

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 Projections² 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 |

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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 |

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* 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 |

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* 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 |

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* 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

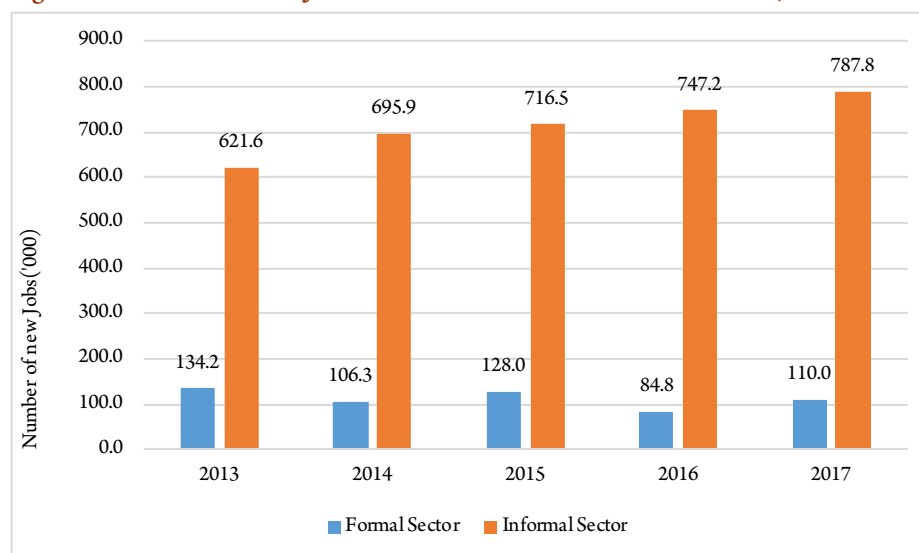
| | '000 | | | | |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2013 | 2014 | 2015 | 2016 | 2017* |
| Modern Establishments | | | | | |
| Wage Employees | 2,283.1 | 2,370.2 | 2,478.0 | 2,553.5 | 2,656.6 |
| Self-employed and unpaid family workers | 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.

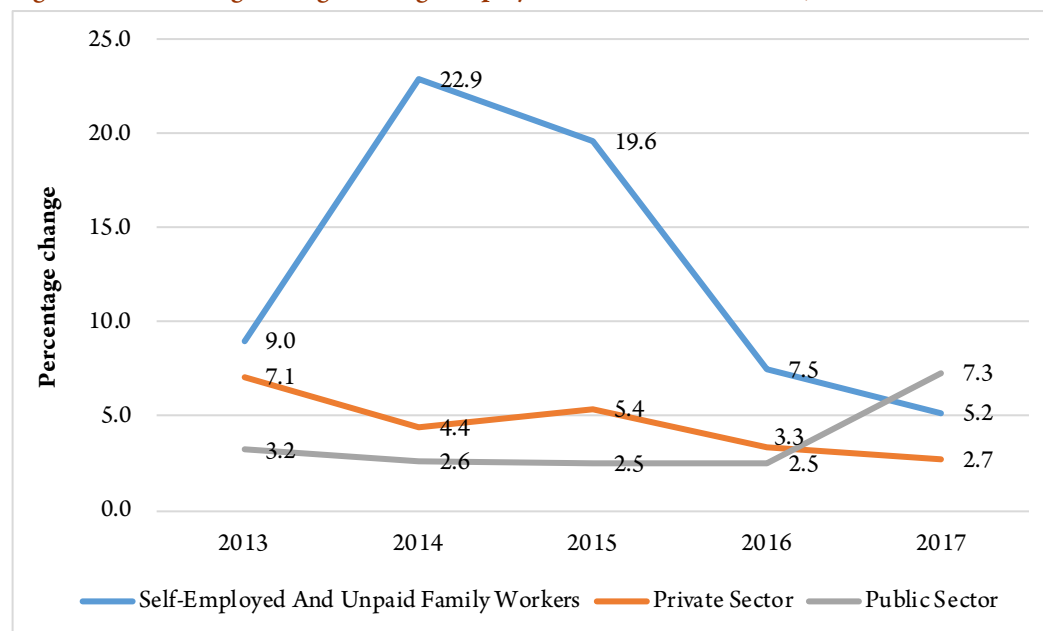
Table 3.2: Wage Employment by Industry and Sector, 2013 – 2017

| | '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.

²Credit 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 | 266.95 | 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 Services⁺, 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 maintenance | 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

| | KSh Million | | | | |
|---|----------------|----------------|----------------|----------------|----------------|
| Commodity | 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 |

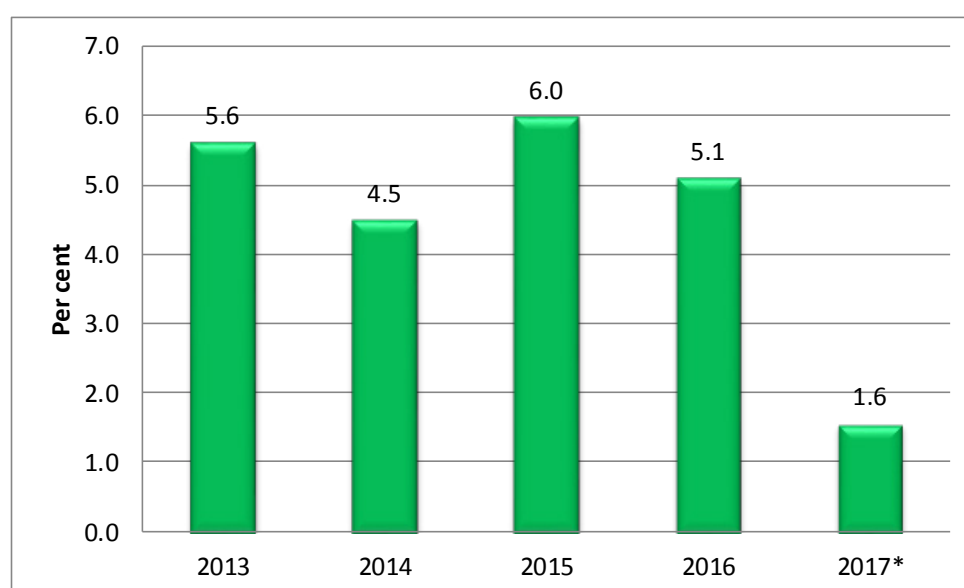
Source: Kenya National Bureau of Statistics

* 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

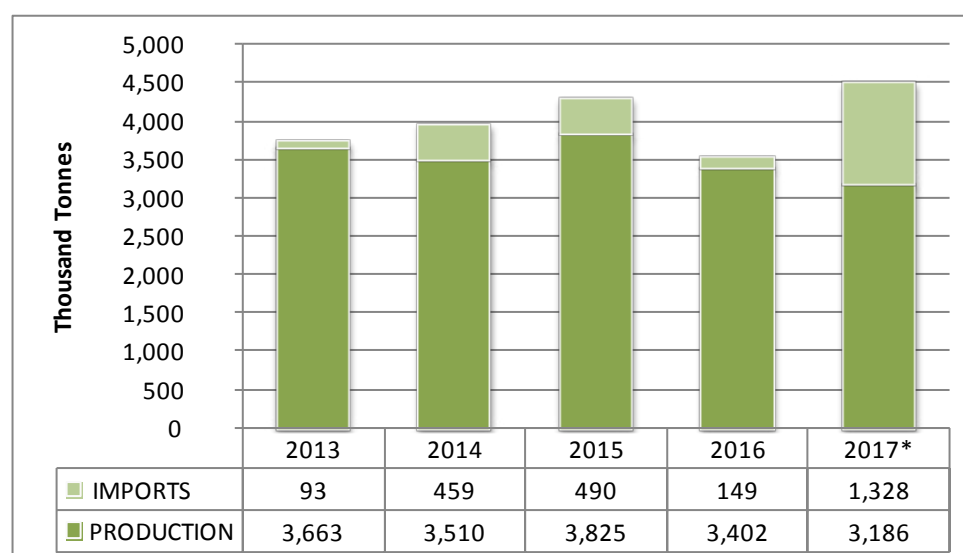
| Crop | Unit | 2013 | 2014 | 2015 | 2016 | 2017* |
|----------------|----------------|------|------|------|------|-------|
| Maize | Million bags | 40.7 | 39.0 | 42.5 | 37.8 | 35.4 |
| Beans | Million bags | 7.9 | 6.8 | 8.5 | 8.1 | 9.4 |
| Potatoes | Million tonnes | 2.1 | 2.3 | 2.0 | 1.3 | 1.5 |
| 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.

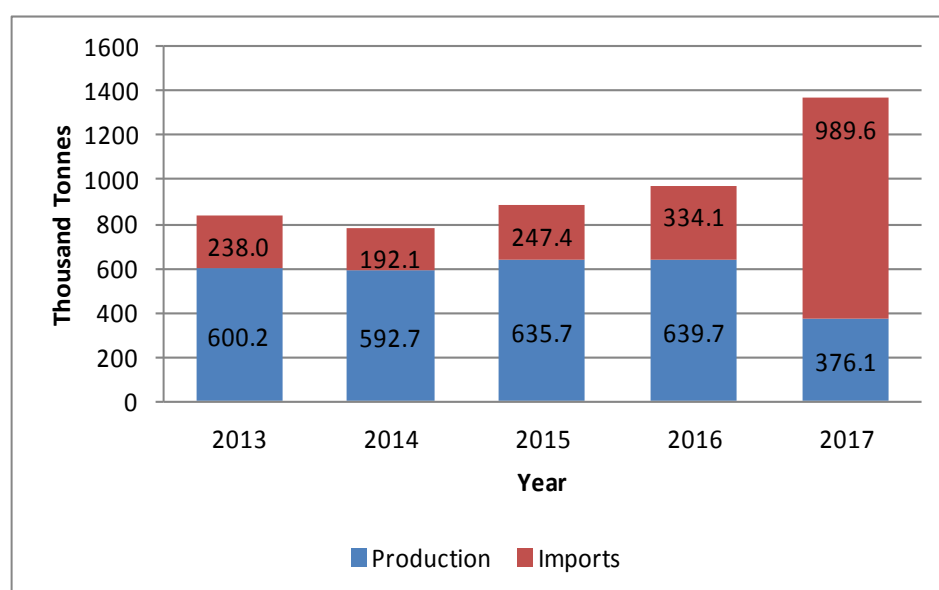
Table 7.16: Production, Imports and Exports of Sugar, 2013-2017

| 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 |

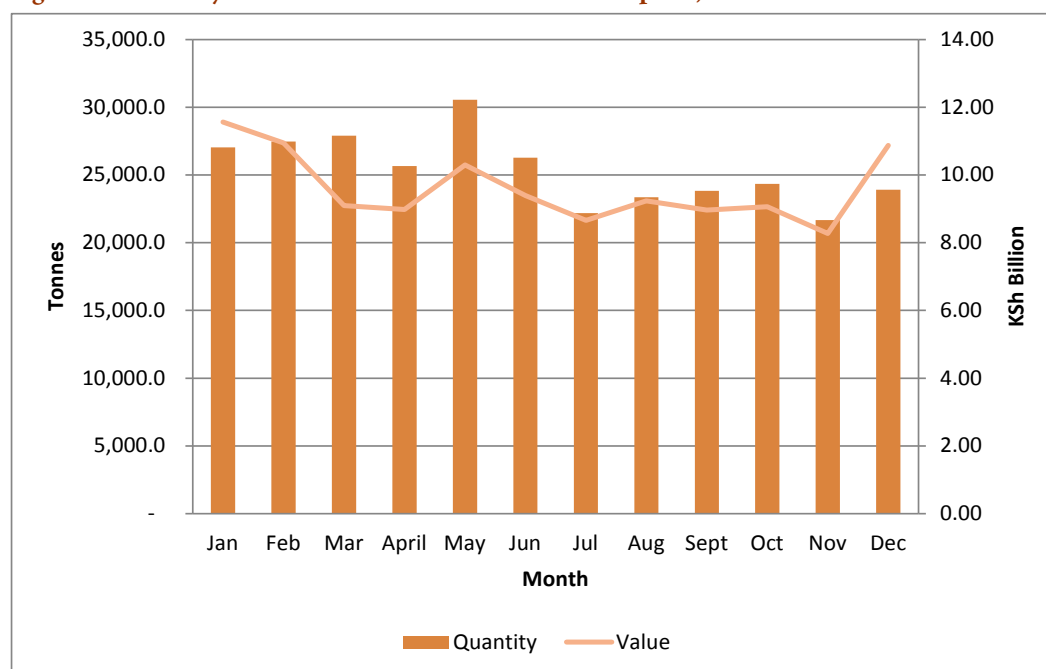
Source: Agriculture and Food Authority, Horticulture Directorate

* 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

| | 2013 |  |  | 2014 |  |  | 2015 |  |  | 2016 |  |  | 2017* |  |  | Number |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Total |
| DEGREE LEVEL-Public Universities | | | | | | | | | | |
| All Universities..... | 5,948 | 3,587 | 7,758 | 4,438 | 9,420 | 5,800 | 10,165 | 6,930 | 14,835 | 9,386 |
| DIPLOMA LEVEL-Public Universities | | | | | | | | | | |
| Egerton..... | 1,149 | 671 | 542 | 928 | 324 | 800 | 459 | 206 | 116 | 80 |
| DIPLOMA LEVEL- MOA | | | | | | | | | | |
| Bukura Institute of Agriculture..... | 819 | 360 | 674 | 290 | 710 | 309 | 705 | 326 | 791 | 406 | 1,197 |
| Naivasha Dairy Training Institute ¹..... | - | - | - | - | - | - | - | - | - | 27 | 21 | 51 | 31 | 82 |
| DIPLOMA - Animal Health Training Institutes² | | | | | | | | | | |
| Kabete .. .. . | - | - | - | - | - | - | - | - | - | - | - | - | 101 | 19 | 120 |
| Ndomba .. .. . | - | - | - | - | - | - | - | - | - | - | - | - | 41 | 9 | 50 |
| CERTIFICATE LEVEL- | | | | | | | | | | |
| Naivasha Dairy Training Institute..... | 122 | 79 | 138 | 93 | 102 | 68 | 64 | 59 | 55 | 63 |
| Animal Health Training Institutes- | | | | | | | | | | |
| Kabete | 92 | 24 | 155 | 32 | 187 | 25 | 91 | 13 | 35 | 18 | 53 |
| Nyahururu | 52 | 28 | 51 | 27 | 51 | 22 | 52 | 24 | 46 | 28 | 74 |
| Ndomba | 140 | 44 | 230 | 65 | 337 | 89 | 118 | 28 | 95 | 25 | 120 |
| Total..... | 284 | 96 | 436 | 124 | 575 | 136 | 261 | 65 | 176 | 71 | 247 |
| SHORT-TERM VOCATIONAL COURSES- | | | | | | | | | | |
| Naivasha Dairy Training School | 122 | 44 | 189 | 100 | 202 | 84 | 116 | 51 | 290 | 101 | 391 |
| Athi River M.T. School | 66 | 28 | 46 | 37 | 66 | 44 | 44 | 12 | 41 | 23 |
| Total..... | 188 | 72 | 235 | 137 | 268 | 128 | 160 | 63 | 331 | 124 |
| Total..... | 472 | 168 | 671 | 261 | 843 | 264 | 421 | 128 | 507 | 195 |

Source: Ministry of Agriculture and Irrigation; Public Universities and other Institutions

* 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

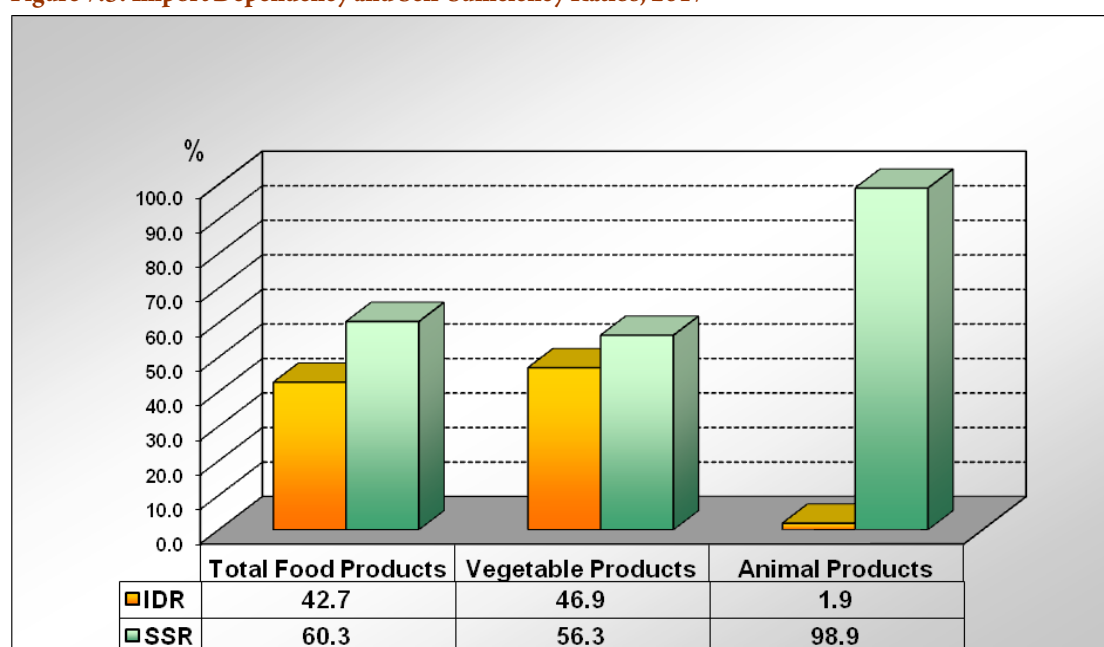


Figure 7.6: Caloric Supply by Main Food Groups, 2017

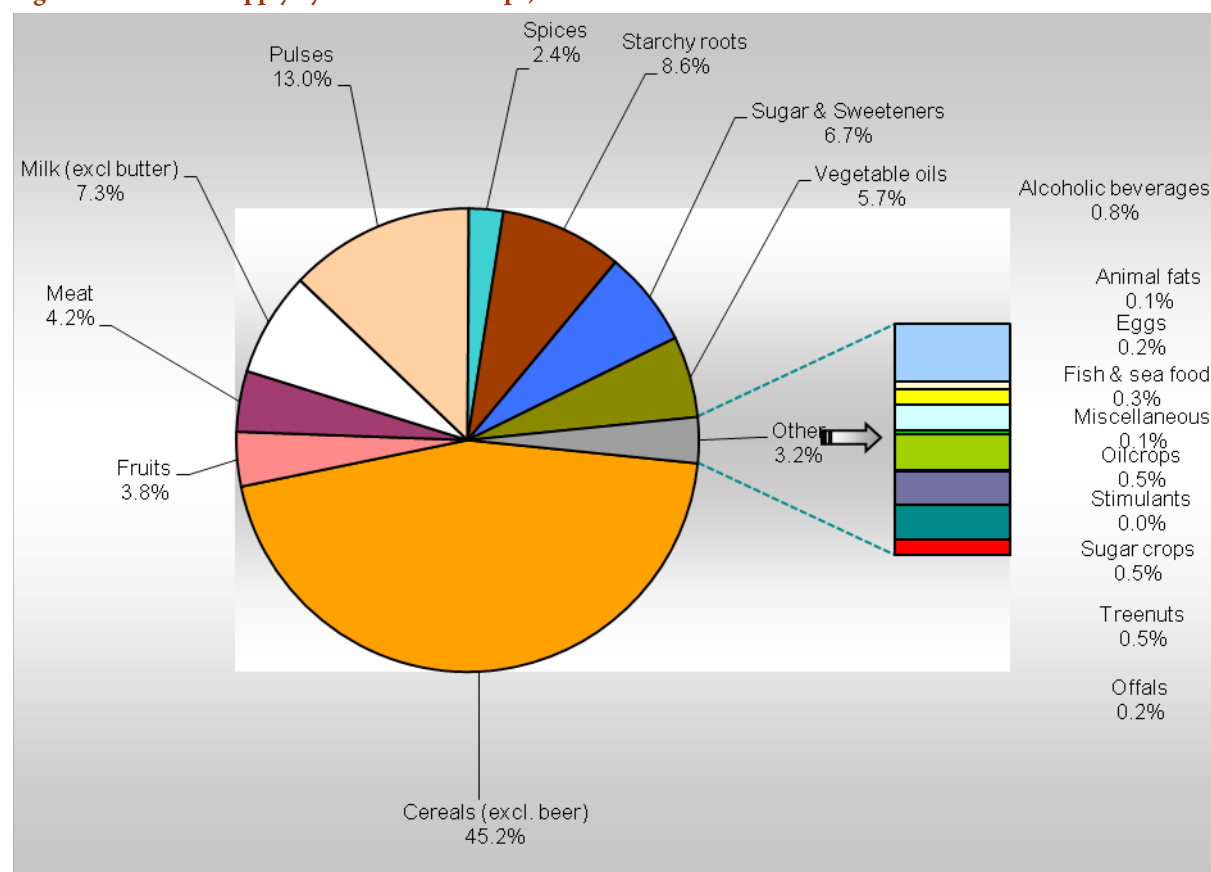


Table 7.24 (a): Food Balance Sheet, 2017

| 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 Kg. | PER DAY | | | |
| | | | | | | | | | | | | | Calories | Proteins | Fats | |
| | | | | | | | | | | | | | | | | units |
| 1000 Metric Tons | | | | | | | | | | | | | | | | |
| 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 | | |
| 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 | 3 |
| Maize | 3402 | 150 | | 545 | 4 | 4093 | 246 | 63 | | 721 | 491 | 0 | 2639 | 58.2 | 506 | 12 | 2 |
| Rice (Milled Eq.) | 68 | 518 | | 0 | 1 | 585 | 0 | 0 | | 1 | 3 | 0 | 577 | 12.7 | 123 | 2 | 0 |
| Barley | 77 | 0 | | 0 | 15 | 63 | 0 | 2 | | 58 | 2 | 0 | 1 | 0.0 | 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 | 0 |
| Millet | 54 | 7 | | 0 | 0 | 61 | 5 | 2 | | 8 | 7 | 0 | 22 | 0.5 | 4 | 0 | 0 |
| Sorghum | 117 | 71 | | 0 | 49 | 139 | 19 | 3 | | 28 | 20 | 0 | 65 | 1.4 | 12 | 0 | 0 |
| Cereals, other | 0 | 47 | | 0 | 4 | 43 | 0 | 0 | | 0 | 0 | 0 | 43 | 0.9 | 8 | 0 | 0 |
| Starchy roots | 3592 | 1 | | 0 | 3 | 3591 | 0 | 104 | | 2 | 281 | 0 | 3204 | 70.6 | 179 | 2 | 0 |
| Cassava | 1112 | 0 | | 0 | 0 | 1113 | 0 | 0 | | 1 | 33 | 0 | 1079 | 23.8 | 70 | 1 | 0 |
| Potatoes | 1300 | 0 | | 0 | 3 | 1298 | 0 | 104 | | 1 | 130 | 0 | 1063 | 23.4 | 46 | 1 | 0 |
| Sweet Potatoes | 1150 | 0 | | 0 | 0 | 1150 | 0 | 0 | | 0 | 115 | 0 | 1035 | 22.8 | 61 | 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 |
| 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 | 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 | 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 | 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 |
| Pulses | 987 | 7 | | 433 | 1 | 1426 | 0 | 10 | | 0 | 151 | 0 | 1258 | 27.7 | 260 | 17 | 1 |
| Beans | 729 | 1 | | 35 | 0 | 765 | 0 | 0 | | 0 | 115 | 0 | 650 | 14.3 | 134 | 9 | 1 |
| 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 | 1 |
| Treenuts | 21 | 0 | | 0 | 6 | 16 | 0 | 0 | | 0 | 0 | 0 | 12 | 0.3 | 3 | 0 | 0 |
| Oilcrops | 172 | 8 | | 0 | 8 | 172 | 10 | 2 | | 82 | 8 | 0 | 71 | 1.6 | 8 | 0 | 1 |
| 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 | 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 | 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 |
| Vegetable oils | 35 | 536 | | 0 | 80 | 491 | 0 | 0 | | 0 | 0 | 258 | 232 | 5.1 | 123 | 0 | 14 |
| 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 |
| 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 | 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 | 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 |
| 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 | 1 |
| Oilcrops oil, other | 14 | 1 | | 0 | 0 | 15 | 0 | 0 | | 0 | 0 | 3 | 12 | 0.3 | 6 | 0 | 1 |
| Vegetables | 1483 | 114 | | 0 | 227 | 1370 | 0 | 0 | | 0 | 187 | 0 | 1311 | 28.9 | 17 | 1 | 0 |
| Tomatoes | 324 | 6 | | 0 | 0 | 330 | 0 | 0 | | 0 | 33 | 0 | 298 | 6.6 | 3 | 0 | 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 | 0 |

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

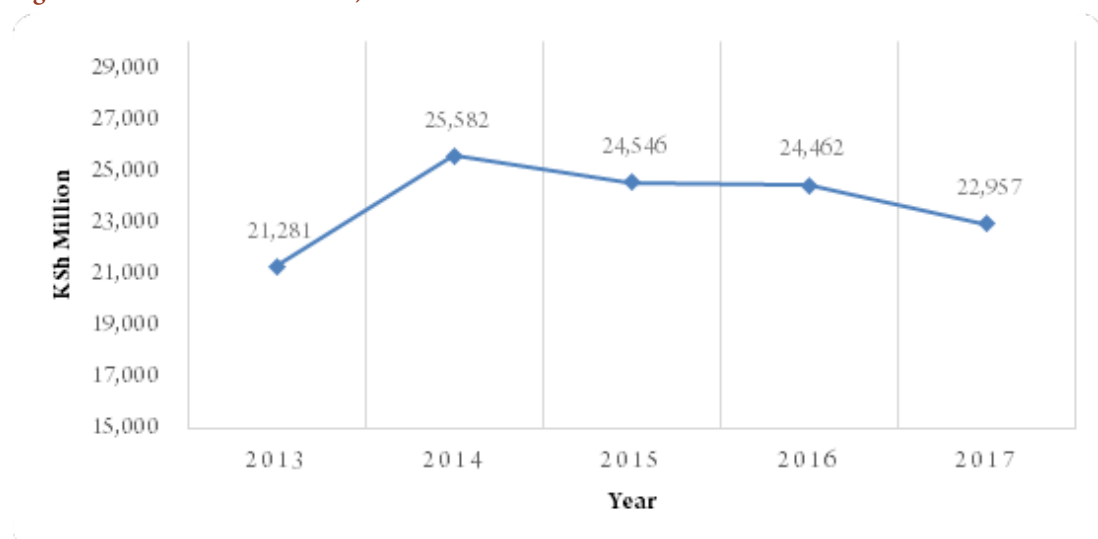


Table 8.4: Quantity and Value of fish landed, 2013 - 2017

| | 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

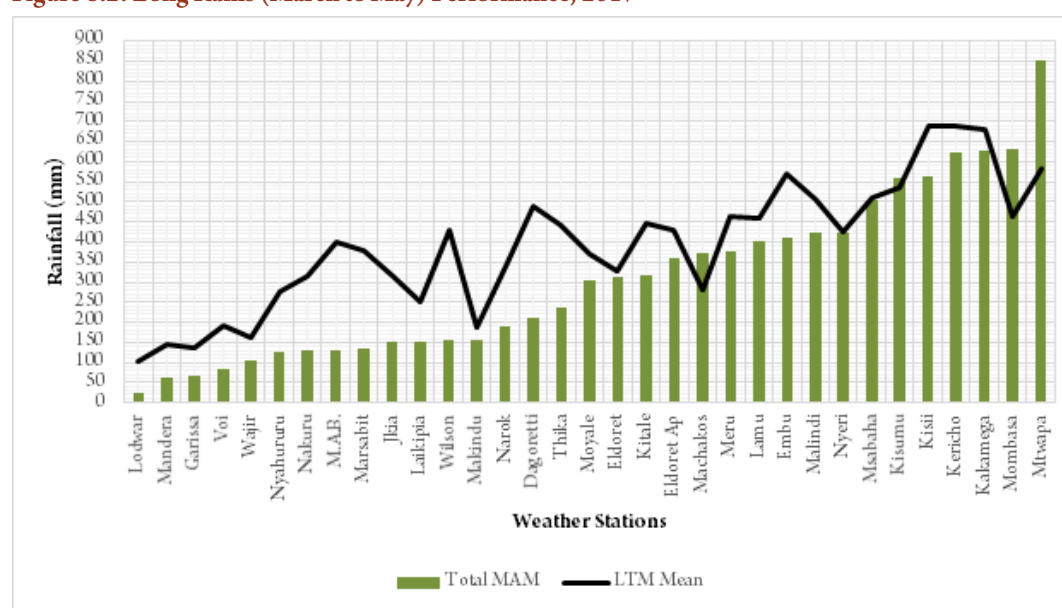
| Number | | | | | |
|--|------------|--------------|--------------|--------------|--------------|
| Sector | 2013 | 2014 | 2015 | 2016 | 2017* |
| Transport and Communication | 208 | 437 | 607 | 636 | 522 |
| Energy | 163 | 188 | 298 | 422 | 501 |
| Tourism | 12 | 11 | 14 | 11 | 8 |
| Mining and Quarrying | 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.

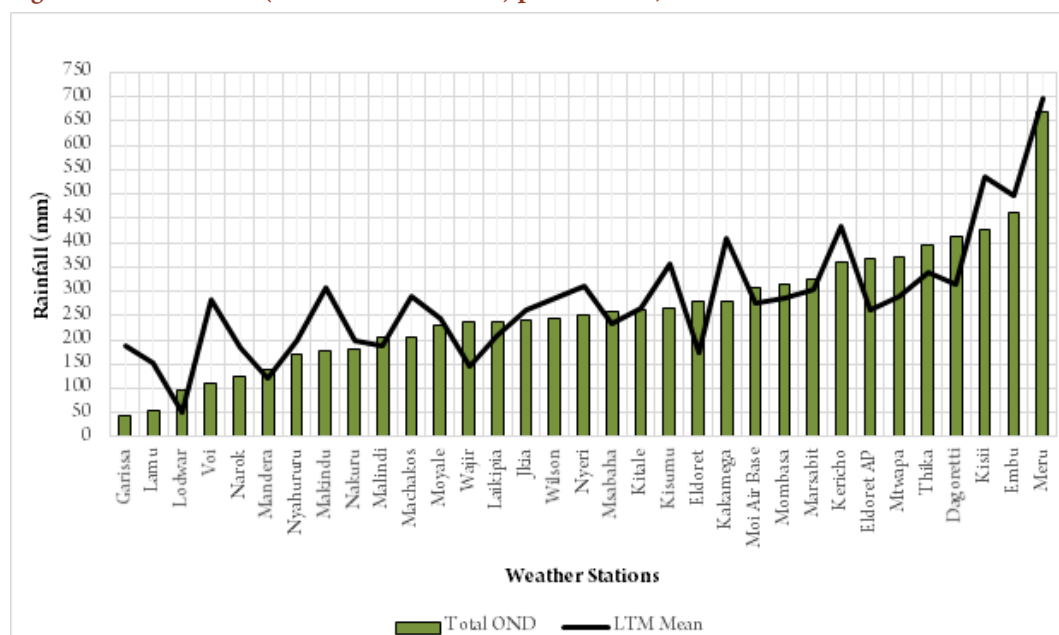
8.25. As shown in Figure 8.2, most meteorological stations in the country recorded below their seasonal Long-Term Means (LTMs) for the March to May long rain season. However, Machakos, Mtwapa and Mombasa stations recorded rainfall above the LTMs. Stations that recorded near-normal rainfall include Kisumu, 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



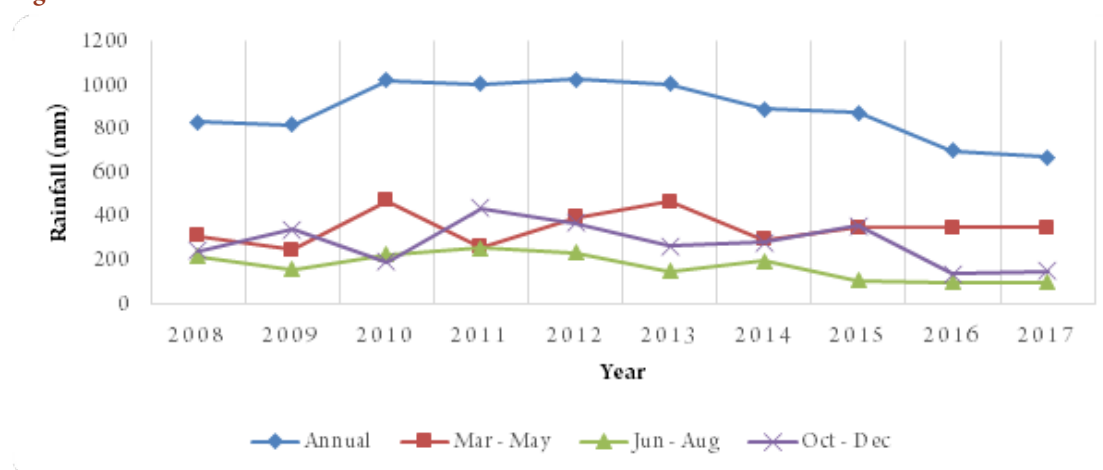
8.27. Figure 8.4 depicts the annual, March to May, June to August and October to December seasonal rainfall trends being on the decrease during the period 2008 to 2017. However, during the review period, annual and October to December seasonal rainfall trend line shows a sharp reduction. The October 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

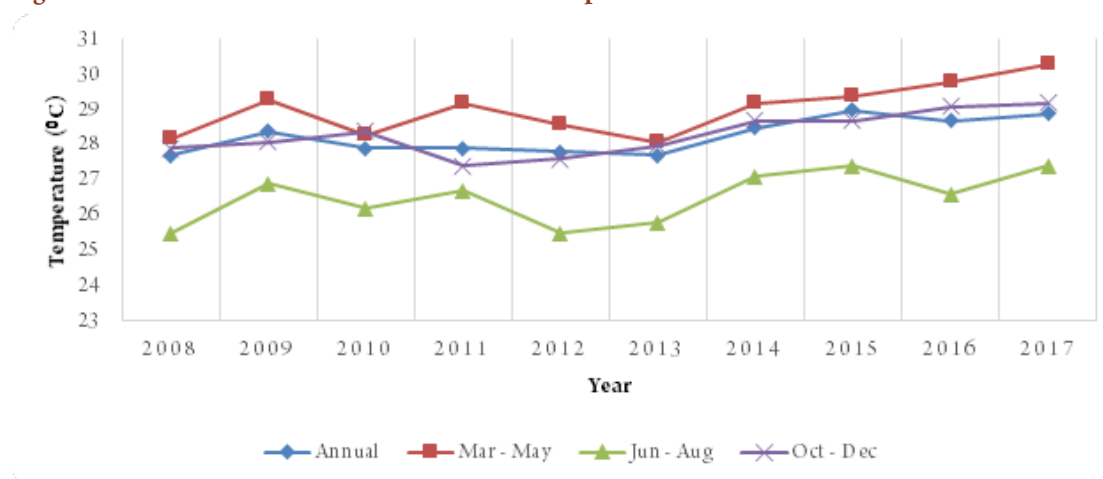
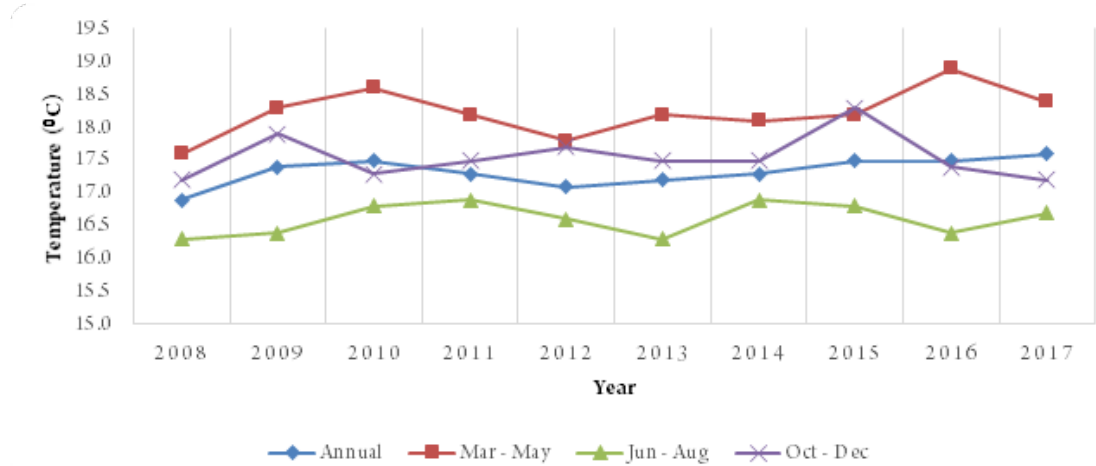


Table 8.16: Mean Annual and Seasonal Minimum Temperatures

| 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

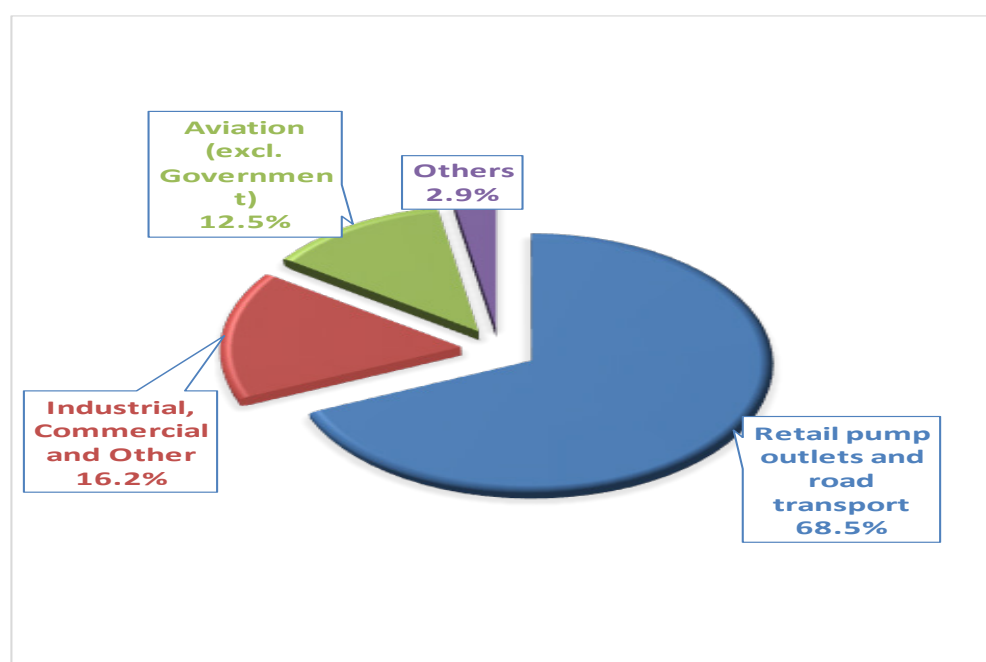
| | '000 Tonnes | | | | |
|--|----------------|----------------|----------------|----------------|----------------|
| User | 2013 | 2014 | 2015 | 2016 | 2017* |
| Agriculture | 28.5 | 36.4 | 29.7 | 35.2 | 57.4 |
| Retail pump outlets and road transport.. | 2,573.7 | 2,791.0 | 3,414.7 | 3,717.6 | 3,541.2 |
| 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

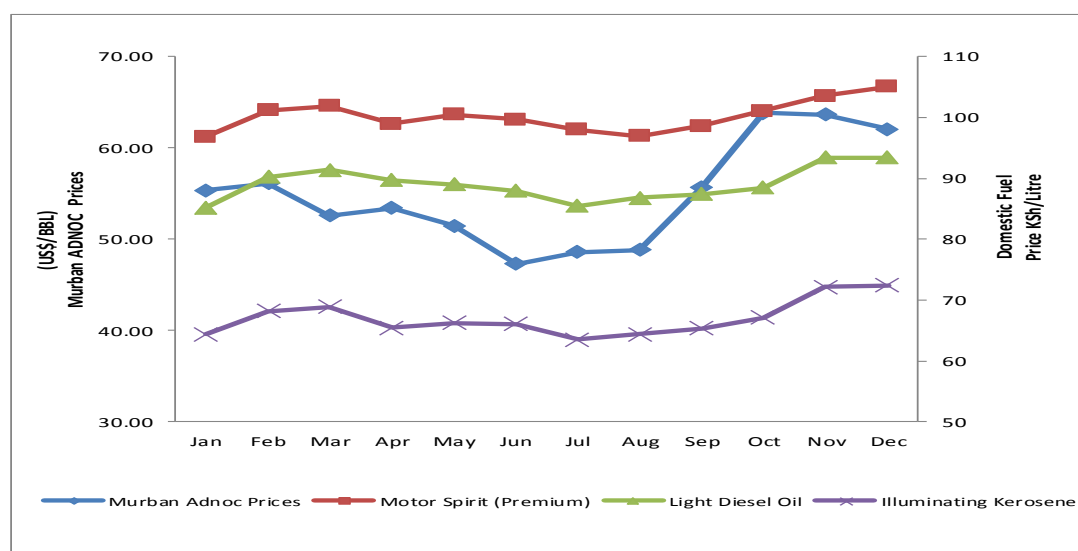
¹ Abu Dhabi Free On Board (FOB) Prices

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

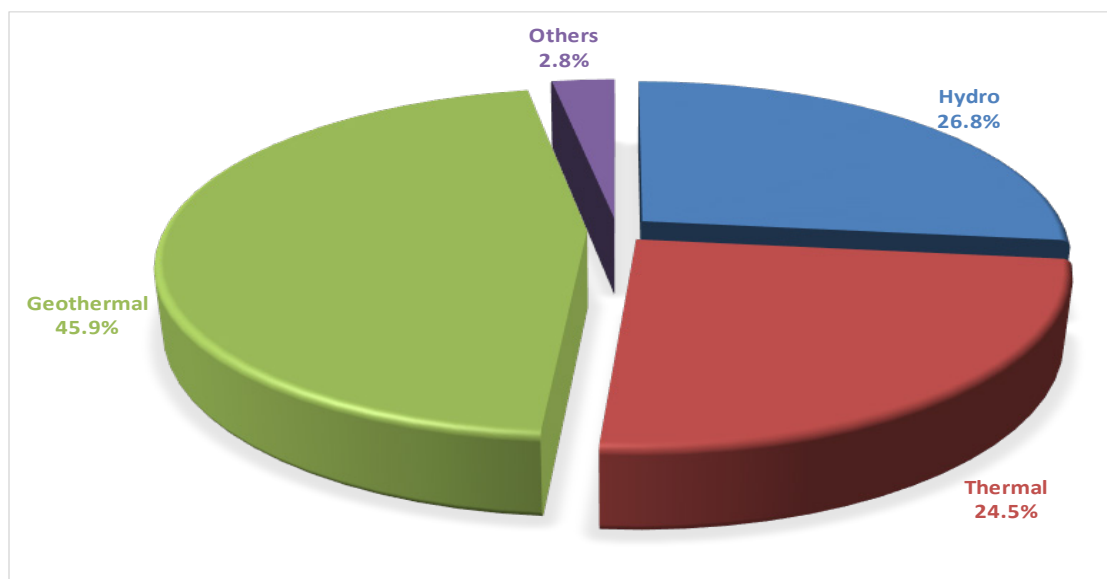
Notes:

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 | 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 | 134,927.5 |
| 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.

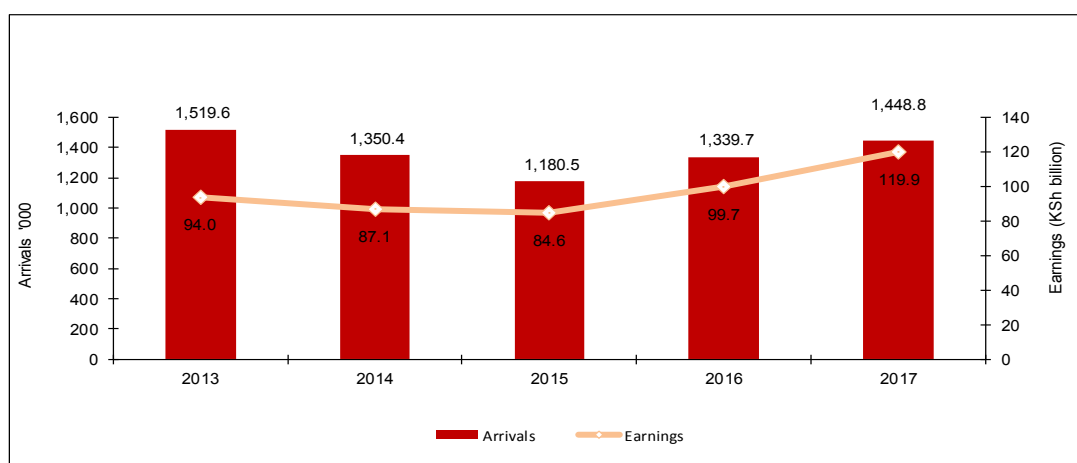
12.2. Hotel bed-nights occupancy increased by 11.3 per cent from 6,448.5 thousand in 2016 to 7,174.2 thousand in 2017. The number of international conferences held contracted by 15.9 per cent from 227 in 2016 to 191 in 2017. On the other hand, local conferences held increased by 2.4 per cent from 3,755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

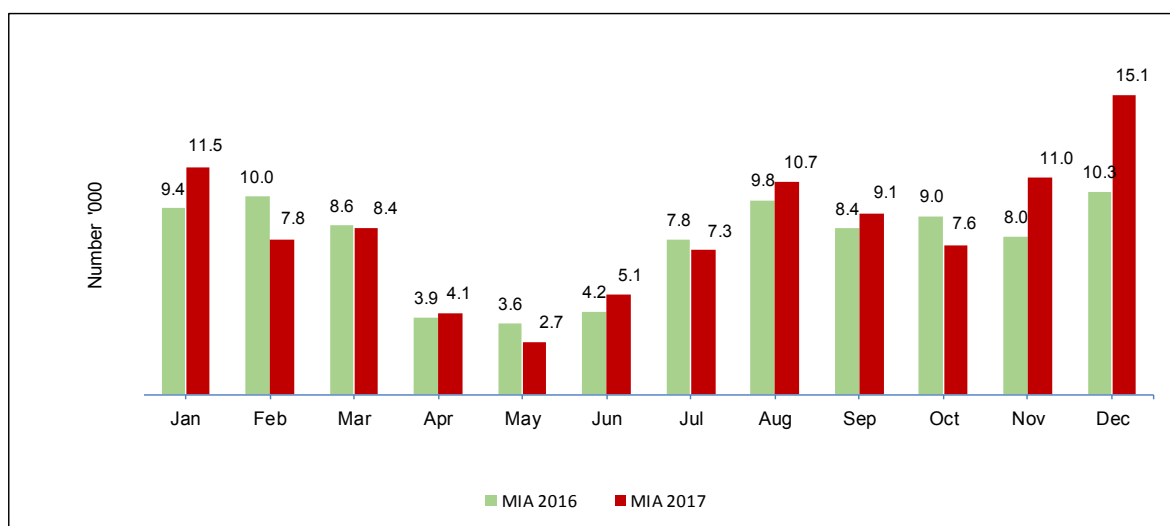
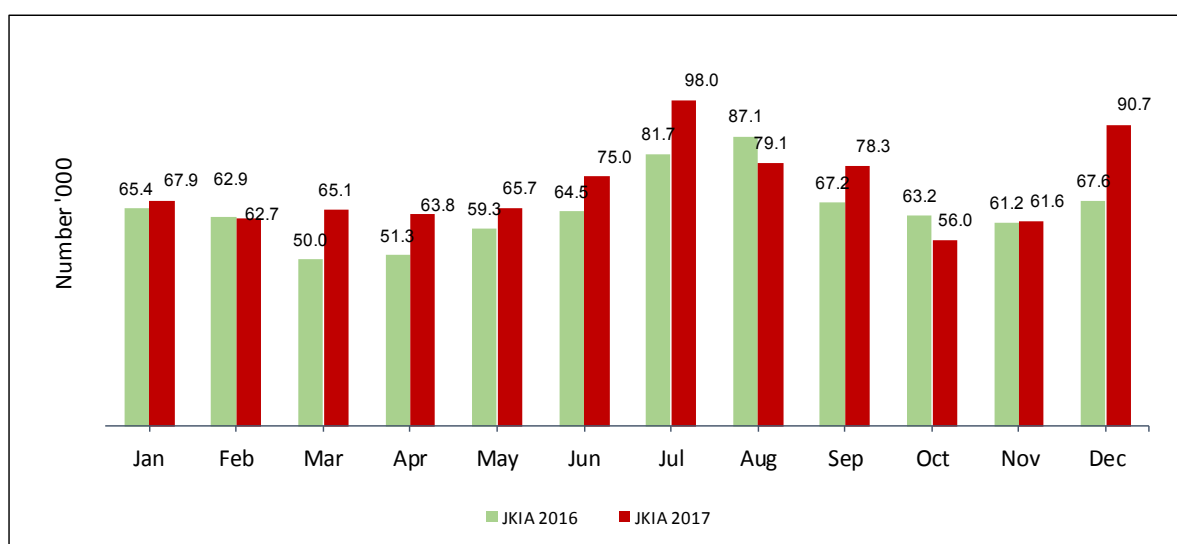
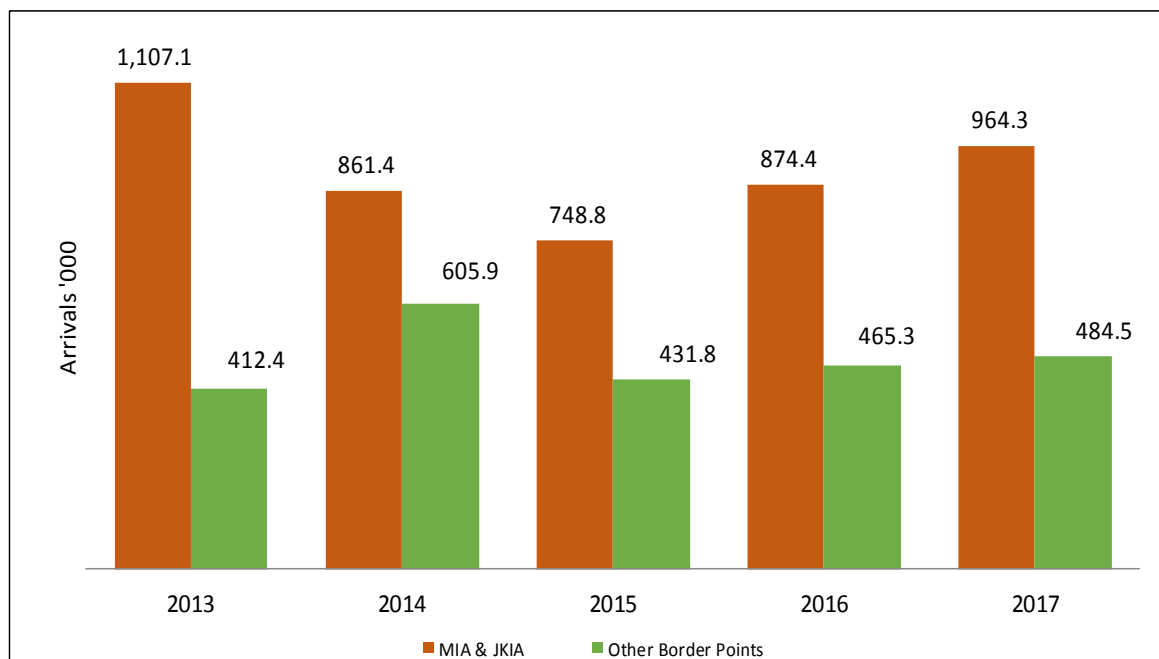


Figure 12.2(b): Monthly International Visitor Arrivals through JKIA, 2016 -2017



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



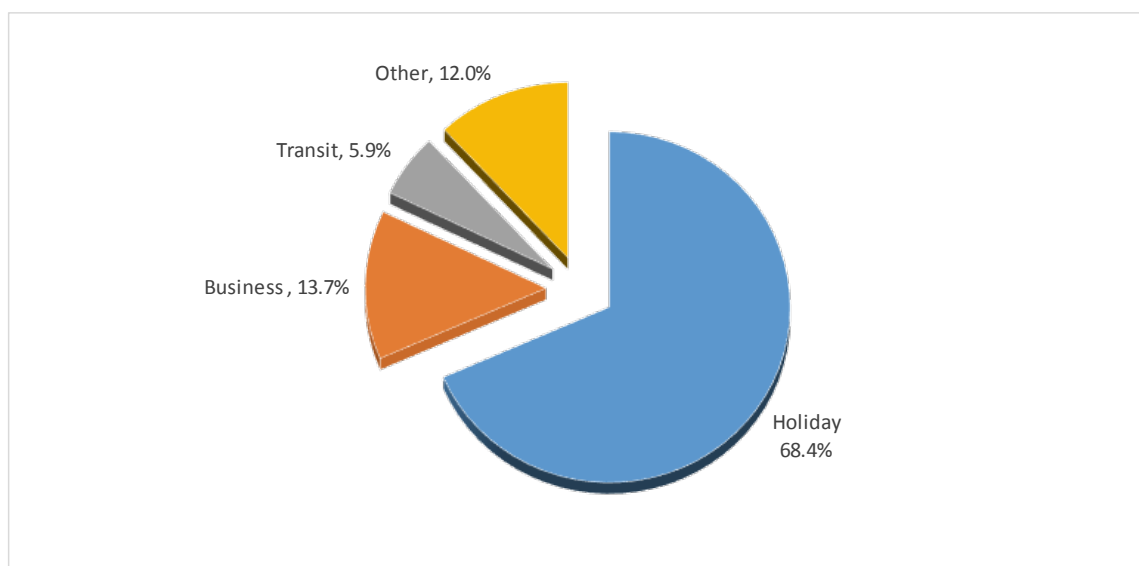
12.7. The number of international arrivals by purpose of visit and by quarter for the period 2013 to 2017 is shown in Table 12.1. Generally, these arrivals went up in all the quarters in 2017 compared to 2016. This growth was more pronounced in the second quarter, increasing by 15.5 per cent to 340.5 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 |

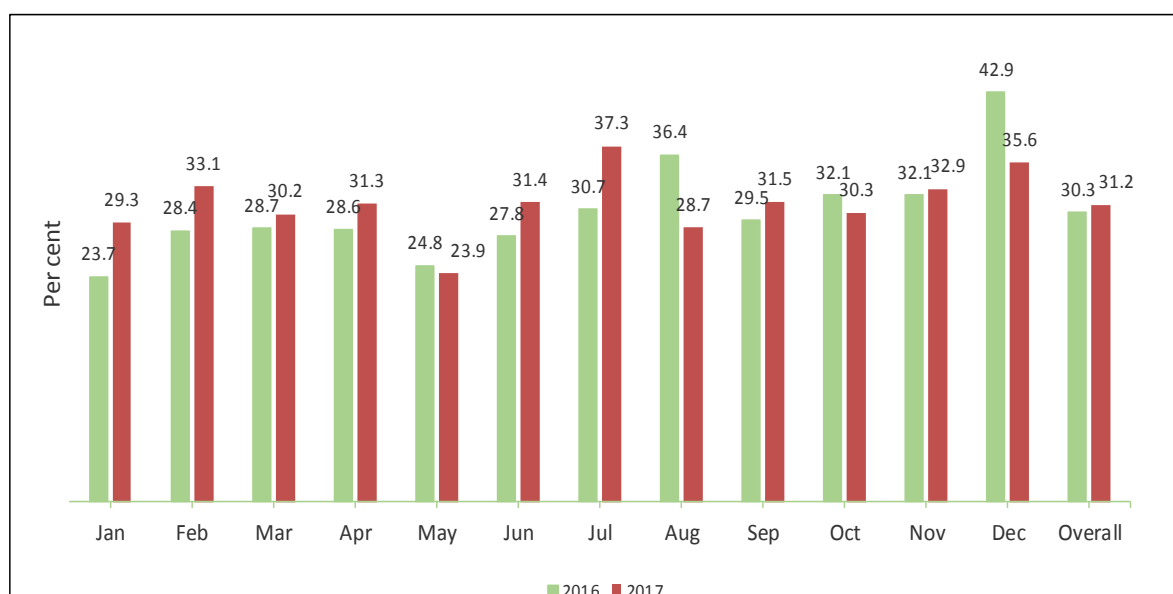
* Provisional

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.

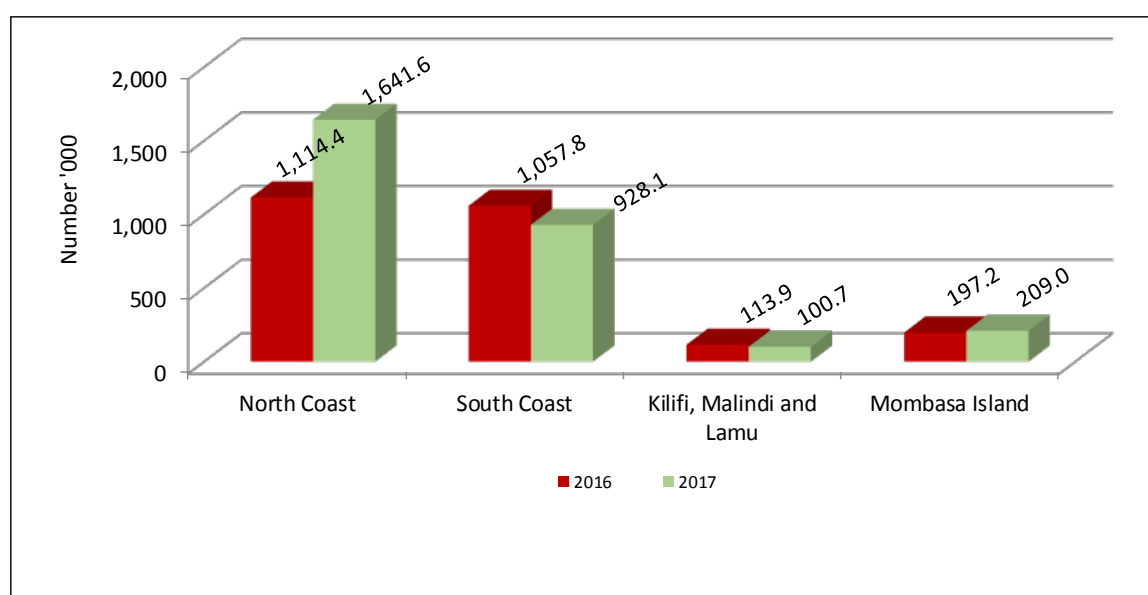
Table 12.6: Hotel Bed-Nights by Zone, 2013-2017

| | '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 |

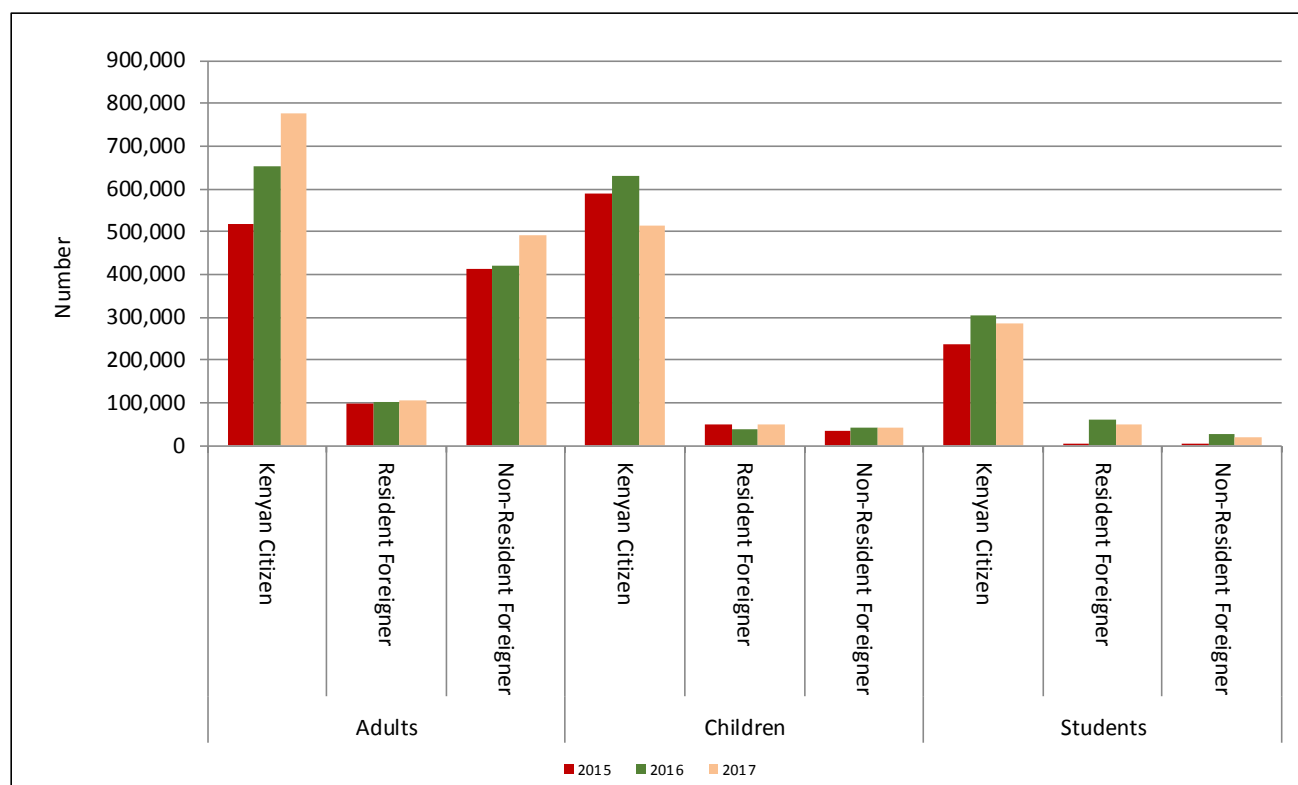
Source: Kenya Wildlife Services

* 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

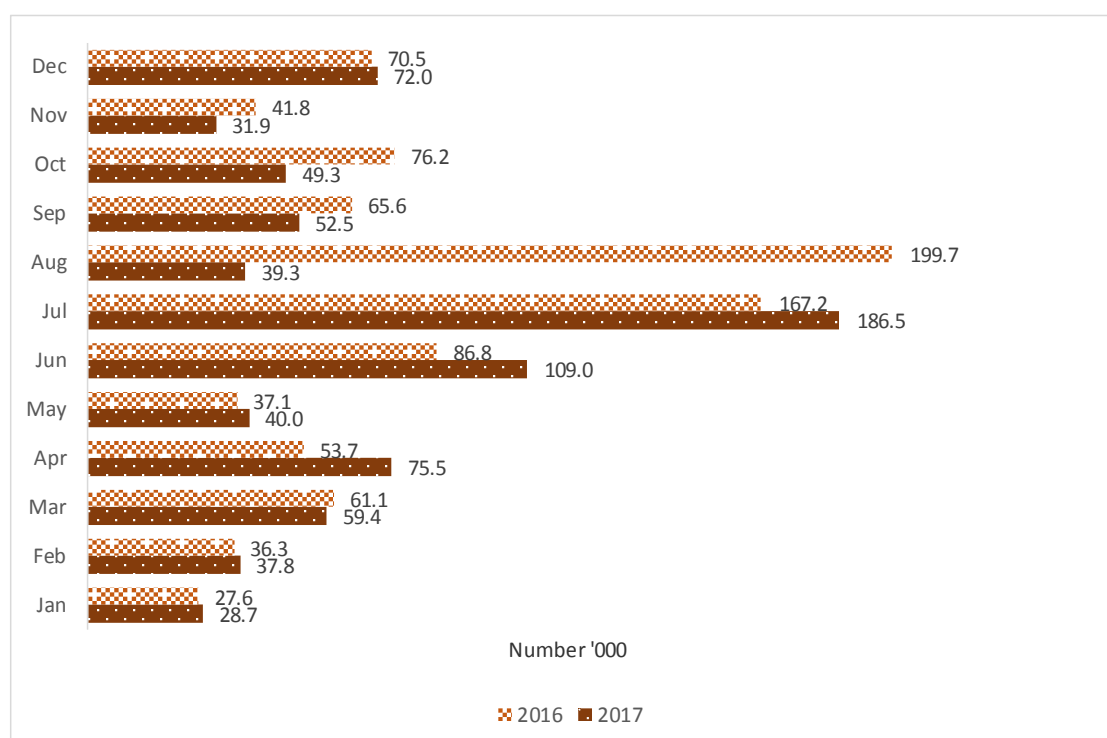
| Name of Museums | '000 | | | | |
|--------------------|--------------|--------------|--------------|--------------|--------------|
| | 2013 | 2014 | 2015 | 2016 | 2017* |
| Nairobi National | 130.9 | 52.5 | 264.0 | 278.7 | 222.9 |
| Nairobi Snake Park | 94.8 | 33.0 | 24.0 | 26.1 | 28.7 |
| Fort Jesus | 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.

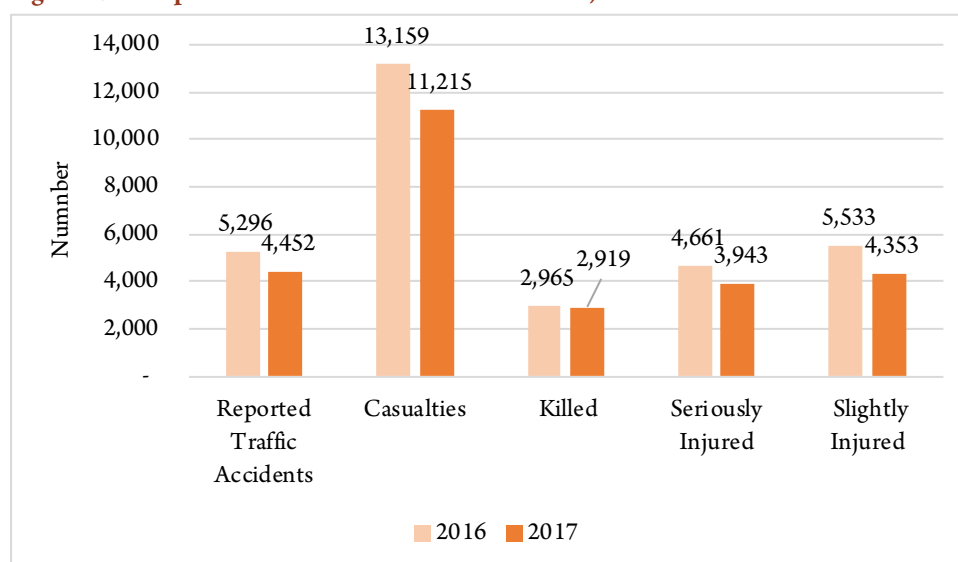
Table 13.6: Reported Road Traffic Accidents, 2013 - 2017

| | 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

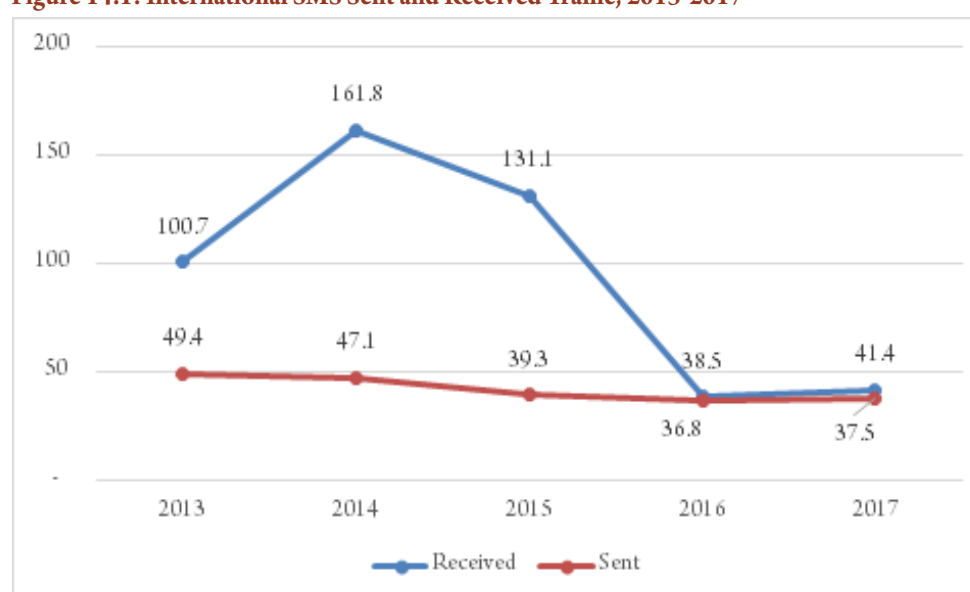
| | Number '000 | | | | |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|
| Messages | 2013 | 2014 | 2015 | 2016 | 2017* |
| Multimedia Messaging Service (MMS) ... | 9,761 | 12,011 | 13,686 | .. | .. |
| Total SMS sent | 19,837,856 | 27,416,127 | 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.

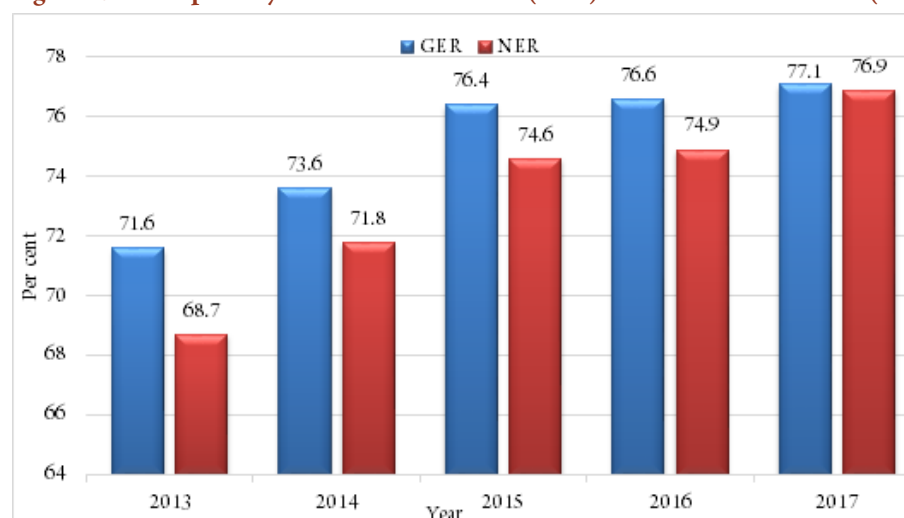
Table 15.3: Pupil Enrolment and Teacher Numbers in ECDE Centres, 2013 – 2017

| | 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

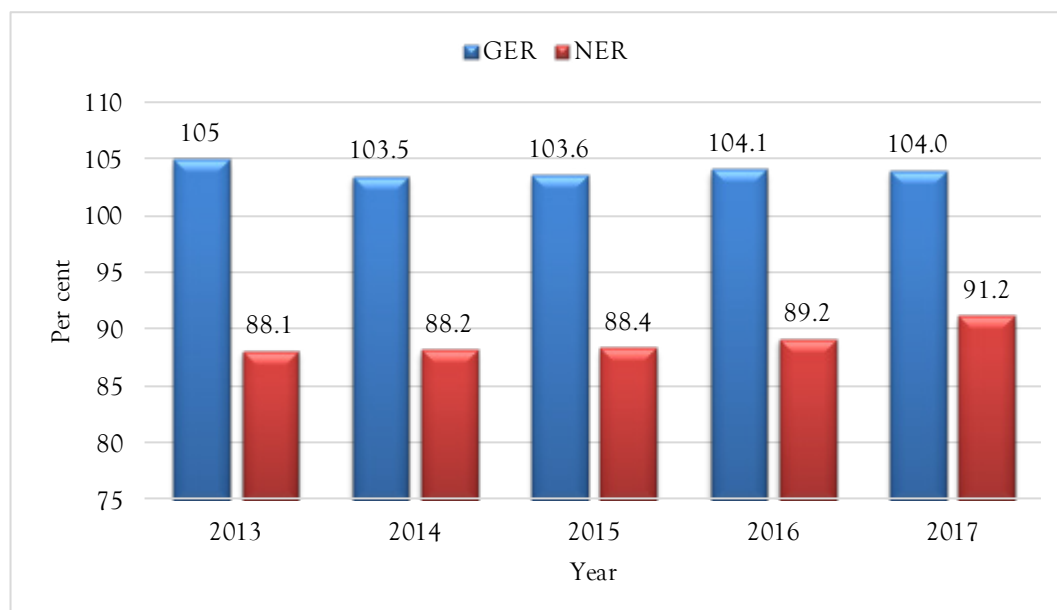
| Class | 2013 | | | 2014 | | | 2015 | | | 2016 | | | 2017* | | |
|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| | 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

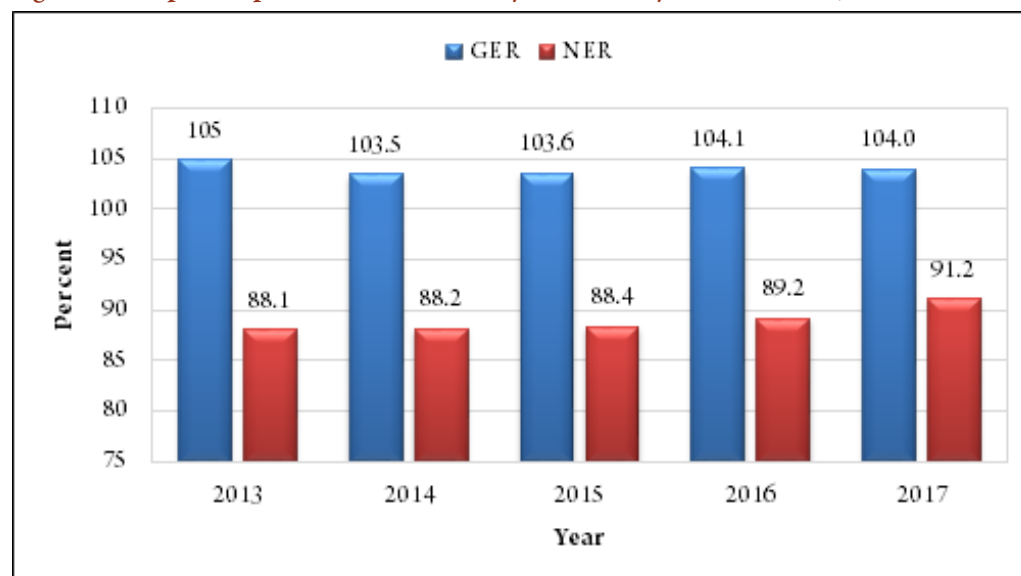
| | Number | | | | |
|-----------------------------|-----------------------|----------------|----------------|----------------|----------------|
| | 2013 | 2014 | 2015 | 2016 | 2017* |
| Number of candidates | | | | | |
| Male... | 426,369 | 443,258 | 467,904 | 473,684 | 498,775 |
| Female... | 413,390 | 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

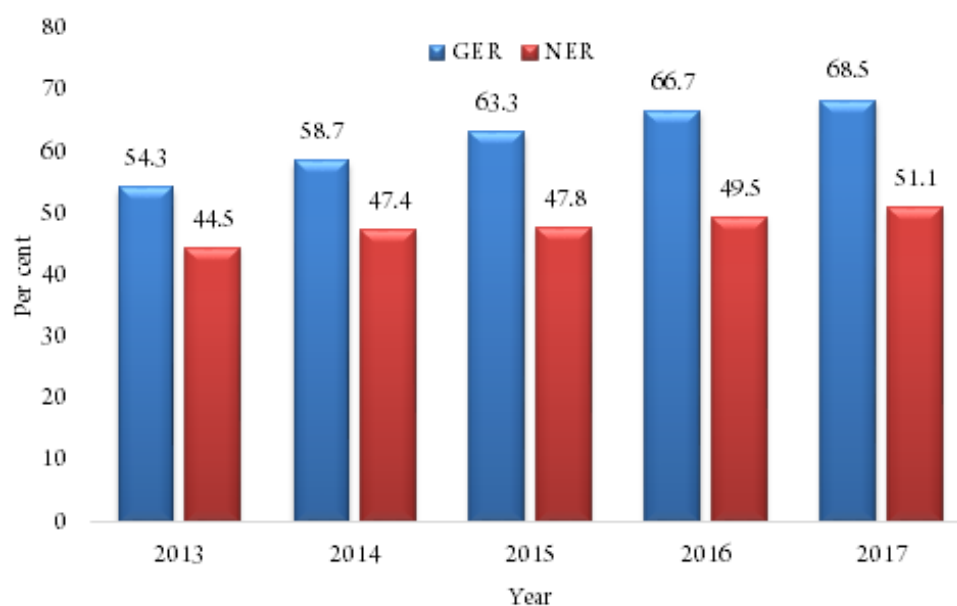
| Class | 2013 | | | 2014 | | | 2015 | | | 2016 | | | 2017* | | | Number ('000') |
|---------------|----------------|--------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | 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 | Kenya | 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 ... | 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 |
| 3 | OTHER OFFENCES AGAINST PERSONS | a) Assault b) Creating Disturbance c) Affray | 11 | TRAFFIC OFFENCES | a) Taking and Driving Motor Vehicle without Authority b) Driving under influence of alcohol |
| 4 | ROBBERY | a) Robbery b) Robbery with Violence c) Carjacking d) Robbed of M/V e) Cattle Rustling | 12 | CRIMINAL DAMAGE | a) Malicious Damage b) Arson c) Negligent Acts |
| 5 | BREAKING | a) House Breaking b) Burglary c) Other Breakings | 13 | ECONOMIC CRIMES | a) Obtaining by False Pretence b) Currency Forgery c) Other Fraud/Forgery Offences |
| 6 | THEFT OF STOCK | | 14 | CORRUPTION | a) Soliciting for Bribe b) Accepting Bribe c) Accept Free Gifts d) Demanding by false pretence e) Other Corruption Offences |
| 7 | STEALING | a) Handling Stolen Property b) Stealing from Person c) Stealing by Tenants/lodgers d) Stealing from a building e) General Stealing | 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 |
| | | | 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 | 36,469.40 |
| 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 |
|-----------------|---|--|----------------------|----------|---------------------|---------------------|-------------------------|---------------------|---------------------|------------------------|----------------------|---------------------------------------|---|-----|-----------|-------|
| | | Liquid fuels | | | | | Gas | | | Gas | | | | | | |
| | CPC Definition | Motor Spirit (Premium and Regular) | Aviation gasoline | Jet fuel | Light Diesel Oil | Heavy Diesel Oil | Other Gas Oils n.e.c | Fuel oils n.e.c. | Lubricating Oils | Lubricating Greases | Other Oils n.e.c. | Liquefied Petroleum Gas (L.P.G) | Petroleum gases and other gaseous hydrocarbons , except natural gas | | | |
| | CPC Code |  | 33311 | 33312 | 33342 | 33349 | 33350 | 33360 | 33360 | 33370 | 33380 | 33380 | 33390 | 334 | 334 | | |
| | Domestic Production | | | | | | | | | | | | | | - | |
| | Imports |  | 6,946.8 | 12.5 | 5,776.1 | 146.0 | 13.2 | 9,894.4 | 4.8 | 2.8 | 7.4 | 10.4 | 327.3 | 830.4 | 0.0 | 26,859.69 | |
| | Domestic Exports | 0.0 | - | 3.7 | 2.2 | 0.4 | 4.5 | 0.0 | 12.1 | 108.2 | 0.3 | 2.2 | 4.2 | 0.0 | 137.91 | |
| | Re-Exports | 2.4 | 1.1 | 3,182.7 | 1.5 | 0.1 | 56.2 | 0.0 | 2.0 | 1.0 | 0.1 | 21.6 | 13.5 | - | 3,410.67 | |
| | Stock changes | | | | | | | | | | | | | | - | |
| | Sub-total Supply |  | 6,944 | 11 | 2,590 | 142 | 13 | 9,834 | 5 | 1 | (102) | 10 | 304 | 813 | 0 | 23,311.11 | |
| | Statistical differences |  | 1,641.8 | (4.6) | (128.7) | (1,732.2) | 12.7 | 1,105.1 | (0.4) | 0.7 | (297.9) | 10.1 | 302.0 | (217.2) | 0.0 | 1,241.68 | |
| | 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 | |
| | 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 | |
| | 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 | |
| | Mining & Quarrying |  | 1.0 | - | - | 0.2 | - | 102.6 | - | - | 64.2 | 3.9 | - | - | 0.7 | - | - | 172.58 | |
| | Manufacturing |  | 31.8 | 0.8 | - | 12.2 | - | 1,020.9 | 0.2 | - | 1,039.9 | 35.2 | - | - | 64.3 | - | - | 2,205.23 | |
| | Electricity, Gas, Steam and Air Conditioning Supply | - | - | - | 177.6 | - | 3.5 | 2.9 | 52.4 | 25.7 | - | 14.1 | - | - | 277.78 | |
| | Construction |  | 5.6 | - | - | 71.1 | - | 422.6 | - | - | 1.4 | 10.9 | - | - | - | - | 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 | |
| | Accommodation and Food Service Activities |  | 0.2 | - | - | 6.2 | - | 25.9 | - | - | 0.4 | 0.7 | - | - | 20.0 | - | - | 53.52 | |
| | Other Commercial Sectors |  | 43.9 | - | - | 109.0 | - | 754.2 | 2.0 | - | 920.2 | 30.8 | - | - | 55.6 | - | - | 1,915.57 | |
| | Public Administration and Defense |  | 18.5 | - | 9.5 | 0.0 | - | 141.4 | - | - | 2.3 | 7.4 | - | - | 3.6 | - | - | 182.75 | |
| | Households | | | | 1,474.0 | | | | | | | 888.5 | | - | 2,332.47 | |

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 | |
| Geo-Thermal | 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 | | 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

IGWH-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. | | | | | | | | | | | | | 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 | | | | | | | | | | | | 12,555.93 | | | | 15,116.30 |
| Off peak | | | | | | | | | | | | 151.87 | | | | 151.87 |
| Rural electrification-F | | | | | | | | | | | | 216.28 | | | | 216.28 |
| Other | | | | | | | | | | | | 2,090.24 | | | | 2,090.24 |
| Biomass: | | | | | | | | | | | | | | | | |
| Firewood | 03131 | | | 122,550.00 | | | | | | | | | | | | 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

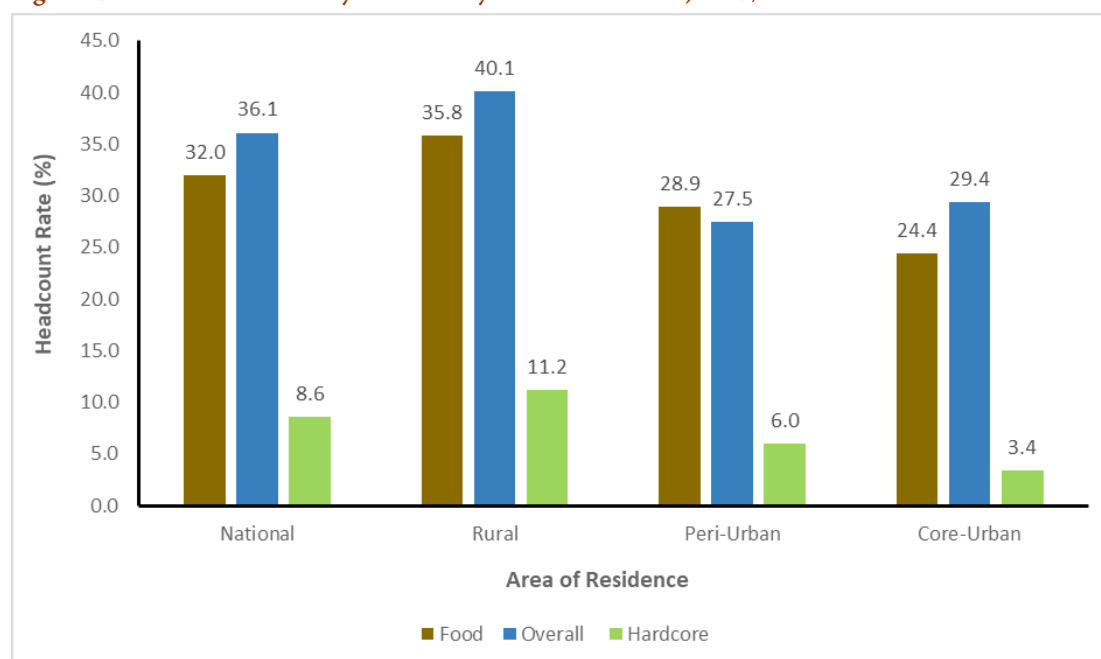


Table 19.3: Food, Overall and Hardcore Poverty Estimates (Individual) by Residence and County, 2015/16

| 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 |

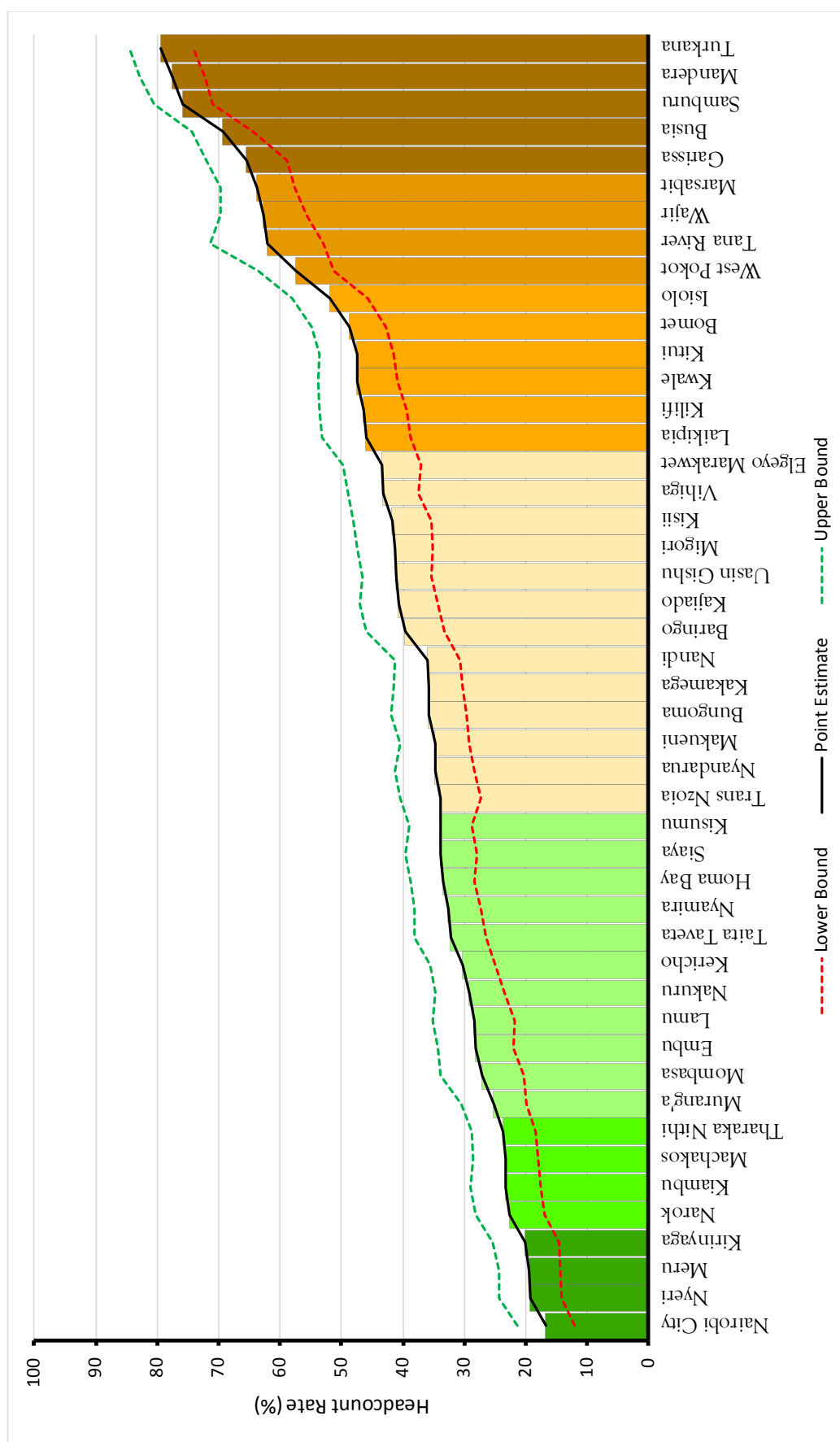
19.24. Meru and Nyeri counties registered the least food poverty incidence at 15.5 per cent each while Turkana county recorded the highest incidence of 66.1 per cent. Other counties that recorded higher food poverty incidence were; Mandera (61.9%), Samburu (60.1%), Busia (59.5%), West Pokot (57.3%), 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

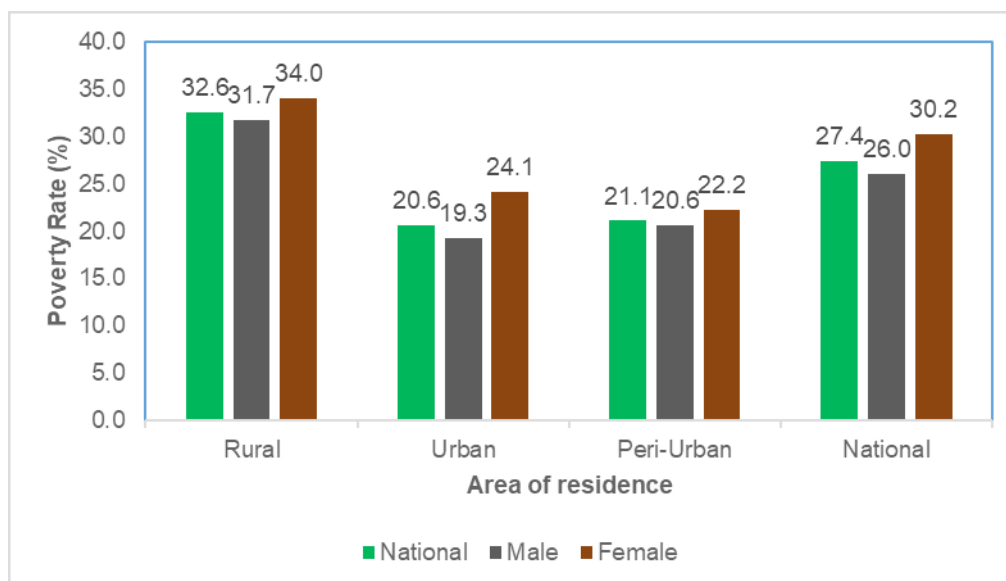
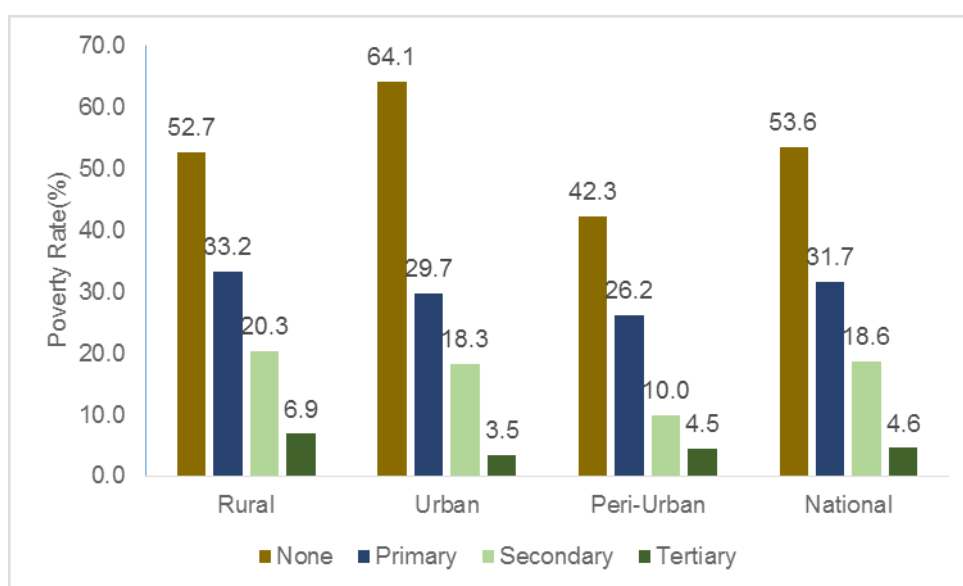


Figure 19.4: Overall Poverty by Education Level of Household Head, 2015/16



Highlights of the KIHBS 2015/16 Labour
Force Basic Report

Chapter
20

Overview

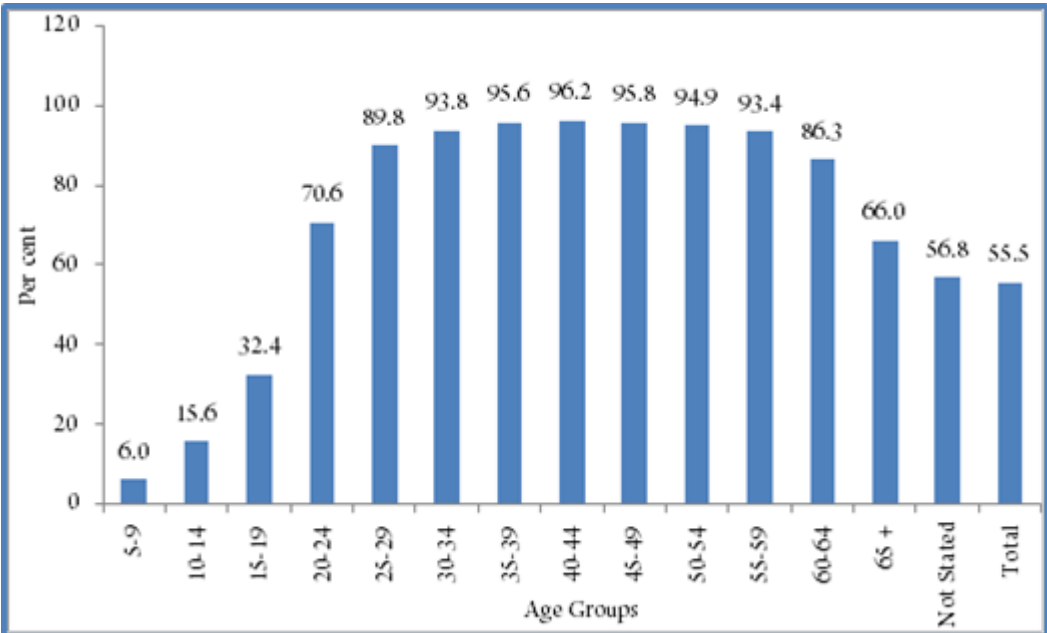
This chapter presents a summary of the labour force basic report which was compiled using data collected in the 2015/16 Kenya Integrated Household Budget Survey (KIHBS). The survey covered the whole country, and was mainly analysed at the national, urban and rural levels. Results presented here are mainly 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.

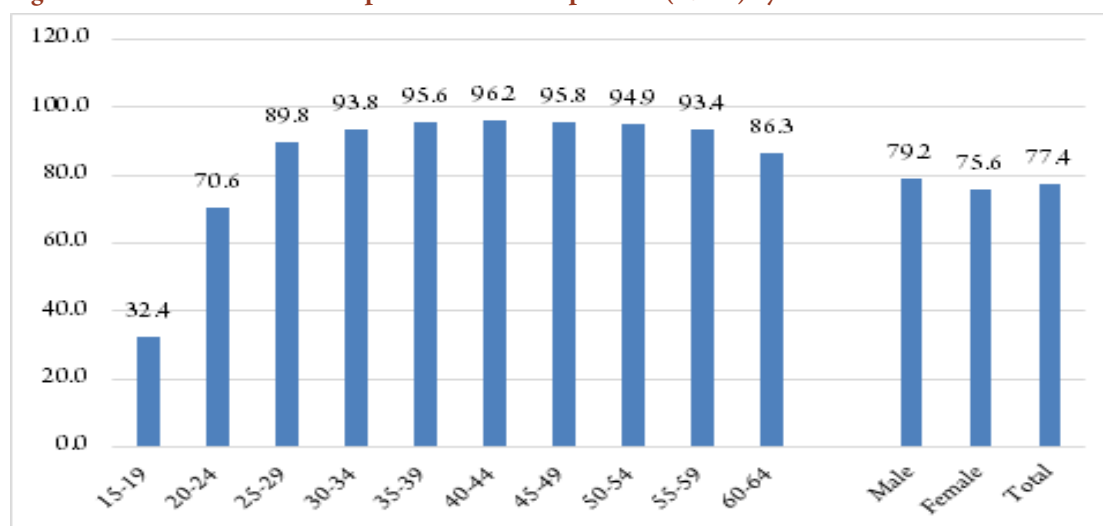
Table 20.2: Distribution of Working Age Population (15 - 64) by Employment, 2009 KPHC and 2015/16 KIHBS

| 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.

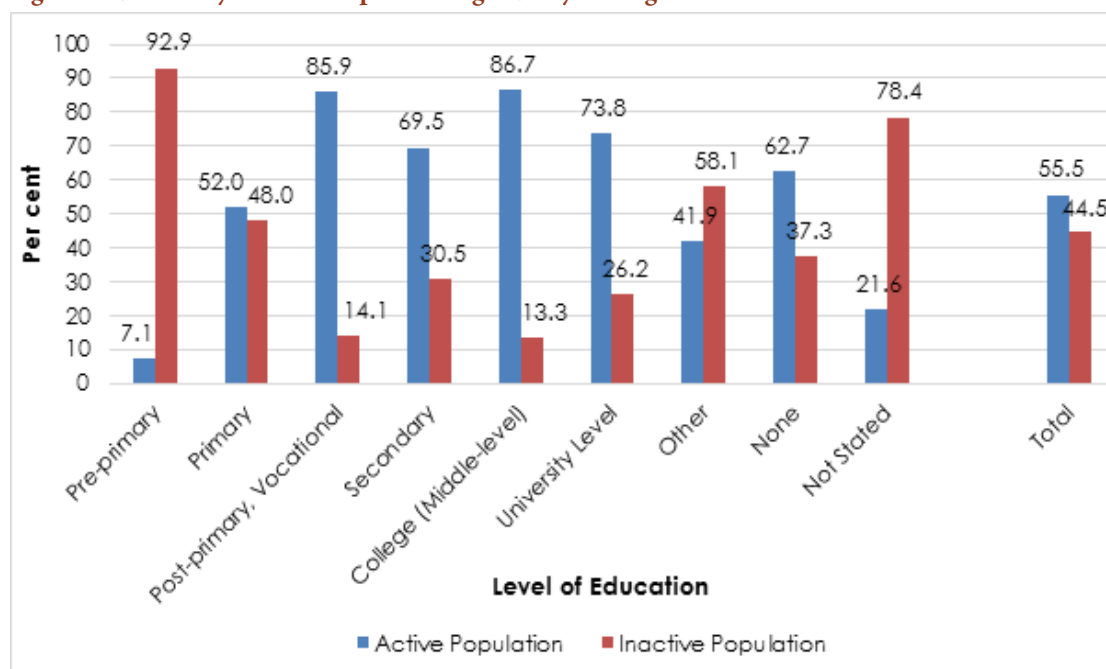
Figure 20.2: Labour Force Participation Rates for Population (15-64) by Sex



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

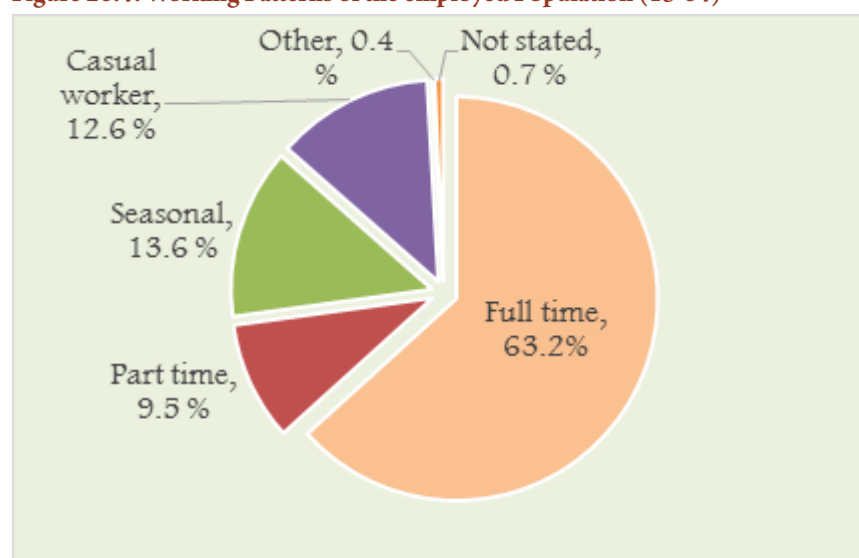
20.8. Data on hours of work are important in distinguishing the various intensities of employment. More so, the information is useful in monitoring the working conditions which impact on the health and wellbeing of workers as well as levels of productivity and labour costs. Most persons aged 15-64 years 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.

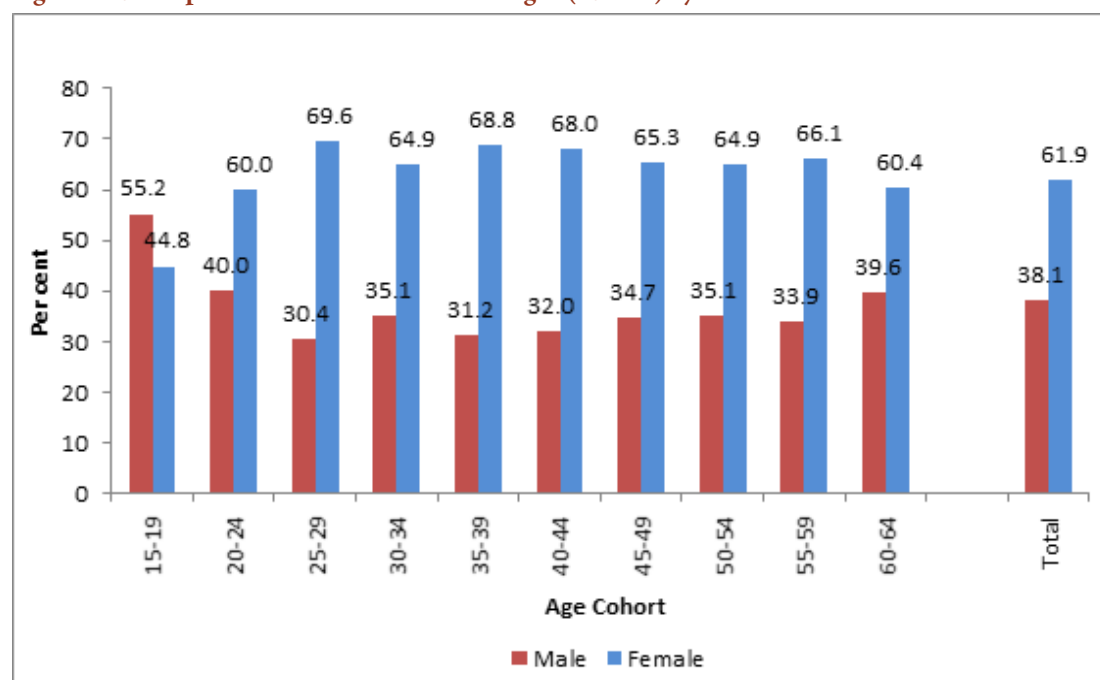
Figure 20.4: Working Patterns of the employed Population (15-64)



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

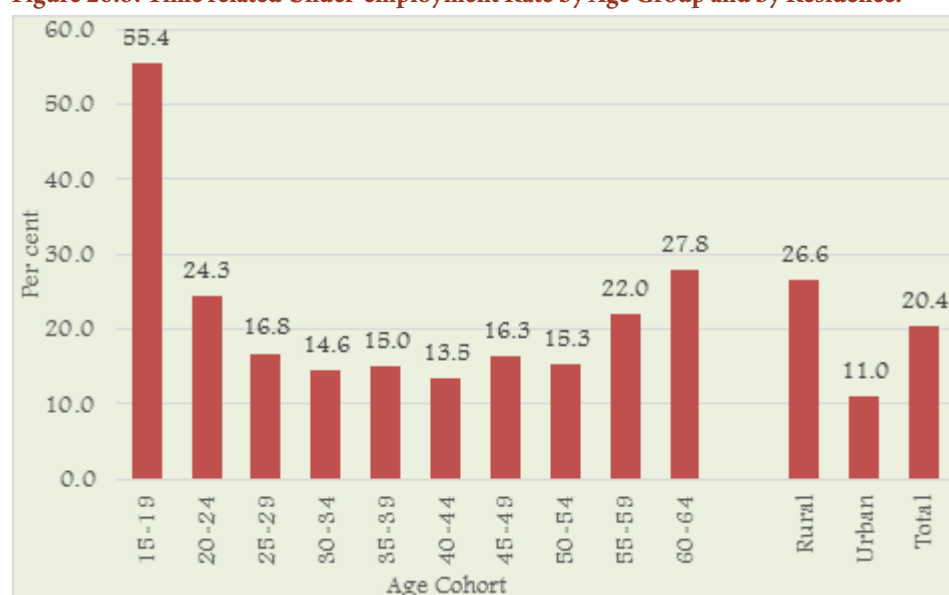
cut off of 35 hours per week, females accounted for 61.9 per cent of all part time workers. In absolute terms, across all age cohorts except “15-19”, there were more female part time workers than males. The highest difference in the number of part time workers between the two sexes was in the age category “25-29”.

Figure 20.5: Proportion of Part Time Workers Aged (15 – 64) by Sex



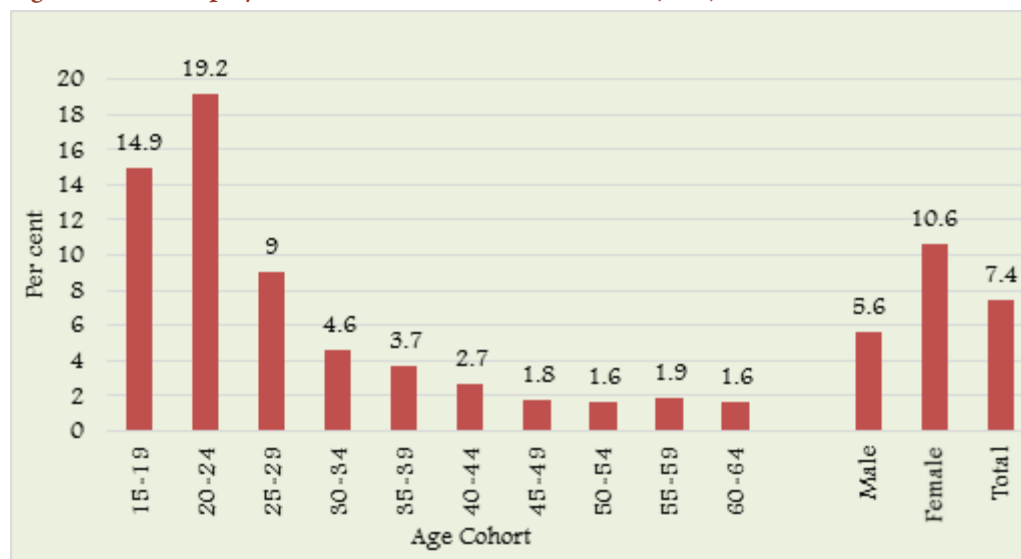
20.11. A person was classified as being Time-related Under-employed if one worked less than 28 hours a week, wanted to work additional hours, and was available to work additional hours if given an opportunity for more work. The indicator is used for assessing the extent to which available human resources 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:

$$\text{Labour Underutilisation (LU2)} = \frac{\text{time related underemployed} + \text{unemployed}}{\text{labour force}} \times 100$$

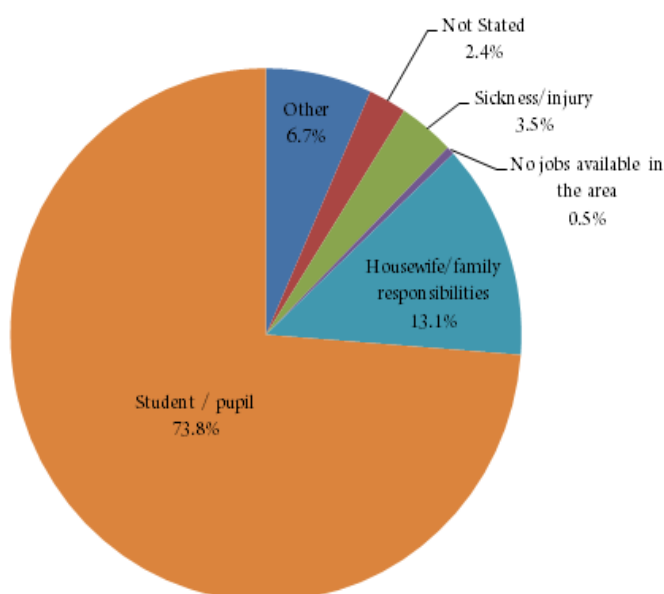
20.14. As shown in Figure 20.8, the total LU2 was 26.4 per cent with the highest rates of underutilization being observed in the age groups 15-29 and 55-64 years.

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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