1,097	3,784	71.0	29.0
Mandera.....	2,287	1,173	3,461	66.1	33.9
Marsabit.....	2,983	1,510	4,493	66.4	33.6
Isiolo.....	3,592	2,661	6,252	57.5	42.6
Meru.....	4,612	2,616	7,228	63.8	36.2
Tharaka - Nithi.....	4,382	2,861	7,243	60.5	39.5
Embu.....	4,148	2,859	7,007	59.2	40.8
Kitui.....	3,424	2,054	5,478	62.5	37.5
Machakos.....	4,403	4,053	8,455	52.1	47.9
Makueni.....	3,620	2,453	6,073	59.6	40.4
Nyandarua.....	4,254	2,439	6,694	63.5	36.4
Nyeri.....	5,402	3,818	9,220	58.6	41.4
Kirinyaga.....	4,359	3,010	7,369	59.2	40.8
Murang'a.....	3,690	2,705	6,394	57.7	42.3
Kiambu.....	4,567	5,027	9,594	47.6	52.4
Turkana.....	3,704	1,158	4,862	76.2	23.8
West Pokot.....	2,552	1,362	3,914	65.2	34.8
Samburu.....	3,037	1,440	4,477	67.8	32.2
Trans Nzoia.....	3,543	2,942	6,485	54.6	45.4
Uasin Gishu.....	3,778	3,252	7,030	53.7	46.3
Elgeyo / Marakwet.....	3,108	1,800	4,909	63.3	36.7
Nandi.....	3,215	2,069	5,284	60.8	39.2
Baringo.....	3,938	2,773	6,712	58.7	41.3
Laikipia.....	3,960	2,287	6,247	63.4	36.6
Nakuru.....	4,765	3,869	8,634	55.2	44.8
Narok.....	4,559	3,706	8,265	55.2	44.8
Kajiado.....	4,122	4,285	8,407	49.0	51.0
Kericho.....	3,342	2,260	5,602	59.7	40.3
Bomet.....	3,179	1,443	4,622	68.8	31.2
Kakamega.....	3,311	1,961	5,272	62.8	37.2
Vihiga.....	2,951	1,686	4,637	63.6	36.4
Bungoma.....	3,619	2,222	5,841	62.0	38.0
Busia.....	2,617	1,307	3,924	66.7	33.3
Siaya.....	4,106	1,853	5,959	68.9	31.1
Kisumu.....	4,435	3,238	7,673	57.8	42.2
Homa Bay.....	3,724	1,954	5,677	65.6	34.4
Migori.....	3,239	1,833	5,072	63.9	36.1
Kisii.....	3,336	2,043	5,378	62.0	38.0
Nyamira.....	3,402	2,379	5,781	58.8	41.2
Nairobi City.....	6,153	8,158	14,311	43.0	57.0

Food, Overall and Hardcore (Extreme) Poverty at National Level 19.20. Table 19.2 shows the headcount poverty rates and population of the poor at national level and by area of residence. The food poverty headcount rate at national level in 2015/16 was 32.0 per cent of the population (14.5 million individuals). These individuals were unable to consume the minimum daily calorific requirement of 2,250 Kilocalories (Kcal) as per expenditures on food. The highest food poverty incidence was in rural areas, where 35.8 per cent of the population were below the food poverty line compared to 28.9 per cent in peri-urban areas and 24.4 per cent in core-urban. The results further show that 23.8 per cent of households were food poor in 2015/16.

19.21. The overall poverty headcount rate for individuals at the national level was 36.1 per cent in 2015/16, implying that 16.4 million individuals lived in overall poverty. The highest overall poverty incidence was in rural areas, where 40.1 per cent of the residents were considered as overall poor compared to 27.5 per cent in peri-urban and 29.4 per cent in core-urban areas. Further analysis indicates that 27.4 per cent of households lived in overall poverty.

19.22. At the national level, the hardcore poverty headcount rate for individuals was 8.6 per cent in 2015/16. This implies that 3.9 million people lived in conditions of abject poverty and were unable to afford the minimum required food consumption basket. Rural areas recorded the highest incidence of extreme poverty of 11.2 per cent (3.2 million individuals). Figure 19.1 presents information on headcount poverty measures; food poverty, overall poverty and extreme poverty.

19.23. Table 19.3 summarizes food, overall and hardcore poverty measures for individuals by residence and county. The findings are further illustrated in Figure 19.2, ranking overall poverty incidence estimates at the county level in ascending order.

Table 19.2: Summary of Headcount Poverty Measures, 2015/16

Residence	Headcount Poverty Measures	Poor Individuals $P_{a=0}$		Poor Households $P_{a=0}$		Poor People (Adult equivalent-Adulteq) $P_{a=0}$	
		% of Population	Number of people in thousands	% of Households	Number of households in thousands	% of Adulteq	Number of Adulteq in thousands
National	Food Poverty	32.0	14,539	23.8	2,718	31.9	11,594
	Overall Poverty ...	36.1	16,401	27.4	3,126	35.3	12,847
	Hardcore Poverty	8.6	3,908	6.0	682	8.3	3,037
Rural	Food Poverty	35.8	10,419	28.1	1,808	35.7	8,213
	Overall Poverty ...	40.1	11,687	32.6	2,097	39.5	9,086
	Hardcore Poverty	11.2	3,273	8.7	560	11.0	2,530
Peri-Urban	Food Poverty	28.9	965	21.5	173	29.1	789
	Overall Poverty ...	27.5	920	21.1	166	27.3	768
	Hardcore Poverty	6.0	199	4.6	37	6.0	163
Core-Urban	Food Poverty	24.4	3,155	17.7	736	24.3	2,592
	Overall Poverty ...	29.4	3,795	20.6	880	28.3	2,915
	Hardcore Poverty	3.4	436	2.0	85	3.2	343

Figure 19.1: Headcount Poverty Measures by Area of Residence, 2015/16

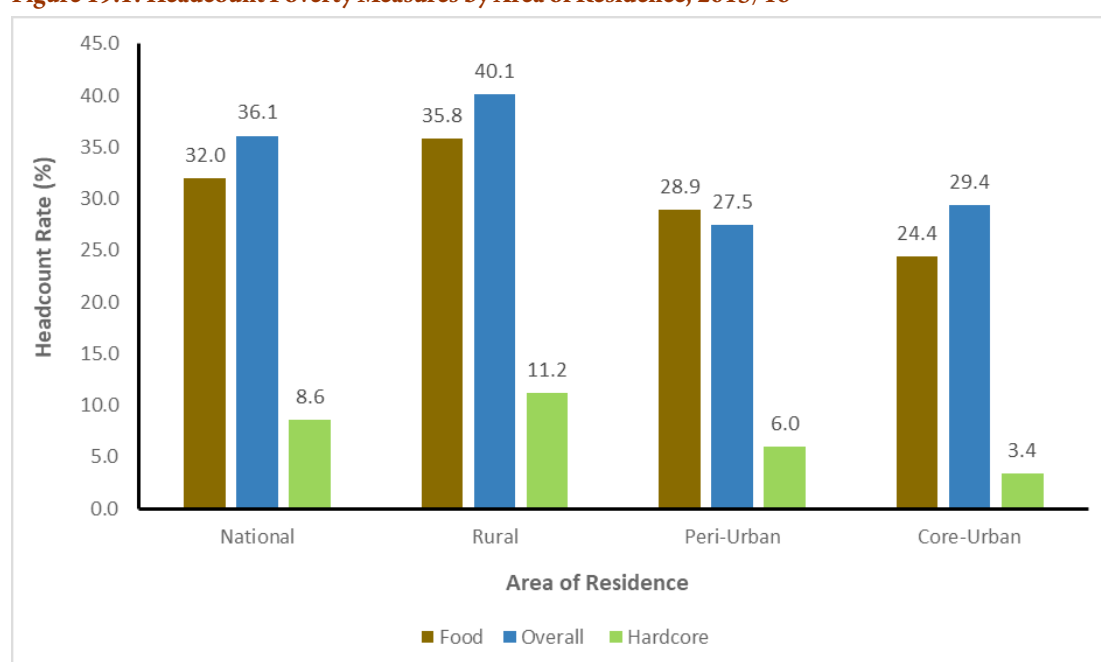


Table 19.3: Food, Overall and Hardcore Poverty Estimates (Individual) by Residence and County, 2015/16

Residence/ County	Food poverty		Overall Poverty		Hardcore poverty		Population ('000)
	Food poverty (%)	Poverty Gap (%)	Overall Poverty (%)	Poverty Gap (%)	Hardcore poverty (%)	Poverty Gap (%)	
National.....	32.0	9.2	36.1	10.4	8.6	2.2	45,371
Rural.....	35.8	10.3	40.1	11.5	11.2	2.9	29,127
Peri-Urban.....	28.9	7.4	27.5	6.9	6.0	1.2	3,340
Core-Urban.....	24.4	7.2	29.4	8.9	3.4	0.8	12,905
Mombasa.....	23.6	7.2	27.1	7.5	2.2	0.8	1,185
Kwale.....	41.1	10.4	47.4	11.1	5.9	0.7	820
Kilifi.....	48.4	12.6	46.4	12.3	7.0	1.9	1,400
Tana River.....	55.4	18.2	62.2	20.0	17.9	5.3	304
Lamu.....	19.9	4.8	28.5	5.5	3.2	0.8	128
Taita /Taveta.....	38.9	9.0	32.3	7.7	5.3	1.0	358
Garissa.....	45.2	14.4	65.5	24.1	23.8	6.7	432
Wajir.....	41.3	11.8	62.6	16.3	10.5	3.3	459
Mandera.....	61.9	26.4	77.6	32.8	38.9	11.0	711
Marsabit.....	55.6	17.9	63.7	23.4	23.8	6.3	316
Isiolo.....	34.2	9.2	51.9	15.5	8.9	2.0	156
Meru.....	15.5	3.8	19.4	4.9	2.8	0.5	1,471
Tharaka-Nithi.....	31.2	7.1	23.6	3.8	1.8	0.2	396
Embu.....	28.3	6.9	28.2	6.4	4.0	1.1	560
Kitui.....	39.4	12.5	47.5	13.4	12.8	2.7	1,098
Machakos.....	24.1	6.8	23.3	5.7	3.5	0.7	1,191
Makueni.....	30.7	9.1	34.8	8.8	6.6	1.1	959
Nyandarua.....	29.8	5.9	34.8	7.2	3.4	0.5	686
Nyeri.....	15.5	3.0	19.3	2.4	0.2	0.0	798
Kirinyaga.....	18.8	3.0	20.0	3.5	0.9	0.2	608
Murang'a.....	22.7	5.7	25.3	6.0	5.2	0.8	1,085
Kiambu.....	23.5	5.9	23.3	6.6	3.1	0.4	1,868
Turkana.....	66.1	32.9	79.4	46.0	52.7	24.3	1,084
West Pokot.....	57.3	20.4	57.4	20.1	26.2	6.0	649
Samburu.....	60.1	22.7	75.8	32.1	42.2	11.7	284
Trans Nzoia.....	33.3	9.9	34.0	10.4	9.7	2.2	1,038
Uasin Gishu.....	38.2	11.7	41.0	12.9	12.1	2.8	1,133
Elgeyo / Marakwet...	44.8	10.8	43.4	13.4	12.2	2.8	469
Nandi.....	31.5	8.3	36.0	9.4	8.0	1.2	954
Baringo.....	41.4	10.8	39.6	9.7	8.5	2.6	704
Laikipia.....	28.5	9.2	45.9	14.9	15.0	4.4	507
Nakuru.....	19.6	4.8	29.1	7.8	3.7	0.4	2,031
Narok.....	22.1	6.7	22.6	6.0	5.5	1.2	1,078
Kajiado.....	36.9	12.3	40.7	13.1	11.4	2.5	871
Kericho.....	31.4	7.3	30.3	8.1	7.3	1.7	945
Bomet.....	32.8	5.6	48.8	9.3	6.1	0.7	916
Kakamega.....	33.3	8.3	35.8	9.5	6.9	1.9	1,876
Vihiga.....	36.6	9.5	43.2	11.5	8.2	1.7	627
Bungoma.....	32.4	9.5	35.7	9.5	8.8	1.7	1,553
Busia.....	59.5	17.5	69.3	22.3	26.8	4.3	840
Siaya.....	27.3	7.2	33.8	8.7	6.1	1.5	985
Kisumu.....	32.5	8.3	33.9	8.7	6.0	1.2	1,132
Homa Bay.....	22.7	6.0	33.5	8.4	5.9	1.2	1,072
Migori.....	32.0	7.9	41.2	8.0	3.6	0.6	1,126
Kisii.....	44.5	11.6	41.7	10.8	7.5	1.2	1,347
Nyamira.....	36.3	10.1	32.7	9.1	7.6	1.5	699
Nairobi City.....	16.1	3.9	16.7	3.4	0.6	0.0	4,463

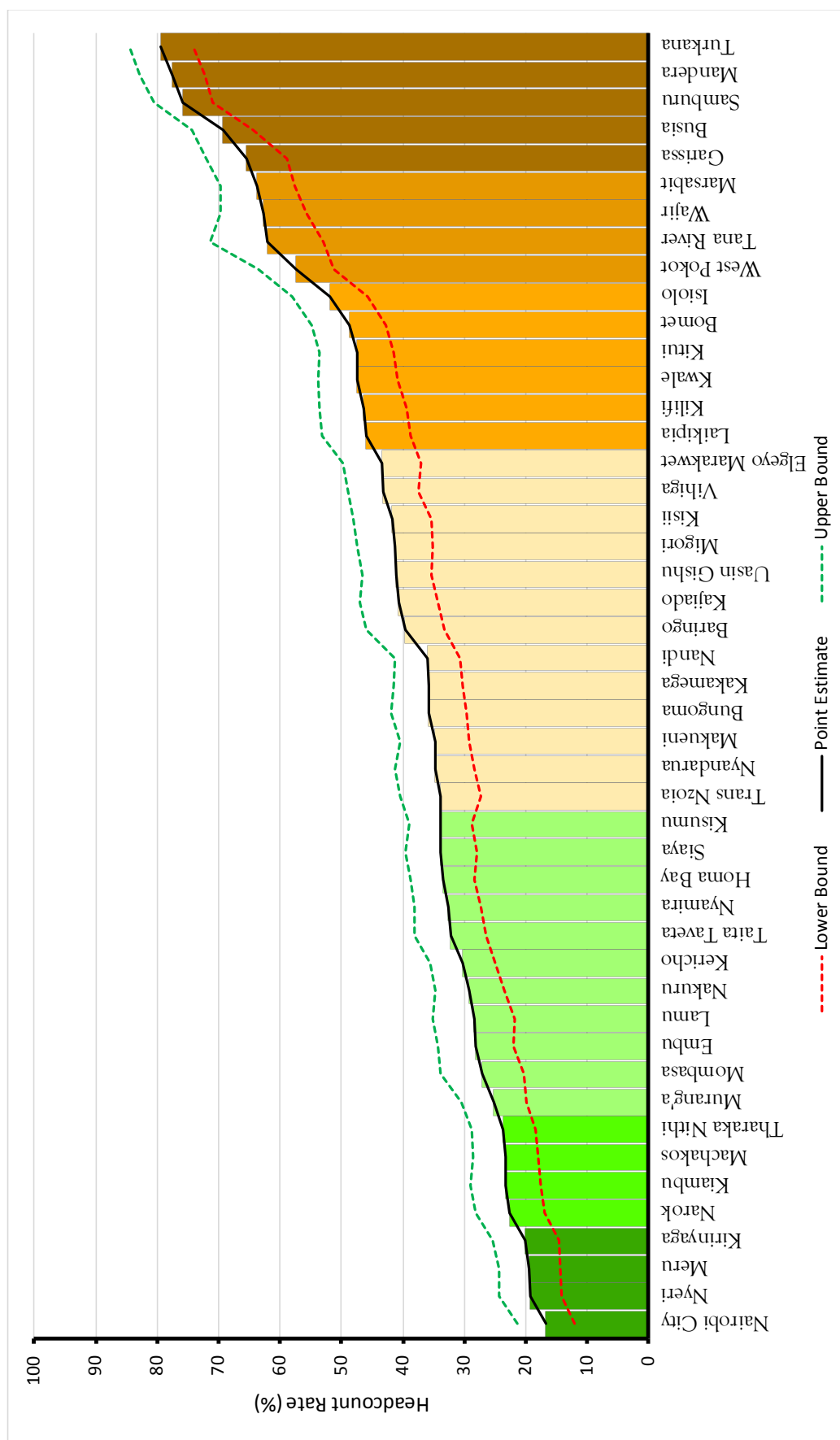
19.24. Meru and Nyeri counties registered the least food poverty incidence at 15.5 per cent each while Turkana county recorded the highest incidence of 66.1 per cent. Other counties that recorded higher food poverty incidence were; Mandera (61.9%), Samburu (60.1%), Busia (59.5%), West Pokot (57.3%), Marsabit (55.6%) and Tana River (55.4%).

19.25. The results show significant variation in overall poverty incidence at the county level, ranging from a low of 16.7 per cent in Nairobi City to a high of 79.4 per cent in Turkana. Similarly, Mandera (77.6%), Samburu (75.8%), Busia (69.3%) and Garissa (65.5%) counties recorded higher poverty incidence. On the contrary, Nyeri (19.3%), Meru (19.4%), Kirinyaga (20.0%) and Narok (22.6%) counties recorded lower overall poverty incidence.

19.26. The hardcore poverty incidence at the county level ranges from a low of 0.2 per cent in Nyeri to a high of 52.7 per cent in Turkana. Likewise, Samburu (42.2%), Mandera (38.9%), Busia (26.8%), West Pokot (26.3%) and Marsabit (23.8%) counties recorded higher extreme poverty incidence. More than one third (37.5%) of the total population living in conditions of extreme poverty reside in these six counties. Concentration of extreme poor populations are also found in Kajiado, Kitui and Uasin Gishu counties.

19.27. Figure 19.2 shows the mountain of poverty where counties are ranked by their incidence of overall poverty from the lowest to the highest. The lower plains of the mountain start in Nairobi City at 16.7 per cent, through Narok (22.1%) and Murang'a (22.7%) counties. Between the lowest point at Nairobi City County (16.7%) to the peak at Turkana County (79.4%), the mid-point points lies between Bungoma and Kakamega counties. The ascent from the mid-point rises gently to Bomet County (48.8%) while the ascent towards the top is steep.

Figure 19.2: Mountain of Individual Overall Poverty Incidence across Counties



**Poverty
by Socio-
Economic
Characteristics
of the Head of
the Household**

19.28. Table 19.4 presents poverty measures cross-tabulated by selected characteristics of the household. The results show that poverty increases with an increase in household size. At the national level, households with between one to three members recorded the least poverty headcount of 14.7 per cent compared to the 54.1 per cent (more than half) for households with seven or more members. This pattern is similar in all the domains of analysis (rural, peri-urban and urban). Household with children (33.7%) have a higher probability of being poor compared to those without children (13.5%).

Table 19.4: Poverty Headcount Rates (%) and Socio-economic Indicators at Household Level, 2015/16

Socio-Economic Indicator	Rural	Urban	Peri-Urban	National
Presence of a Child in the Household				
Household without children.....	18.2	10.1	12.0	13.5
Household with children.....	36.8	29.2	24.7	33.7
Household Size (Household members)				
1-3.....	18.3	11.9	11.1	14.7
4-6.....	34.4	30.9	23.7	32.5
7+.....	54.6	58.2	41.9	54.1
Age of Household Head (Years)				
15-19.....	25.8	32.2	9.3	27.5
20-29.....	20.9	13.4	8.4	15.9
30-39.....	29.8	22.3	18.8	25.8
40-49.....	36.7	22.0	21.1	30.8
50-59.....	34.4	24.7	24.7	31.1
60-69.....	36.6	31.6	32.3	35.4
70+.....	37.3	40.8	32.9	37.3

19.29. The analysis of poverty by age of the household head reveals that poverty rate increases as the age of the household head increases, except for households headed by persons in 20-29 age-group. Households headed by older persons (70+ years) recorded a higher poverty rate (37.3%) than those headed by younger population (20-29 years), who registered the lowest poverty incidence (15.9%).

19.30. Figure 19.3 shows that households headed by females are likely to be poorer than those headed by males. Nationally, poverty rates were highest in households headed by individuals without any form of formal education (53.6%) and lowest in those headed by individuals with tertiary education (4.6%), as shown in Figure 19.4. The trend is the same for rural, urban and peri-urban areas.

Figure 19.3: Overall Poverty by Sex of Household Head, 2015/16

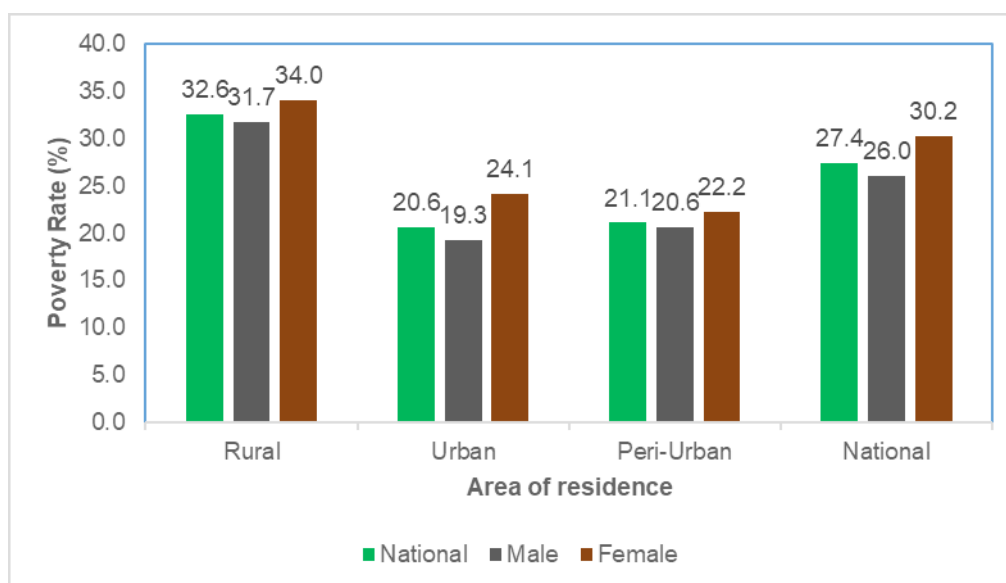
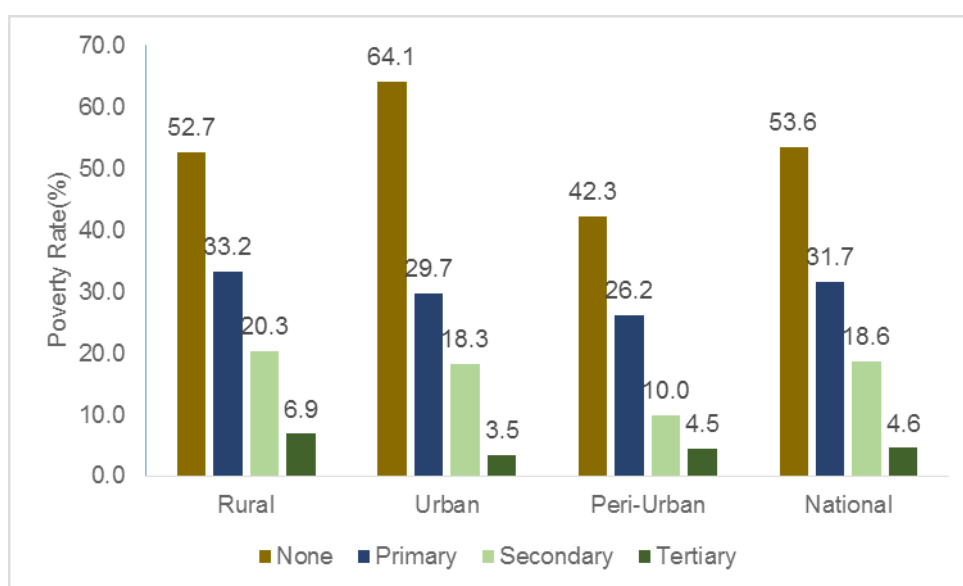


Figure 19.4: Overall Poverty by Education Level of Household Head, 2015/16



Highlights of the KIHBS 2015/16 Labour Force Basic Report

Chapter 20

Overview

This chapter presents a summary of the labour force basic report which was compiled using data collected in the 2015/16 Kenya Integrated Household Budget Survey (KIHBS). The survey covered the whole country, and was mainly analysed at the national, urban and rural levels. Results presented here are mainly for the economically productive population aged 15-64 years. The activity status of the population was determined with respect to a 7 days' reference period.

20.2. In the 2015/16 KIHBS, the recorded number of persons aged 15-64 was estimated at 25.0 million. This number had increased from 19.9 million recorded in 2005/06 KIHBS and the 20.5 million enumerated during the 2009 Kenya Population and Housing Census (KPHC). Out of these 25.0 million, 19.3 million were found to be in the labour force (either employed or unemployed) where the total employed were 17.9 million. A person was considered to be employed if during the reference period (7 days preceding the survey) he/she was engaged in an economic activity for at least one hour.

Active Population

20.3. Analysis of the 2015/16 KIHBS revealed that out of all Kenyans aged five years and above, 55.5 per cent were economically active (employed, unemployed or looking for work). Figure 20.1 presents a distribution of the population aged 5 years and above by age cohorts and activity status. Notably, the active population aged between 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.

Figure 20.1: Percentage of Active Population by Age Cohorts



Total Dependency Ratio

20.4. The total dependency ratio measures the burden which the productive part of the population shoulders to support the economically dependent. It is a ratio of the “dependents” to the “productives” and is calculated by adding the young population aged (0-14) years to the aged population (65+) years, and then dividing the sum by the working age population (15-64) years. 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 summarized in Table 20.1, total dependency ratio in the country decreased to 81.6 per cent in 2015/16 KIHBS 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 - 64 years) in 2015/16 KIHBS. Over the same period, total dependency ratio in the rural areas decreased from 100.4 to 96.7 per cent. In the urban areas, total dependency ratio decreased from 62.7 per cent in 2009 KPHC to 59.7 per cent in 2015/16 KIHBS.

Table 20.1: Total Dependency Ratio by Residence and by Region

	Age					Total Population '000	Total Dependency Ratio	
	0-14	65+	<15 and 65+	15-64	Not Stated	2015/ 16 KIHBS	2009 KPHC	2015/16 KIHBS ²
Kenya.....	18,636.5	1,737.7	20,374.2	24,955.5	41.4	45,371.1	86.9	81.6
<i>Rural.....</i>	12,934.9	1,377.0	14,311.9	14,796.1	18.6	29,126.6	100.4	96.7
<i>Urban.....</i>	5,701.6	360.7	6,062.3	10,159.5	22.8	16,244.6	62.7	59.7
Region¹								
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

¹ Region is used for comparison purposes with 2009 KPHC results.

² The Not Stated are excluded from the computation of Total Dependency Ratio.

20.5. 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 20.2 shows the distribution of the employment to population ratio by age and by residence. The overall employment to population ratio in the country increased to 71.6 per cent in 2015/16 KIHBS, from 69.3 per cent in the 2009 KPHC. The ratio of persons aged 15-24 years who were employed had declined between 2009 KPHC and 2015/16 KIHBS. This indicates higher school retentions and 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 2015/16 KIHBS from 70.7 per cent in 2009 KPHC. Similarly, the ratio in the urban areas increased to 69.4 per cent in 2016 from 66.8 per cent in 2009 KPHC. Overall, employments to population ratios in the rural areas were found to be higher than those in the urban areas across all age cohorts.

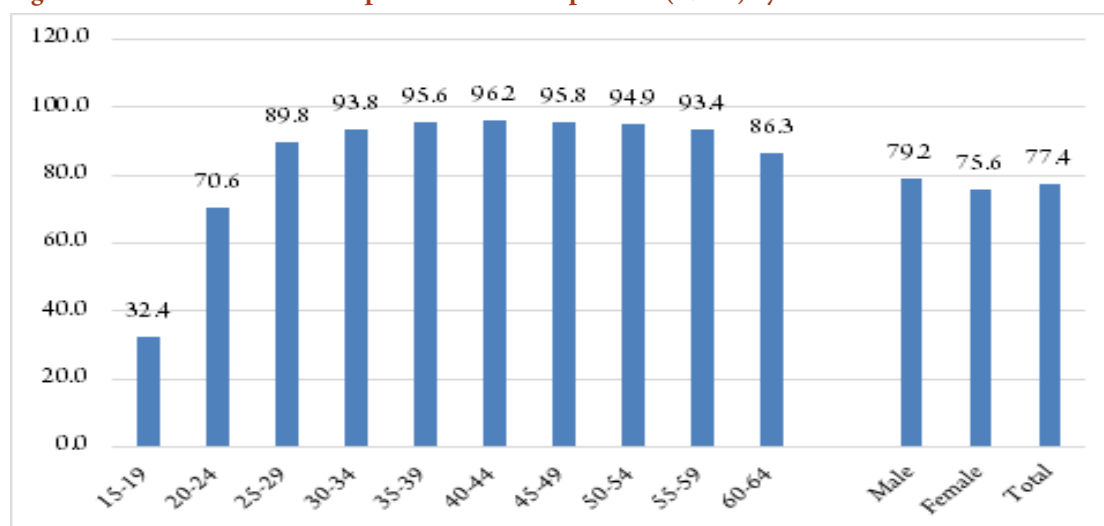
Table 20.2: Distribution of Working Age Population (15 - 64) by Employment, 2009 KPHC and 2015/16 KIHBS

Age Group	Population '000	Employed '000	Employment Ratio 2015/16 KIHBS	Employment Ratio 2009 KPHC
Kenya				
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

**Labour Force
Participation
Rate**

20.6. The labour force participation rate is a measure of the proportion of a country's working age population that engages actively in the labour market either by working or looking for work. It provides an indication of the size of the supply of labour available to engage in the production of goods and services, relative to the population and working age. The labour force participation rate is calculated by expressing the number of persons in the labour force (employed, unemployed or looking for work) as a percentage of the working age population. As shown in Figure 20.2, 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.

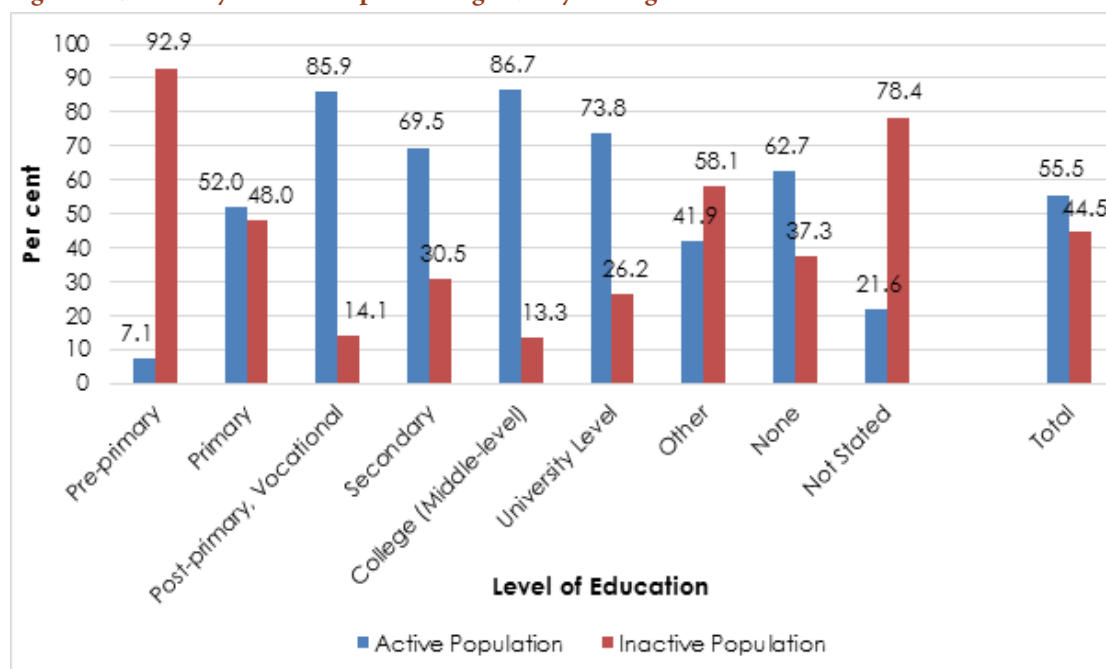
Figure 20.2: Labour Force Participation Rates for Population (15-64) by Sex



Educational
Attainment –
Highest Level
Completed

20.7. The skill level of the workforce is an important aspect of the labour market performance and competitiveness. Information on education attainment is therefore important in determining the employability of the workers. Figure 20.3 presents a comparison between the active and inactive population in terms of the highest level of education reached. 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 20.3: Activity Status of Population Aged 5+ by the Highest Level of Education Attained



Hours worked

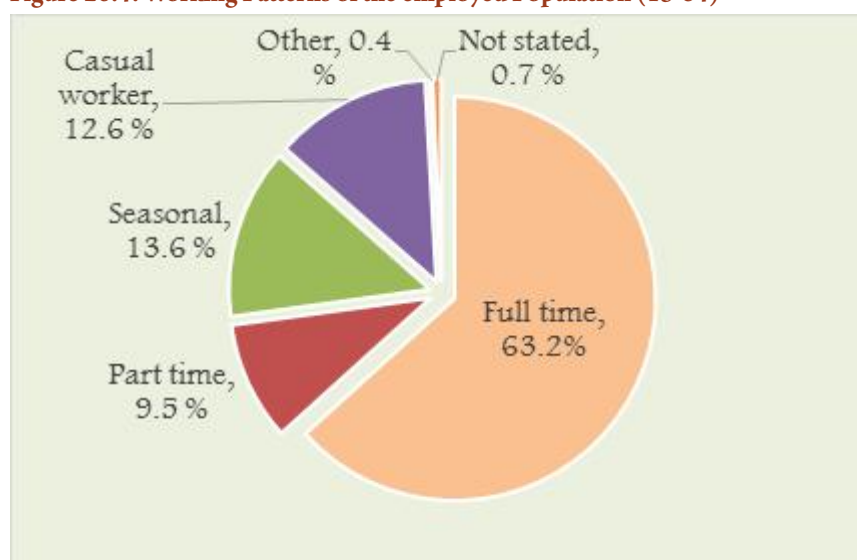
20.8. Data on hours of work are important in distinguishing the various intensities of employment. More so, the information is useful in monitoring the working conditions which impact on the health and wellbeing of workers as well as levels of productivity and labour costs. Most persons aged 15-64 years worked between “40-48” hours in a week as shown in Table 20.3. Those aged 15-19 years reported the highest proportion (30.8 per cent) working for less than 15 hours in the last 7 days mainly due to schooling activities.

Table 20.3: Percentage Distribution of Population (15-64) by Hours Worked

Age	Total (N) ('000')	Hours											Total
		Less than 15	15-24	25-29	30-34	35-39	40-48	49-58	59-83	84-99	Above 99	Not Stated	
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

20.9. As shown in Figure 20.4, the proportion of persons who worked for all hours and for all working days, as defined by the employer, except when on leave or otherwise officially away was 63.2 per cent. The survey also revealed that the proportion of persons engaged in seasonal activities such as coffee picking, planting, tourism was 13.6 per cent. Casual employees i.e. persons whose terms of engagements provide for payment at the end of each day and who are not engaged for a period longer than 90 days accounted for 12.6 per cent. Further, the number of employees who voluntarily worked for fewer hours than normal for the employer was 9.5 per cent.

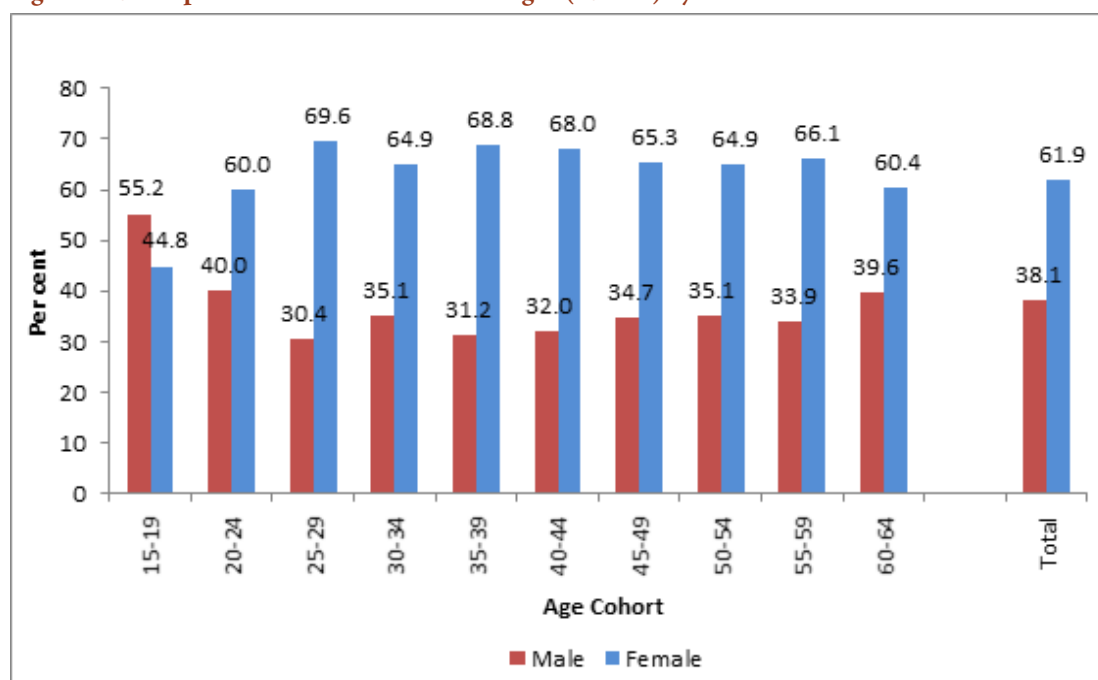
Figure 20.4: Working Patterns of the employed Population (15-64)



20.10. Part time workers are the individuals who are permanent employees and work fewer hours than full time employees. During the survey, a person was considered a part time worker if he/she worked for less than 35 hours in a week. As displayed in Figure 20.5, based on a

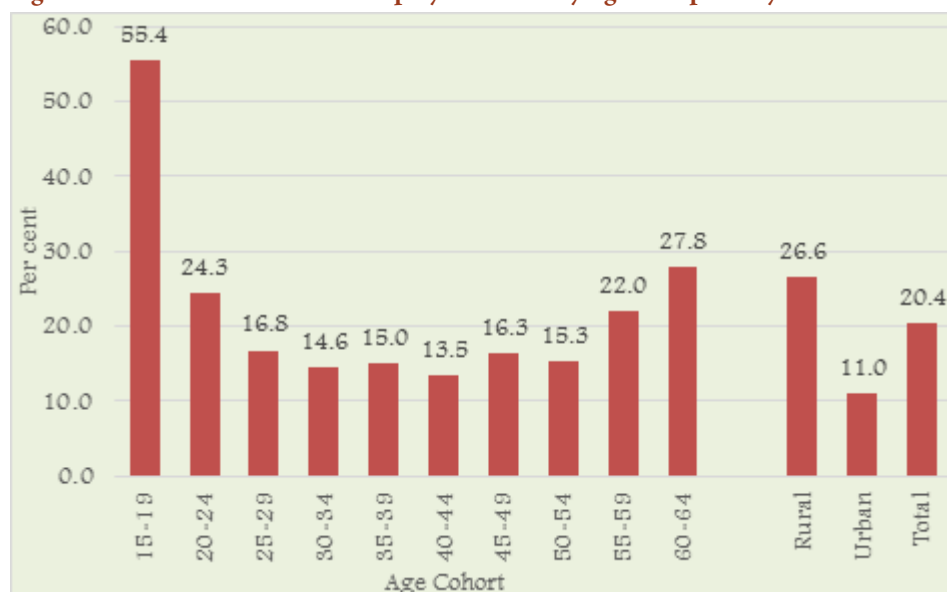
cut off of 35 hours per week, females accounted for 61.9 per cent of all part time workers. In absolute terms, across all age cohorts except “15-19”, there were more female part time workers than males. The highest difference in the number of part time workers between the two sexes was in the age category “25-29”.

Figure 20.5: Proportion of Part Time Workers Aged (15 – 64) by Sex



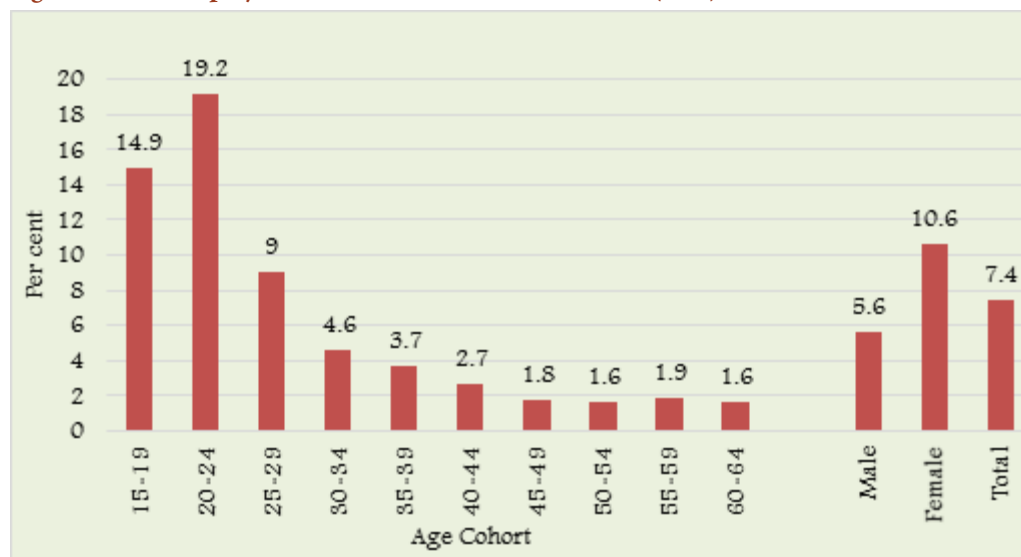
20.11. A person was classified as being Time-related Under-employed if one worked less than 28 hours a week, wanted to work additional hours, and was available to work additional hours if given an opportunity for more work. The indicator is used for assessing the extent to which available human resources are being utilised in the production process of a country. As shown in Figure 20.6, 20.4 per cent of the employed persons in the working age population were under-employed. This was a higher rate compared to 15.2 and 18.7 per cent in 2009 KPHC and 2005/06 KIHBS, respectively. Most of the underutilized were aged 15-19 followed by those aged 60-64. Under-employment was higher in the rural areas at 26.6 per cent compared to the urban areas at 11.0 per cent.

Figure 20.6: Time related Under-employment Rate by Age Group and by Residence.



20.12. The “strict” definition (never worked for at least one hour, available to pick up a job and actively looking for work during the reference period) was used to compile the number of unemployed. As depicted in Figure 20.7, overall unemployment rate was 7.4 per cent, down from 9.7 per cent in 2009 KPHC and 12.7 per cent recorded in 2005/06 KIHBS. The largest unemployment rate was recorded in the age cohort “20-24” at 19.2 per cent.

Figure 20.7: Unemployment Rate - Labour Underutilisation (LU1)



20.13. 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. There are four sets of indicators, for under-utilisation which are recommended. One of the measures (LU2) is the combined rate of Time Related Under-Employment and Unemployment. This rate is computed as:

$$\text{Labour Underutilisation (LU2)} = \frac{\text{time related underemployed} + \text{unemployed}}{\text{labour force}} \times 100$$

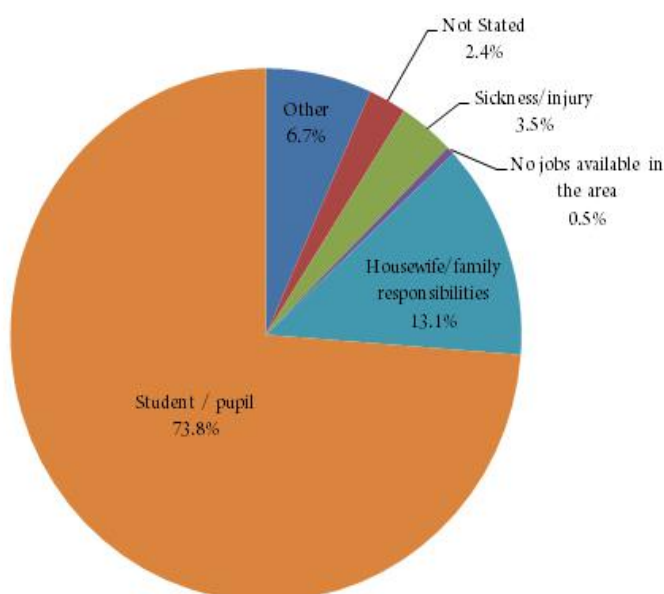
20.14. As shown in Figure 20.8, the total LU2 was 26.4 per cent with the highest rates of underutilization being observed in the age groups 15-29 and 55-64 years.

Figure 20.8: Under Utilization - Combined Rate of Time Related Under-Employment and Unemployment (LU2)



20.15. The economically inactive population comprise of all persons who were neither “employed” nor “unemployed” during the “last seven days” reference period. 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 reduced to 4.7 million during the 2009 KPHC. In the 2015/16 KIHBS, the inactive population was estimated atn 5.6 million. Figure 20.9 presents the proportion of the incative population by the main reason of inactivity. The main two reasons of inactivity were school attendance and family responsibilities accounting for 73.8 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.

Figure 20.9: Proportion of Inactive Population (15 – 64) by Main Reason for Inactivity



20.16. Table 20.4 presents a summary of some key indicators of the labour market for 2005/06 KIHBS, 2009 KPHC and 2015/16 KIHBS. Comparison of the labour participation rate, employment to population ratio and unemployment rate for the various period shows improvement overtime. However, the indicator on time related underemployment for 2015/16 KIHBS reversed the trend which was previously improving.

Table 20.4: Key Indicators of the Labour Market

Indicator	2005/06	2009	2015/16
Labour Force Participation Rate (per cent)	72.6	76.7	77.1
Employment to Population Ratio	69.3	69.3	71.1
Unemployment Rate (per cent)	12.7	9.7	7.1
Underemployment Rate (per cent)	18.7	15.2	20.1
Labour Under Utilisation			26.1

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