KNBS
KENYA NATIONAL
BUREAU OF STATISTICS
*Keeping you informed*



# ECONOMIC SURVEY 2017

Kenya KENYA VISION 2030

# Economic Survey 2017

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# Foreword

**The Economic Survey is an annual publication of the Kenya National Bureau of Statistics (KNBS). It presents socio-economic highlights of the economy for the last five years. The report forms an important source of input into the budgeting, planning, monitoring and policy formulation processes.**

## Vision

**The Vision of the Bureau is "to be a centre of excellence in statistics production and management"**

## Mission

**The mission of the Bureau is "to effectively manage and coordinate the entire National Statistical System to enhance Statistical Production and Utilization".**

## Mandate

**The KNBS is a Semi Autonomous Government Agency (SAGA) mandated by law (Statistics Act 2006) to collect, analyze and disseminate socio-economic statistics needed for planning and policy formulation in the country.**

## Organization

**The Kenya National Bureau of Statistics comprises of six Directorates namely;**
**Production Statistics**
**Macroeconomic Statistics**
**Strategy and Development**
**Finance and Administration**
**Population and Social Statistics**
**Information and Communication Technology**

## Teamwork

**We are committed to face challenges and opportunities of the 21st Century together with our stakeholders.**

**Director General**
**Kenya National Bureau of Statistics**

# Metadata

Kenya National Bureau of Statistics is dedicated to presenting statistics produced according to internationally sound and scientific methods. Below are a few quality observations to be taken into account when using the statistics in Economic Survey 2017.

## Data sources

The statistics presented in Economic Survey 2017 are based on a wide variety of sources. In order to provide the most comprehensive picture of the economy and social situation in Kenya during 2016, KNBS has gathered data from its own surveys, surveys carried out by other institutions and administrative data collected by Ministries, Government Departments and Agencies.

The source of the data is always noted directly alongside the table or in the explanatory text. More details about the data may be obtained from the responsible primary data source agency.

## Accuracy and reliability

The surveys carried out by KNBS are primarily based on samples of the population. Although the sample surveys are representative of the total units, in some instances, sampling errors may occur, such as bias. Other non-sampling errors may also exist, such as due to respondent fatigue (when respondents do not answer a questionnaire, either fully or partially). However, the Surveys conducted by KNBS are always based on international standards and methods, and mitigation measures are always taken in order to minimize these errors. Whenever such errors occur, they are documented fully.

Data from administrative sources may also be subject to certain errors, such as undercoverage in the source (where it has not been possible to collect data) and differences in definitions and categorization.

## Periodicity

Some of the data presented cover the calendar year (e.g. 2016) and some cover financial years, (e.g. from July 2015 to June 2016, presented as 2015/16). Where necessary, the period covered by the data is specified in the table and/or the explanatory text.

## Consistency

Where data is available, KNBS has endeavoured to provide the same statistical tables as in previous years to enable consistency and trend comparison over time. In terms of consistency between data, some definitions and categories, such as age groups, may differ between datasets due to the varying data sources.

## Accessibility

Economic Survey reports, including this edition, are uploaded on KNBS´website for download free-of-charge in pdf format. The publication is also available in hard copy from KNBS at a small fee. Further details on the data are available from respective Directorates in KNBS.

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# List of Acronyms

| | |
|---|---|
| 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 |
| ASALs | Arid and Semi-Arid Lands |
| ASEAN | Association of South Eastern Asia Nations |
| ASFR | Age Specific Fertility Rate |
| ASMR | Age Specific Mortality Rate |
| ATM | Automatic teller machine |
| BAU | Business as Usual |
| BCG | Bacillus Calmete Guérin |
| BEC | Broad Economic Category |
| BH | Boreholes |
| BOP | Balance of Payments |
| BPS | Bits per Second |
| BRIICS | Brazil, Russia, India, Indonesia, China and South Africa |
| CA | Communications Authority of Kenya |
| CBA | Collective Bargaining Agreement |
| CBD | Central Business District |
| CBK | Central Bank of Kenya |
| CBR | Central Bank Rate |
| CDF | Constituency Development Fund |
| CDMA | Code Division Multiple Access |
| CFS | Container Freight Station |
| CIF | Cost, Insurance and Freight |
| 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 |
| COP 22 | The 22$^{nd}$ Session of the Conference Parties |
| CPI | Consumer Price Index |
| CRA | Commission on Revenue Allocation |
| CRB | Credit Reference Bureau |
| CRR | Cash Reserve Ratio |
| CUE | Commission for University Education |
| DAP | Daily Average Population |
| DBK | Development Bank of Kenya |
| DSA | Debt Sustainability Analysis |

| | |
|---|---|
| DSL | Digital subscriber Line |
| DWT | Deadweight Tons |
| DTSs | Deposit Taking Savings and Credit Co-operatives |
| EAC | East African Community |
| EACC | Ethics and Anti-Corruption Commission |
| EAOGS | East Africa Oil and Gas Summit & Exhibition |
| ECDE | Early Childhood Development Education |
| ECF | Extended Credit Facility |
| EEC | European Economic Commission |
| EEZ | Exclusive Economic Zone |
| EFA | Education For All |
| EFT | Electronic Funds Transfer |
| EIA | Environmental Impact Assessment |
| EIB | European Investment Bank |
| EMS | Expedited Mail Services |
| EPC | Export Promotion Council |
| EPP | Emergency Power Producers |
| EPS | Expanded Polystyrene |
| EPVs | Export Production Villages |
| EPZ | Export Processing Zone |
| EPZA | Export Processing Zone Authority |
| ERC | Energy Regulatory Commission |
| ETF | Exchange Traded Funds |
| EU | European Union |
| FAL | Foreign Assets and Liabilities |
| FBS | Food Balance Sheet |
| FDEI | Foreign Direct Equity Investment |
| FDI | Foreign Direct Investment |
| FIC | Full Immunization Coverage |
| FIS | Foreign Investment Survey |
| FM | Frequency Modulation |
| FOB | Free on Board |
| FOSA | Front Office Savings Activities |
| FPE | Free Primary Education |
| FDSE | Free Day Secondary Education |
| FSTE | Free Secondary Tuition Education |
| FY | Financial Year |
| GDP | Gross Domestic Product |
| GER | Gross Enrolment Rate |
| GFCF | Gross Fixed Capital Formation |
| GFS | Government Finance Statistics |
| GHG | Greenhouse Gas Emissions |
| GNDI | Gross National Disposal Income |
| GNI | Gross National Income |
| GOB | Gross Operating Balance |

| | |
|---|---|
| GoK | Government of Kenya |
| GPDEC | Global Partnership for Effective Development Cooperation |
| GPI | Gross Premium Income |
| GSM | Global System for Mobile Communication |
| GVA | Gross Value Added |
| GWh | GigaWatt Hours |
| HELB | Higher Education Loans Board |
| HIV | Human Immunodeficiency Virus |
| IC | Intermediate Consumption |
| ICDC | Industrial and Commercial Development Corporation |
| ICT | Information, Communication and Technology |
| IDA | International Development Association |
| IDB | Industrial Development Bank |
| ID | Identity Card |
| IDR | Import Dependency Ratio |
| IEBC | Independent Electoral and Boundaries Commission |
| IFAD | International Fund for Agricultural Development |
| IFMIS | Integrated Financial Management Information System |
| IFS | International Financial Services |
| IGAD | Intergovernmental Authority on Development |
| IMF | International Monetary Fund |
| INDCs | Intended Nationally Determine Contributions |
| IPP | Independent Power Producers |
| ISIC REV 4 | International Standard of Industrial Classification Revision 4 |
| ISPs | Internet Service Providers |
| IOCs | International Oil Companies |
| IT | Information Technology |
| JKIA | Jomo Kenyatta International Airport |
| KAPU | Kenya Airports Police Unit |
| KCB | Kenya Commercial Bank |
| KCPE | Kenya Certificate of Primary Education |
| KCSE | Kenya Certificate of Secondary Education |
| KE-CIRT | Kenya Computer Incident Response Team |
| KenGen | Kenya Electricity Generating Company |
| KeNHA | Kenya National Highways Authority |
| KenInvest | Kenya Investment Authority |
| KMTC | Kenya Medical Training College |
| KeRRA | Kenya Rural Roads Authority |
| KETRACO | Kenya Electricity Transmission Company |
| KFS | Kenya Forest Service |
| KIE | Kenya Industrial Estates |
| KNBS | Kenya National Bureau of Statistics |
| KOJ | Kisumu Oily Jetty |
| KOSF | Kipevu Oil Storage Facility |
| KPC | Kenya Pipeline Corporation |

| | |
|---|---|
| KPLC | Kenya Power and Lighting Company |
| KPRL | Kenya Petroleum Refinery Limited |
| KRA | Kenya Revenue Authority |
| KRB | Kenya Roads Board |
| KSh | Kenya Shillings |
| KTDC | Kenya Tourism Finance Corporation |
| KUC | Kenya Utalii College |
| KURA | Kenya Urban Roads Authority |
| KW | Kilo watt |
| KWS | Kenya Wildlife Service |
| L | Overall Liquidity |
| LATF | Local Authority Transfer Fund |
| LFS | Labour Force Survey |
| LLO | Local Loop Operators |
| LPG | Liquefied Petroleum Gas |
| LTM | Long Term Mean |
| M1 | Narrow Money Supply |
| M2 | Broad Money Supply (Money supplied by CBK, Commercial banks & NBFIs) |
| M3 | Broad Money Supply (M2 plus Foreign Currency Holdings by Residents) |
| M.A.B | Moi Air Base meteorological Station |
| MAM | March April May long rains |
| Mbps | Megabits per second |
| MCA | Members of County Assembly |
| MCH | Maternal and Child Health |
| MDER | Minimum Dietary Energy Requirement |
| MDAs | Ministries, Departments and Agencies |
| MDP | Management Development Programme |
| MEWNR | Ministry of Environment, Water and Natural Resources |
| MG | Metre Gauge |
| MIA | Moi International Airport |
| MICE | Meetings, Incentives, Conferences and Exhibitions |
| MLND | Maize Lethal Necrosis Disease |
| MMS | Multimedia Messaging Service |
| MoAL&F | Ministry of Agriculture, livestock and Fisheries |
| MoE | Ministry of Education |
| MoE&P | Ministry of Energy and Petroleum |
| MoH | Ministry of Health |
| MPC | Monetary Policy Committee |
| MTP | Medium Term Plan |
| MTP II | Second Medium Term Plan |
| MW | Mega Watt |
| MVNO | Mobile Virtual Network Operator |
| n.e.c | Not elsewhere classified |
| NBFI | Non-Bank Financial Institutions |

| | |
|---|---|
| NCC | Nairobi City Council |
| NCCAP | National Climate Change Action Plan |
| NCPB | National Cereals and Produce Board |
| NEMA | National Environment Management Authority |
| NER | Net Enrolment Rate |
| NFA | Net Foreign Assets |
| NFE | Non Formal Education |
| NFS | Non Formal Schools |
| NHC | National Housing Corporation |
| NHIF | National Hospital Insurance Fund |
| NIB | National Irrigation Board |
| NIP | National Incomes Policy |
| NOB | Net Operating Balance |
| NOCK | National Oil Corporation of Kenya |
| NPA | National Plan of Action |
| NPISH | Non-Profit Institutions Serving Households |
| NPS | 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 |
| OPV | Oral Polio Vaccine |
| OVC | Orphans and Vulnerable Children |
| OTTs | Over The Tops |
| PAYE | Pay As You Earn |
| PCK | Postal Corporation of Kenya |
| PCR | Pupil Completion Rate |
| PGN | Policy Guidance Note |
| PI | Portfolio Investment |
| PPI | Producer Price Index |
| PPPs | Public Private Partnerships |
| PSDA | Private Sector Development Authority |
| PSVs | Public Service Vehicles |
| PTR | Pupil Teacher Ratio |
| REA | Rural Electrification Authority |
| REIT | Real Estate Investment Trust |
| REP | Rural Electrification Programme |
| RMLF | Roads Maintenance Levy Fund |
| RSI | System of Rice Intensification |
| SACCO | Savings and Credit Cooperative Societies |

| | |
|---|---|
| SADC | Southern African Development Community |
| SAGA | Semi Autonomous Government Agency |
| SASRA | Sacco Societies Regulatory Authority |
| SDD | Special Dimensions of Development |
| SDGs | Sustainable Development Goals |
| SDRs | Special Drawing Rights |
| SEZ | Special Economic Zones |
| SG | Standard Gauge |
| 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 |
| SPF | Social Protection Fund |
| SSA | Sub-Saharan Africa |
| SSR | Self Sufficiency Ratio |
| STIs | Sexually Transmitted Infections |
| TICAD | Tokyo International Conference on African Development |
| TEAMS | The East Africa Marine System |
| TEUs | Twenty-Foot Equivalent Units |
| TIVET | Technical Industrial and Vocational Educational Training |
| TVETA | Technical Vocational Educational Training Authority |
| TLB | Transport Licensing Board |
| TOT | Total Rainfall |
| 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 |
| UoN | University of Nairobi |
| US$/BBL | US Dollar per Barrel |
| USD | United States Dollar |
| US /USA | United States of America |
| 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 |
| WSB | Water Services Board |
| WSIS | World Summit on the Information Society |
| WSPs | Water Services Providers |
| WTO | World Trade Organization |

# Summary and Outlook

## International Scene

The global economy is estimated to have expanded by 2.9 per cent in 2016 compared to a revised growth of 3.1 per cent in 2015. Growth in advanced economies expanded by 2.1 per cent in 2016 compared to 1.9 per cent in 2015. The United States of America recorded a growth of 1.5 per cent in 2016 compared to 2.6 per cent in 2015, mainly due to weak exports, subdued investments and uncertainty surrounding the 2016 elections. Growth in China decelerated on account of slowed investment as the economy rebalanced towards services and consumption. In Japan, growth was boosted by private consumer spending, signaling improved consumer purchasing power after two years of contraction. The Sub-Saharan Africa's real gross domestic product is estimated to have grown by 1.5 per cent in 2016 compared to 3.8 per cent growth registered in 2015.

Global inflation was estimated at 2.9 per cent compared to 2.8 per cent recorded in 2015. In emerging markets and developing economies, headline inflation remained steady as currencies remained broadly stable, or appreciated in some cases. Growth of the global trade slowed in 2016 to 1.9 percent from 2.6 per cent growth in 2015. Global unemployment rate was estimated at 5.7 per cent in 2016 compared to 5.8 per cent in 2015.

## Domestic Economy

Kenya's Gross Domestic Product (GDP) is estimated to have expanded by 5.8 per cent in 2016 compared to a revised growth of 5.7 per cent in 2015. Accommodation and food services recorded improved growth of 13.3 per cent in the year under review compared to a contraction of 1.3 per cent in 2015. The other sectors that registered significant improved performance in economic activities were in the information and communication; real estate; and transport and storage. Persistent drought hampered growth in the fourth quarter of 2016 impacting negatively on agriculture and electricity supply. On the other hand, growth in construction; mining and quarrying; and financial and insurance activities decelerated in 2016. From the demand side, growth was buoyed by consumption in both the public and private sector.

Annual average inflation eased to 6.3 per cent in 2016 compared to an average of 6.6 per cent in 2015. This was mainly due to decline in prices of transportation; housing and utilities; and communication. The Shilling strengthened against the Pound Sterling, South African Rand, Ugandan Shilling, Tanzanian Shilling and the Rwandan Franc but weakened against the US Dollar, Euro, and the Yen in 2016. The capping of interest rates to a maximum of 4.0 per cent above the Central Bank Rate (CBR) resulted in a significant decline in interest rates during the month of September to 13.84 per cent compared to 16.75 in a similar month in 2015. Domestic credit slowed from a growth of 20.8 per cent in 2015 to 6.4 per cent in 2016 mainly on account of a decline in credit to the private sector. The current account deficit narrowed to KSh 370.8 billion in 2016 from a deficit of KSh 421.1 billion in 2015. The fiscal deficit in 2016/17 as a percentage of GDP is expected to rise to 9.9 per cent compared to 8.6 per cent in 2015/16.

## Social Scene

National Government total expenditure on the social sector is expected to increase by 23.3 per cent to KSh 495.5 billion in 2016/17. Total recurrent expenditure is expected to grow by 17.5 per cent while total development expenditure is expected to substantially increase by 57.5 per cent. The gross recurrent expenditure for the Ministry of Education including that of

Teachers Service Commission is expected to rise by 13.5 per cent from KSh 280.3 billion in 2015/16 to KSh 318.2 billion in 2016/17. The recurrent and development expenditures for Youth Empowerment and Development is expected to increase by 20.8 per cent and 25.7 per cent, respectively.

Total enrolment in pre-primary schools rose marginally to 3.2 million while enrolment in primary schools increased by 2.0 per cent to 10.3 million in 2016. Enrolment in Secondary schools rose by 6.3 per cent to 2.7 million during the period under review. University enrolment is expected to grow by 10.5 per cent to 564.5 thousand in 2016/17 while enrolment in Technical and Vocational Education Training (TVET) increased from 153.3 thousand to 202.6 thousand in the same period. The number of loan applicants and beneficiaries in public and private universities; and TVET institutions is expected to increase by 10.3 per cent and 10.4 per cent in 2016/17, respectively. The amount of bursary awarded to students in public universities and TVET colleges is expected to grow by 7.2 per cent to KSh 231.7 million in 2016/17.

Overall membership of National Hospital Insurance Fund (NHIF) grew by 16.5 per cent to 6.1 million in 2015/16. The formal sector continued to contribute the largest share of the total membership representing 58.9 per cent. The number of registered employees by NSSF rose by 9.5 per cent while the annual contributions went up by 9.6 per cent in 2016. Similarly, annual benefits paid to members increased from KSh 3,091 million in 2015 to KSh 3,121 million in 2016. Government loans disbursed through the Uwezo Fund is expected to increase by 5.9 per cent to KSh 5.4 billion in 2016/17.

## Employment and Earnings

In 2016, the economy generated a total of 832.9 thousand new jobs of which 85.6 thousand were in the modern sector while 747.3 thousand were in the informal sector. Wage employment in the private sector increased by 3.3 per cent from 1,759.6 thousand persons in 2015 to 1,817.2 thousand persons in 2016. Within the public sector, wage employment increased from 718.4 thousand persons in 2015 to 737.1 thousand persons in 2016.

Nominal wage earnings increased by 9.1 per cent from KSh 1,509.1 billion in 2015 to KSh 1,647.1 billion in 2016. Total wage payments in the public sector increased by 9.1 per cent from KSh 461.7 billion in 2015 to KSh 503.5 billion in 2016. The share of County Governments wage payments to the total public sector was 19.1 per cent in 2016. Wage payments in the private sector increased by 9.2 per cent to KSh 1,143.6 billion in 2016. Annual average wage earnings grew by 5.9 per cent to KSh 644,837.7 in 2016. Annual inflation decelerated from 6.6 per cent in 2015 to 6.3 per cent in 2016 largely due to reduced costs of petroleum products and tight monetary policies.

## Money, Banking and Finance

In 2016, the monetary policy adopted was aimed at supporting a non-inflationary credit expansion to key sectors of the economy and continued anchoring of inflation expectations, while promoting stability in the foreign exchange market. The Kenya Shilling (KSh) weakened against major currencies and averaged KSh 101.5 per USD in 2016 compared to KSh 98.2 per USD in 2015.

The period witnessed the amendment of the Banking Act which introduced capping of interest rates on credit facilities. The amendment aimed at protecting borrowers from high interest rates, thus making loans affordable. In the review period, the CBR, was revised downwards

twice, to 10.50 per cent in June and 10.00 per cent in December. However, it remained at 11.50 per cent during the first half of the year.

The 91 day Treasury bill rate dropped from 9.81 per cent in December 2015 to 7.25 per cent in June 2016 and rose to 8.44 per cent in December 2016. The overall inflation stood at 6.35 per cent in December 2016 compared with 8.01 per cent in the same period of 2015.

In 2016, growth in M3 slowed down from 14.1 per cent in December 2015 to 3.6 per cent. The Net Foreign Assets (NFA) held by the banking system increased from KSh 491.5 billion in December 2015 to KSh 495.5 billion in December 2016. Similarly, overall domestic credit growth decelerated from 20.8 per cent in 2015 to 6.4 per cent, with credit to private sector expanding by 4.3 per cent in 2016 compared to 18.0 per cent in 2015.

The Nairobi Securities Exchange (NSE) 20-Share Index increased to 3,982 points in the first quarter of 2016 but declined through to the fourth quarter to 3,186 points in December 2016. Total liabilities of life insurance increased by 11.8 per cent to KSh 260.1 billion in 2016 from KSh 232.7 billion in 2015, while total assets grew by 13.5 per cent to KSh 305.4 billion in 2016. Gross premium income grew by 19.3 per cent to KSh 73.1 billion in 2016 compared to 8.4 per cent growth recorded in 2015. Net premium income registered an accelerated growth of 19.6 per cent in 2016 from an increase of 7.4 per cent in 2015. In the pensions sub-sector, the retirement benefit assets grew from KSh 800 billion in June 2015 to KSh 830 billion in June 2016.

Overall growth of the financial sector decelerated from 9.4 per cent in 2015 to 6.9 per cent in 2016. Banking sector including other monetary intermediation declined from a growth of 10.1 per cent in 2015 to 7.1 per cent in 2016. The insurance sector recorded a growth of 5.3 per cent in 2016 compared to 5.0 per cent in 2015.

### Public Finance

In 2016/17, the National Government has budgeted to spend a total of KSh 2,496.1 billion compared to KSh 2,047.4 billion spent in 2015/16. Of the total budgeted amount, KSh 1,449.6 billion is allocated for recurrent expenditure while KSh 1,046.5 billion is allocated for development expenditure. In addition, Government has budgeted KSh 467.5 billion for public debt servicing, and KSh 284.8 billion as current grants to County Governments.

The government estimates to receive KSh 1,566.5 billion as revenue, of which KSh 1,338.3 billion is tax revenue. As at June 2016, the total stock of public debt amounted to KSh 3,203.3 billion, of which domestic debt accounted for 43.9 per cent of this stock. In 2016/17, County Governments are estimated to spend KSh 360.0 billion, with an estimated revenue of KSh 361.5 billion.

### International Trade and Balance of Payments

Total exports declined marginally from KSh 581.0 billion in 2015 to KSh 578.1 billion in 2016 while total imports contracted by 9.2 per cent from KSh 1,577.6 billion to KSh 1,431.7 billion. This led to improvement in balance of trade from KSh 996.5 billion in 2015 to KSh 853.7 billion, in 2016. Similarly, the export-import ratio improved from 36.8 per cent to 40.4 per cent over the same period. Tea, horticulture, articles of apparel and clothing accessories, and coffee were the leading export earners accounting for 56.7 per cent of the total domestic exports during the review period.

Africa remained the leading destination of Kenya's exports; accounting for 40.6 per cent of total exports in 2016, with EAC accounting for slightly more than half of total exports to Africa. Exports to Europe accounted for 24.5 per cent of total exports in 2016, with the bulk of exports destined to the European Union (EU) countries. Asia accounted for 66.8 per cent of total value of imports in 2016 continuing its dominance as the leading source of Kenya's imports.

The gross foreign reserves reduced slightly by 0.8 per cent to KSh 736.5 billion as at December 2016, while the net foreign assets of Central Bank increased marginally by 1.0 per cent to KSh 643.1 billion as at December 2016. The Central Bank's foreign liabilities reduced by 12.3 per cent to KSh 91.4 billion as at December 2016. Trade weighted exchange rate index deteriorated from 114.3 in 2015 to 114.8 in 2016, a reflection of the depreciation of the Kenya Shilling against the currencies of the major trading partners.

The overall balance of payments position improved from a deficit of KSh 24.9 billion in 2015 to a surplus of KSh 13.1 billion in 2016. The current account balance narrowed by 11.9 per cent to a deficit of KSh 370.8 billion in 2016, reflecting a 5.2 per cent of Gross Domestic Product (GDP). Net inflows of international trade in services increased by 32.7 per cent to a surplus of KSh 171.7 billion in 2016, supported by increased foreign travel receipts. Net financial inflows rose by 9.5 per cent to a surplus of KSh 420.0 billion in 2016, on account of increased in short term capital inflows.

## Agriculture

The agriculture sector registered a decelerated growth of 4.4 per cent in 2016 from a revised growth of 7.2 per cent. The volume of marketed milk increased by 5.6 per cent from 615.9 million litres in 2015 to 650.3 million litres in 2016. The value of marketed milk increased from KSh 21.2 billion in 2015 to KSh 23.0 billion in 2016. Tea and coffee production increased by 18.5 per cent and 10.8 per cent to 473.0 thousand tonnes and 46.1 thousand tonnes, respectively in 2016. Earnings from fresh horticulture exports increased by 12.3 per cent from KSh 90.4 billion in 2015 to KSh 101.5 billion in 2016.

Maize production declined from 42.5 million bags in 2015 to 37.1 million bags in 2016. Sugarcane production reduced from 7.2 million tonnes in 2015 to 7.1 million tonnes in 2016. Wheat production declined from 238.6 thousand tonnes in 2015 to 222.4 thousand tonnes in 2016.

## Environment and Natural Resources

There was mixed performance in the selected indicators on environmental and natural resources in 2016. The overall expenditure on water and related services is expected to increase by 32.2 per cent from KSh 41.3 billion in the 2015/16 to KSh 54.6 billion in the 2016/17. Acreage under Government forest plantation stocking expanded slightly from 130.5 thousand hectares in 2015 to 131.3 thousand hectares in 2016. Total mineral output increased by 9.5 per cent from 1,571.9 thousand tonnes in 2015 to 1,720.6 thousand tonnes in 2016. Total quantity of fish landed declined from 146.3 thousand tonnes in 2015 to 128.6 thousand tonnes in 2016. This is reflected by the falling trend in fish production from all fresh water lakes and marine sources except for molluscs.

## Energy

High global crude oil production and inventories levels led to a reduction in international oil prices in 2016. Consequently, crude prices for Murban decreased to an average of 44.18 US

Dollars per barrel in 2016 from an average of US Dollars 52.53 per barrel in 2015. The volume of petroleum products imports expanded by 9.5 per cent from 4,431.7 thousand tonnes in 2015 to 4,852.4 thousand tonnes in 2016. Total import bill of petroleum products declined by 12.6 per cent to KSh 197.5 billion from KSh 226.1 in 2015. Total demand for petroleum products increased by 6.5 per cent to 5,046.9 thousand tonnes. Total installed electricity generating capacity declined to 2,325.7 Mega-Watt (MW) as at December 2016. Total electricity generation increased from 9,514.9 Giga-Watt hours (GWh) in 2015 to 10,057.7 GWh in 2016. Hydro power generation increased to 3,959.9 GWh in 2016. The number of connections under the Rural Electrification Programme (REP) rose by 38.2 per cent to stand at 972,018 customers as at the end of June 2016 from 703,190 customers in 2015.

### Manufacturing

The manufacturing sector recorded a real growth of 3.5 per cent in 2016 compared to a revised growth of 3.6 per cent in 2015. The growth was as a result of reduced cost of production and increased volume output. Cement production increased by 5.6 per cent from 6,352.9 thousand tonnes in 2015 to 6,707.2 thousand tonnes in 2016. The Producer Price Index (PPI) increased marginally by 0.2 per cent in 2016. The increase was due to stability of prices of imported raw materials and reduced cost of electricity. Credit to manufacturing sector decreased by 4.6 per cent from KSh 290.9 billion in 2015 to KSh 277.4 billion in 2016.

In the year under review, formal employment in the manufacturing sector went up marginally by 1.8 per cent to 300.8 thousand persons in 2016. The Export Processing Zones (EPZ) experienced growth in most of its performance indicators in 2016. Total capital investment of EPZ enterprises increased from KSh 48.1 billion in 2015 to KSh 51.2 billion in 2016.

### Building and Construction

The construction industry grew by 9.2 per cent in 2016 from an expansion of 13.9 per cent registered in 2015. Increased activity in the construction of roads and development of housing also translated to an increase in employment in the sector from 148.6 thousand jobs in 2015 to 163.0 thousand jobs in 2016. Construction of Phase I of the Standard Gauge Railway (SGR) was at the final stages of completion as at the end of 2016.

Overall expenditure on roads is expected to increase by 38.3 per cent from KSh 113.2 billion in 2015/16 to KSh 156.5 billion in 2016/17. Total development expenditure is also expected to grow by 31.7 per cent from KSh 87.8 billion in 2015/16 to KSh 115.6 billion in 2016/17. Development expenditure on trunk and primary roads is expected to grow by 36.2 per cent from KSh 51.6 billion in 2015/16 to KSh 70.3 billion in 2016/17.

Disbursement of funds from the Roads Maintenance Levy Fund (RMLF) by Kenya Roads Board (KRB) to various road agencies and county governments is anticipated to increase significantly to KSh 40.9 billion in 2016/17 from KSh 25.4 billion in 2015/16.

National Housing Corporation (NHC), the government agency for housing, undertook several housing activities in 2016, at a total cost KSh 877.9 million. The value of reported new buildings completed in Nairobi registered a growth of 7.6 per cent to KSh 76.2 billion in 2016. The value of reported building plans approved in Nairobi increased by 43.3 per cent from KSh 215.2 billion in 2015 to KSh 308.4 billion in 2016.

The index of government expenditure on roads increased from 350.3 in 2015 to 461.0 in 2016 following an increase in road construction projects. Consumption of cement, a major input in

construction of buildings and civil works, rose further by 10.5 per cent from 5,708.8 thousand tonnes in 2015 to 6,302.0 thousand tonnes in 2016. Credit to the construction industry went down marginally from KSh 106.3 billion in 2015 to KSh 104.8 billion in 2016.

### Tourism

Tourism sector had a remarkable recovery because of improved security and successful conference tourism in 2016. In addition, the sector benefited from aggressive marketing in the domestic and international markets. Therefore, receipts accruing to the tourism sector earnings improved to KSh 99.7 billion in 2016 compared to KSh 84.6 billion in 2015, translating to an increase of 17.8 per cent. The number of international visitor arrivals rose by 13.5 per cent to 1,339.7 thousand in 2016. The number of hotel bed-nights occupancy rose by 9.7 per cent from 5,878.6 thousand in 2015 to 6,448.5 thousand in 2016. Local conferences held increased by 17.4 per cent from 3,199 in 2015 to 3,755 in 2016. Likewise, the number of international conferences held expanded by 4.1 per cent from 218 in 2015 to 227 in 2016. Museums, snake parks and historical sites reported a 15.7 per cent increase in the number of visitors recording 923.1 thousand in 2016 compared to 797.5 thousand in 2015. Similarly, visitors to national parks and game reserves rose by 17.0 per cent to 2,284.7 thousand in 2016.

### Transport and Storage

The value of output for the transport and storage sector increased by 7.2 per cent from KSh 928.3 billion in 2015 to KSh 994.7 billion in 2016. Output of the road transport sub-sector grew by 6.1 per cent to KSh 667.1 billion while that of the railway transport sub-sector declined by 9.9 per cent to KSh 5.7 billion in 2016.

Total cargo throughput handled at the Port of Mombasa rose by 2.4 per cent to 27,364 thousand tonnes in 2016 while container traffic increased by 1.4 per cent to 1.1 million Twenty-foot Equivalent Units (TEUs) in the review period. Total pipeline throughput of white petroleum products expanded by 2.8 per cent to 5,872.9 thousand cubic metres in 2016. On the other hand, the volume of white petroleum products transported through the pipeline for domestic consumption expanded by 9.0 per cent to 4,018.6 thousand cubic metres in the review period.

The performance of the air transport sub-sector improved during the review period, with the total commercial passengers handled increasing by 11.7 per cent to 10.0 million in 2016. Total passengers handled at Jomo Kenyatta International Airport (JKIA) rose by 9.7 per cent to 7.1 million in 2016 while those handled at Moi International Airport (MIA) rose by 7.6 per cent to 1.3 million during the same period.

The number of road transport licenses issued increased by 2.8 per cent to 123,386 in 2016 with the number of Public Service Vehicle (PSV) licenses issued increasing by 9.3 per cent to 33,349 in 2016. The number of reported traffic accidents dropped marginally to 5,296 in 2016 while reported casualties from accidents rose by 8.4 per cent to 13,159 in 2016. Newly registered motor vehicles and motor cycles dropped by 13.5 per cent to 213,715 in 2016.

### Information and Communication Technology

The value of ICT output increased by 11.1 per cent from KSh 280.0 million in 2015 to KSh 311.1 million in 2016. The penetration rate for mobile subscriptions improved to 85.9 per cent in 2016 from 85.4 per cent in 2015. Wireless subscriptions per 100 inhabitants increased from 54 in 2015 to 59 in 2016. Mobile money subscriptions per 100 inhabitants increased from 61 in 2015 to 71 in 2016. The value of money transacted through mobile phones increased from KSh 2.8 trillion in 2015 to KSh 3.4 trillion in 2016. The number of mobile money transactions

grew by 37.0 per cent from 1,114.2 million in 2015 to 1,526.2 million in 2016. In 2016, there were 928.2 thousand mobile commerce (m-commerce) transactions with a value of KSh 1.8 trillion. Fixed telephone line capacity more than doubled from 75 thousand in 2015 to 179 thousand lines in 2016 mainly attributed to recommissioning of fixed network services during the review period.

The number of Internet Service Providers (ISPs) increased from 221 in 2015 to 242 in 2016 while estimated internet users increased by 11.0 per cent to 39.4 million in the review period. Bandwidth capacity increased by 30.8 per cent to 2,028,743 mega bytes per second (mbps) in 2016 while demand for mobile broadband increased by 76.4 per cent to 12.5 million subscribers in 2016.

The cost of installing fixed telephone increased by 38.5 per cent from KSh 3,394 in 2015 to KSh 4,699 in 2016. Subscription fees for residential and business telephone services increased to KSh 750 and KSh 1,000 in 2016, respectively.

The number of TV frequencies increased from 302 recorded in 2015 to 312 in 2016. The total number of mobile transceivers grew by 12.9 per cent from 109,294 in 2015 to 123,380 in 2016.

The third generation (3G) transceivers increased by 59.7 per cent to 30,818 while the second generation (2G) transceivers rose by 2.9 per cent to 92,562 during the review period. Overall, gender disparity in the use of ICT remained low but tends to favour male users in 2016.

### Governance

The Government continued to implement various institutional reforms to improve Governance in 2016. The reforms included; vetting of police officers, installation of a national secure communication network and surveillance system for the National Police Service (NPS) in Nairobi and Mombasa, and introduction of a 'Roadmap Toolkit' to guide training of police officers. During the same period, additional armored vehicles as well as transport trucks were procured to enhance capacity of the police to respond to emerging security threats. In the review period, the Judiciary operationalized the Employment and Labour Relations Court, formerly the Industrial Court, and the Environment and Land Court to High Court status.
In 2016, the number of crimes reported to the police increased by 6.2 per cent to 76,986. Similarly, the number of persons reported to have committed crime increased by 3.8 per cent to 73,221 in 2016. The number of cases filed in the Law courts declined by 37.1 per cent to 226,554 while cases disposed of decreased by 29.8 per cent to 191,386. However, pending cases increased by 7.6 per cent to 498,320 in 2016. The number of judicial officers decreased marginally from 616 in 2015 to 611 in 2016. The total number of corruption reports forwarded to Office of the Director of Public Prosecutions (ODPP) increased from 117 in 2014/15 to 167 in 2015/16. The Ethics and Anti-Corruption Commission traced public assets valued at KSh 3.6 billion, recovered assets valued at KSh 420.6 million and averted a loss of assets worth KSh 2.6 billion in 2015/16.

Total prison population, which comprise of all persons committed to prison regardless of duration during the reference period decreased slightly by 5.3 per cent to 210,227. The daily average prison population declined by 6.8 per cent to 50,900.

The number of applications for identity cards for persons Not Previously Registered (NPR) increased from 1.1 million in 2015 to 1.5 million in 2016 while NPR cards produced increased

by 75.3 per cent to 1,431.1 thousands in 2016. The number of registered voters stood at 15,961,627 by the end of 2016 following the updating of voters register as a result of the mass voter registration exercise conducted in 2015. The registered refugee population declined by 16.7 per cent from 593,881 in 2015 to 494,863 in 2016 mainly attributed to the voluntary repatriation of refugees from the Dadaab camp.

## Outlook

Economic growth in 2017 is likely to be influenced more by the domestic factors than external ones. The long rains are projected to delay and to be depressed in 2017, which is likely to have a direct negative impact on growing of crops, production of livestock and its products, electricity generation and water supply. Due to the share of agricultural contribution to the GDP, there will be a lower rural demand for goods and services. The impacts could further be experienced in sectors that have strong interlinkages with these industries.

If the deceleration in growth of credit that started in 2016 continues, it is likely to constrain growth in 2017 especially in activities that are reliant on borrowing from commercial banks. Furthermore, sectors such as manufacturing are encountering more intensified competition in their traditional export markets which could delay the recovery in that sector. However, the expected commencement of operations of railways services on the Standard Gauge Railway (SGR) is likely to increase efficiency while other modes of transport are expected to continue in the current growth trajectory. The overall performance is therefore likely to be determined by the extent of each of these effects.

International oil prices are projected to rise in 2017 albeit gradually. If this occurs, growth in the road transport is likely to be suppressed due to rise in cost of intermediate inputs. The exchange rate is expected to remain stable due to significant level of reserves, the continued growth in emigrant remittances and sustainability of the current account deficit.

On the demand side, growth is likely to be driven by both the public and private final consumption. Public final consumption is projected to expand as reflected in the 2017/18 national budget. Similarly, private consumption is likely to remain robust in 2017 and therefore boost economic growth. On the external front, world trade is projected to improve while the expansion of global economy is expected to be strong in 2017. Similarly, majority of Kenya's main European trading partner are likely to sustain strong growths and therefore support the domestic economy.

## Table 0: Key Economic and Social Indicators, 2012 - 2016

| | DESCRIPTION | Unit | 2012 | 2013 | 2014 | 2015 | 2016* | |
|---|---|---|---|---|---|---|---|---|
| 1 | Population | (Million) | 40.7 | 41.8 | 43.0 | 44.2 | 45.4 | |
| 2 | Growth of GDP at Constant Prices | (Per cent ) | 4.5 | 5.9 | 5.4 | 5.7 | 5.8 | |
| 3 | GDP at Market Prices : | (KSh Mn) | 4,261,370.0 | 4,745,143.4 | 5,402,410.0 | 6,260,646.3 | 7,158,695.0 | |
| 4 | Total value of petroleum products | (KSh Mn) | 307,556.1 | 291,622.6 | 335,671.3 | 226,125.7 | 197,528.3 | |
| 5 | Trade balance | (KSh Mn) | -856,740.0 | -911,029.2 | -1,081,085.3 | -996,511.7 | -853,678.0 | |
| 6 | Money Supply (M3) | (KSh Mn) | 1,727,686.0 | 1,996,242.0 | 2,329,978.6 | 2,658,165.5 | 2,753,528.0 | |
| 7 | Total domestic credit | (KSh Mn) | 1,702,510.0 | 1,978,522.0 | 2,312,178.0 | 2,793,924.0 | 2,972,874.0 | |
| 8 | Balance of Payments (current account balance) | (KSh Mn) | -356,389.1 | -417,019.6 | -527,535.7 | -424,610.2 | -362,121.8 | |
| 9 | Coffee-marketed production | ('000 tonnes) | 46.1 | 38.4 | 42.5 | 32.2 | 39.7 | |
| 10 | Tea-marketed production | ('000 tonnes) | 369.4 | 432.4 | 445.1 | 399.2 | 473.0 | |
| 11 | Fresh Horticultural Produce exports | ('000 tonnes) | 205.7 | 213.8 | 220.2 | 238.7 | 261.2 | |
| 12 | Maize-marketed production | ('000 tonnes) | 387.3 | 316.4 | 289.4 | 295.3 | 265.8 | |
| 13 | Wheat-marketed production | ('000 tonnes) | 155.0 | 184.9 | 218.0 | 227.3 | 215.9 | |
| 14 | Sugar-cane production | ('000 tonnes) | 5,824.0 | 6,673.7 | 6,410.0 | 7,164.8 | 7,160.8 | |
| 15 | Milk sold centrally | (Mn litres) | 495.2 | 523.0 | 541.3 | 615.9 | 650.3 | |
| 16 | Manufacturing output | (KSh Mn) | 1,619,622.0 | 1,737,699.0 | 1,820,369.0 | 1,976,793.0 | 2,132,259.0 | |
| 17 | Construction output | (KSh Mn) | 513,390.0 | 582,896.0 | 683,376.0 | 805,703.0 | 819,448.0 | |
| 18 | Cement Consumption | ('000 tonnes) | 3,991.2 | 4,266.5 | 5,196.7 | 5,708.8 | 6,303.0 | |
| 19 | Petroleum Consumption | ('000 tonnes) | 3,638.0 | 3,707.9 | 3,937.9 | 4,738.5 | 5,044.2 | |
| 20 | Electricity consumption | (GWh) | 6,414.4 | 6,928.1 | 7,415.4 | 7,826.4 | 8,053.2 | |
| 21 | Tourism earnings | (KSh Mn) | 96,020.0 | 93,970.0 | 87,080.0 | 84,600.0 | 99,690.0 | |
| 22 | New registration of motor vehicles and cycles | (Number) | 173,044.0 | 222,178.0 | 218,057.0 | 247,181.0 | 213,715.0 | |
| 23 | Rail freight | (`000 tonnes) | 1,394.0 | 1,214.0 | 1,509.0 | 1,575.0 | 1,429.0 | |
| 24 | Air passengers handled | ('000) No. | 8,583.8 | 8,231.6 | 8,882.0 | 8,993.2 | 10,043.8 | |
| 25 | Mobile Subscriptions | ('000) No. | 30,482.8 | 31,309.0 | 33,632.6 | 37,716.0 | 38,982.0 | |
| 26 | Estimated Internet Users | ('000) No. | 14,032.4 | 21,273.7 | 26,163.6 | 35,550.0 | 39,351.0 | |
| 27 | Wage employment | ('000) No. | 2,155.8 | 2,283.1 | 2,370.2 | 2,478.0 | 2,554.3 | |
| 28 | Education-primary enrolment | ('000) No. | 9,757.6 | 9,857.6 | 9,951.0 | 10,090.8 | 10,269.4 | |
| 29 | Education-secondary enrolment | ('000) No. | 1914.8 | 2,104.3 | 2,331.7 | 2,559.0 | 2,720.6 | |
| 30 | Education-University enrolment | ('000) No. | 251.2 | 361.4 | 443.8 | 510.7 | 564.5 | |
| 31 | Education-other post secondary enrolment (TIVET+TTC) | ('000) No. | 127.7 | 148.0 | 147.8 | 153.3 | 202.6 | |
| 32 | Registered doctors and dentists | (Number) | 9,077.0 | 9,727.0 | 10,239.0 | 10,699.0 | 11,525.0 | |
| 33 | GDP Per capita (Current): | (KSh) | 104,702.0 | 113,520.2 | 125,637.4 | 141,644.0 | 157,681.0 | |
| 34 | GDP Per capita (Constant): | (KSh) | 84,721.2 | 87,105.4 | 89,240.4 | 91,890.1 | 94,757.3 | |
| 35 | Net lending/borrowing (% of GDP) at Current Market Prices | (Per cent ) | -8.7 | -10.2 | -11.5 | -10.2 | -6.8 | |
| 36 | Net lending/borrowing | (KSh Mn) | -368,729.6 | -484,395.6 | -618,615.9 | -641,572.2 | -484,672.8 | |
| 37 | Recurrent Revenue and Grants | (KSh Mn) | 896,496.5 | 1,001,374.8 | 1,140,407.5 | 1,262,720.3 | 1,566,459.3 | |
| 38 | Total Expenditure | (KSh Mn) | 1,241,396.4 | 1,532,993.0 | 1,953,509.4 | 2,047,351.8 | 2,496,107.9 | |
| 39 | External Debt Service Charge as % of GDP[2] | (Per cent ) | 0.8 | 1.0 | 1.8 | 1.8 | 1.1 | |
| 40 | External Debt Service as % of Exports of Goods & Services | (Per cent ) | 3.8 | 4.8 | 10.3 | 10.8 | 7.5 | |
| | **INDEX NUMBERS** | | | | | | | **2012 -2016 Annual % rate of change** |
| 41 | Export volumes: (2009=100) | | 113.4 | 104.0 | 109.9 | 105.0 | 111.6 | -0.4 |
| 42 | Import volumes: (2009=100) | | 104.8 | 106.7 | 113.9 | 102.5 | 100.6 | -1.0 |
| 43 | Terms of trade | | 78.7 | 81.1 | 73.1 | 76.0 | 78.8 | 0.03 |
| 44 | NSE 20 Share: (1966=100) | | 4,133.0 | 4,927.0 | 5,113.0 | 4,040.0 | 3,186.0 | -6.3 |
| 45 | Consumer Price Index: (Feb 2009=100) | | 132.5 | 140.1 | 149.7 | 159.6 | 169.7 | 6.4 |
| 46 | Real wages: (June 2009=100) | | 84.4 | 90.9 | 91.2 | 93.8 | 93.9 | 2.7 |
| 47 | Agriculture terms of trade: (2001 =100) | | 52.9 | 46.6 | 49.3 | 50.2 | 49.3 | -1.7 |

* Provisional.

# International Scene

01 Chapter

**Overview**

The global economy is estimated to have expanded by 2.9 per cent in 2016 compared to a revised growth of 3.1 per cent in 2015. The slowed growth was occasioned by constrained global trade, subdued investment and heightened policy uncertainty associated with the United Kingdom (UK) decision to leave the European Union (EU); and elections in the United States of America (USA). Growth in advanced economies expanded by 2.1 per cent in 2016 compared to 1.9 per cent in 2015. The United States of America recorded a growth of 1.5 per cent in 2016 compared to 2.6 per cent in 2015, mainly due to weak exports, subdued investments in the manufacturing sector and uncertainty surrounding the 2016 elections. Growth in China decelerated on account of slowed investment as the economy rebalanced towards services and consumption. In Japan, the level of economic activity was robust owing to fiscal support, lower oil prices and accommodative financial conditions.

1.2. In the Sub-Saharan Africa, lower commodity prices for metal exporting countries and domestic shocks from a generally less supportive global economic environment slowed the economic performance. The region's real gross domestic product is estimated to have expanded by 1.5 per cent in 2016 compared to 3.8 per cent growth registered in 2015. The slowdown in growth was mainly on account of decelerated growth in South Africa and the oil exporting countries whose economic activities were strained by a considerable drop in international oil prices. However, growth remained solid in agricultural exporting countries as well as in the commodity importing economies.

1.3. During the period under review, global inflation was estimated at 2.9 per cent compared to 2.8 per cent recorded in 2015. In emerging markets and developing economies, headline inflation remained steady as currencies remained broadly stable, or appreciated in some cases. Rising input prices in many emerging economies particularly China, where producer price inflation became positive for the first time in four years also contributed to the rise in inflation. Core inflation remained comparatively stable at low levels, reflecting persistent economic slack and weak global price pressures, particularly in Japan where the effective exchange rate appreciated substantially over the past year.

1.4. Growth of the global trade slowed in 2016 to 1.9 per cent from 2.6 per cent growth in 2015. Imports from major economies such as China continued to depress trade flows. Similarly, the sharp drop in oil prices from mid-2014 to early 2016 resulted in income losses in oil exporting countries. The slowdown in global investment in 2015-16 also played an important role in slowing the pace of world trade as capital goods account for about one third of world goods trade.

1.5. The global unemployment rate was estimated at 5.7 per cent in 2016 compared to 5.8 per cent in 2015. This was occasioned by improvements in developed economies such as the United States of America and the European Union where unemployment levels fell by 1.4 million in 2016. Labour market conditions in emerging economies in Latin America and the Caribbean continued to deteriorate in 2016, resulting in a 6.7 per cent unemployment rate compared to a 6.5 per cent in 2015.

Regional Economic Analysis

## Organization for Economic Co-operation and Development (OECD)

1.6. Table 1.1 shows key global and selected OECD countries' macroeconomic indicators and projections for the period 2014 to 2018. The OECD real GDP growth slowed to 1.7 per cent in 2016 from a revised growth of 2.1 per cent in 2015. This was on account of shortfalls in both public and private investment, sluggish productivity growth, financial disruptions and heightened policy uncertainty notably in the United States of America and the United Kingdom. However, the Euro Area, Germany and Japan recorded modest growths during the review period.

1.7. The OECD inflation remained at 1.3 per cent as recorded in 2015, a reflection of relatively stable commodity prices' regime in most economies even with the fall in energy prices that prevailed in the early part of 2016. The current account surplus as a percentage of GDP stood at 0.3 per cent in 2016 compared to 0.1 per cent in the previous year. Labour market in the OECD continued to perform well with the unemployment rate falling to 6.3 per cent in 2016 compared to 6.8 per cent in 2015.

### Euro Area

1.8. The Euro Area exhibited a slow recovery though economic performance differed across countries within the bloc. Real GDP in the bloc grew by 1.7 per cent, a 0.2 percentage point improvement from the growth in 2015. The marginal growth was realized against a backdrop of low demand as a result of depressed investment, banking sector fragilities and uncertainties regarding European integration.

1.9. Inflation eased to 1.0 per cent in 2016 compared to 1.1 per cent in 2015. Current account surplus improved to 4.1 per cent in the review period compared to 3.9 per cent in 2015, on account of reduced imports as domestic demand slowed in the Euro Area. In addition, subdued global trade and slower growth in the UK, following its decision to exit the European Union, weighed in on growth of exports in the Euro Area. Unemployment rate receded further to 10.0 per cent in 2016 from 10.9 per cent in 2015, albeit with wide variations across countries.

### United States of America

1.10. Economic performance in the United States of America decelerated to 1.5 per cent in 2016 compared to 2.6 per cent growth in 2015. The growth was curtailed by weak exports and subdued investments partly due to uncertainty surrounding the 2016 elections. Inflation remained low at 1.3 per cent in the review period.

1.11. Weak external demand and appreciation of the US dollar constrained growth of exports during the better part of 2016. In addition, the strong dollar held back activities in manufacturing sector while lower oil prices curtailed investment in mining and equipment weighing on imports. Against this backdrop, the current account deficit narrowed slightly to 2.5 per cent from 2.6 per cent of GDP in 2015. The labour market continued to perform well despite subdued productivity growth with unemployment rate falling to 4.9 per cent in 2016 compared to 5.3 per cent in 2015.

### United Kingdom

1.12. The United Kingdom's real GDP growth decelerated to 2.0 per cent in 2016 compared to 2.2 per cent in 2015, an indication that the political and economic implications of referendum outcome somewhat led to weak business investment as major projects were deferred or cancelled. Inflation edged up to 1.5 per cent in 2016 from 0.4 per cent in 2015. On the contrary, the unemployment rate improved to 4.9 per cent in the review period compared to 5.4 per

cent in 2015. Current account deficit remained unchanged at 5.4 per cent mainly owing to a weakening of the Pound Sterling that led to improved net exports.

### Japan

1.13. Japan's real GDP expanded by 0.8 per cent in the review period compared to 0.6 per cent in 2015. This was despite the Yen appreciating during the early part of 2016, associated with decline in business investment and generally weak exports. The growth was boosted by private consumer spending, signaling improved consumer purchasing power after two years of contraction. Inflation eased to 0.4 per cent in 2016 compared to 2.0 per cent in 2015 partly due to a slack in oil prices in early 2016. Similarly, the unemployment rate improved to 3.1 per cent in the review period compared 3.4 per cent in 2015. The current account surplus improved to 3.8 per cent during the review period compared to 3.3 per cent in 2015.

### Germany

1.14. The country's economic growth improved to 1.7 per cent in the year under review compared to 1.5 per cent in 2015 mainly anchored on robust private consumption. Inflation slowed to 1.4 per cent in 2016 from 2.0 per cent in the previous year. The current account surplus as a percentage of the GDP expanded to 9.2 per cent in 2016 compared to 8.5 per cent in 2015 despite a slowdown in world trade and a slow recovery of the Euro Area. The growth was buoyed by strong activity in the labour market such as intensive services in retail trade and restaurants, and growth in employment and wages. Consequently, the unemployment rate stood at a low of 4.2 per cent in 2016 compared to 4.6 per cent in 2015.

**Table 1.1: Key Economic Indicators and Projections for Selected OECD Countries, 2014-2018**

| | 2014 | 2015+ | 2016* | 2017[1] | 2018[1] |
|---|---|---|---|---|---|
| | (Percentage change from the previous year) | | | | |
| **World Real GDP Growth**** | 3.3 | 3.1 | 2.9 | 3.3 | 3.6 |
| **World Trade Growth**[2] | 3.9 | 2.6 | 1.9 | 2.9 | 3.2 |
| **Real GDP Growth** | Percentage change | | | | |
| United States of America | 2.4 | 2.6 | 1.5 | 2.3 | 3.0 |
| United Kingdom | 3.1 | 2.2 | 2.0 | 1.2 | 1.0 |
| Japan | 0.2 | 0.6 | 0.8 | 1.0 | 0.8 |
| Germany | 1.6 | 1.5 | 1.7 | 1.7 | 1.7 |
| Euro Area | 1.2 | 1.5 | 1.7 | 1.6 | 1.7 |
| **Total OECD** | 1.9 | 2.1 | 1.7 | 2.0 | 2.3 |
| **Inflation** (GDP Deflator) | Percentage change | | | | |
| United States of America | 1.8 | 1.1 | 1.3 | 1.9 | 2.4 |
| United Kingdom | 1.6 | 0.4 | 1.5 | 1.9 | 2.2 |
| Japan | 1.7 | 2.0 | 0.4 | 0.0 | 0.7 |
| Germany | 1.8 | 2.0 | 1.4 | 1.2 | 1.5 |
| Euro Area | 0.9 | 1.1 | 1.0 | 1.1 | 1.1 |
| **Total OECD** | 1.7 | 1.3 | 1.3 | 1.7 | 2.1 |
| **Current Account Balances** | Per cent of GDP | | | | |
| United States of America | -2.9 | -2.7 | -2.5 | -2.9 | -3.1 |
| United Kingdom | -4.7 | -5.4 | -5.4 | -4.8 | -4.4 |
| Japan | 0.8 | 3.3 | 3.8 | 3.8 | 4.1 |
| Germany | 7.4 | 8.5 | 9.2 | 8.8 | 8.7 |
| Euro Area | 3.0 | 3.9 | 4.1 | 4.0 | 4.0 |
| **Total OECD** | 0.0 | 0.1 | 0.3 | 0.3 | 0.2 |
| **Unemployment Rate** | Percentage change | | | | |
| United States of America | 6.2 | 5.3 | 4.9 | 4.7 | 4.5 |
| United Kingdom | 6.2 | 5.4 | 4.9 | 5.0 | 5.6 |
| Japan | 3.6 | 3.4 | 3.1 | 3.0 | 2.9 |
| Germany | 5.0 | 4.6 | 4.2 | 4.2 | 4.1 |
| Euro Area | 11.6 | 10.9 | 10.0 | 9.5 | 9.1 |
| **Total OECD** | 7.4 | 6.8 | 6.3 | 6.1 | 6.0 |

Source: OECD Economic Outlook No. 100

* Provisional

**World Economic Outlook November 2016

+Revised

[1]Projections

[2]Refers 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 2016.

The projections assume unchanged exchange rates from those prevailing on 25th October 2016.

### Brazil, Russia, India, Indonesia, China and South Africa (BRIICS)

1.15. Economic performance of the emerging economies of BRIICS registered an average real GDP growth of 4.6 per cent in 2016 compared to 5.2 per cent in 2015 as shown in Table 1.2. The growth was subdued in all the members in the bloc except Indonesia.

1.16. Brazil's economy contracted by 3.5 per cent in 2016 compared to a contraction of 3.8 per cent in 2015. The slight improvement was attributed to diminishing political uncertainty, rising business and consumer confidence, and strengthening of investments. The weak Brazilian currency supported exports resulting in the improvement in current account deficit from 3.3 per cent in 2015 to 0.8 per cent in 2016. Inflationary pressures eased to 6.3 per cent in 2016 compared to 8.9 per cent in 2015. The Russian economy contracted by 0.6 per cent in 2016 compared to a contraction of 3.7 per cent in 2015. The slowed contraction was mainly due to accommodative fiscal policy and flexible exchange rate. Overall inflation eased to 7.2 per cent in the period under review compared to 15.5 per cent in 2015.

1.17. In China, real GDP expanded by 6.7 per cent in 2016 compared to a growth 6.9 per cent in 2015. This growth was mainly driven by a rebalancing of the economy towards services and consumption, fiscal and credit stimulus that focused on infrastructure investment, and household credit. The Indian economy recorded a decelerated real GDP growth of 6.6 per cent during the year under review compared to a growth of 7.6 per cent in 2015. Growth was supported by implementation of structural reforms, reduction in supply side constraints and favorable monsoon rainfall, which supported agriculture. In Indonesia, a favourable monetary policy supported domestic demand resulting to a real GDP growth of 4.9 per cent in 2016 compared to a growth of 4.8 per cent in 2015. Inflation slowed to 3.7 per cent in 2016 from 6.4 per cent in 2015. In South Africa, the economy expanded by 0.3 per cent in 2016 compared to a growth of 1.3 per cent in 2015. The growth was depressed by persistent drought, falling investment and political uncertainty during the period under review. High food prices led to a surge in the inflation from 4.6 per cent in 2015 to 6.4 per cent in 2016.

### Association of South Eastern Asia Nations (ASEAN-5)

1.18. The real GDP of the five members of the Association of South Eastern Asia Nations (ASEAN-5) remained at 4.8 per cent in 2016 due to weaker external demand experienced by both Vietnam and Malaysia. In Vietnam, severe drought and weak exports restrained growth resulting in real GDP expansion of 6.1 per cent in 2016 compared to 6.7 per cent in 2015. Growth in Malaysia was held back by lower revenue from energy exports, which narrowed the current account surplus. The economy recorded a decelerated growth of 4.3 per cent compared to a growth of 5.0 per cent in 2015.

1.19. In Thailand and Philippines, growth picked to 6.4 and 3.2 per cent in 2016 compared to 5.9 and 2.8 per cent in 2015, respectively. In Philippines, growth was boosted by accelerated implementation of public investment projects and continued strong growth of export in services. Thailand's growth on the other hand was buoyed by improved confidence in the economy. Inflation for the region eased to 2.5 per cent in 2016 from 3.3 per cent in 2015.

### Sub-Saharan Africa

1.20. Real GDP growth in the Sub-Saharan Africa decelerated to 1.6 per cent in 2016 compared to 3.4 per cent growth in 2015. The slowdown was mainly attributed to low commodity prices, weak external demand, drought and insecurity. Currency depreciation coupled with rising food prices due to drought resulted in an increase in inflation from 7.0 per cent to 11.3 per cent in 2016. The current account deficit as a percentage of GDP narrowed to 4.5 per cent during the review period compared to 5.9 per cent in 2015.

## Table 1.2: Real GDP Growths, Inflation Rates and Current Account Balances for Selected Regions and Countries

| | Real GDP Growth Rates | | | | Inflation | | | | Current Account Balance (Percent of GDP) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2014 | 2015+ | 2016* | 2017[1] | 2014 | 2015+ | 2016* | 2017[1] | 2014 | 2015+ | 2016* | 2017[1] |
| **BRIICS** | **3.7** | **5.2** | **4.6** | **3.5** | **5.8** | **7.0** | **5.7** | **4.7** | **-1.4** | **-0.4** | **-0.4** | -0.6 |
| Brazil | 0.1 | –3.8 | –3.5 | 0.2 | 6.3 | 9.0 | 9.0 | 5.4 | -4.3 | -3.3 | -0.8 | -1.3 |
| Russia | 0.7 | –3.7 | –0.6 | 1.1 | 7.8 | 15.5 | 7.2 | 5.0 | 2.8 | 5.2 | 3.0 | 3.5 |
| India | 7.2 | 7.6 | 6.6 | 7.2 | 5.9 | 4.9 | 5.5 | 5.2 | -1.3 | -1.1 | -1.4 | -2.0 |
| Indonesia | 5.0 | 4.8 | 4.9 | 5.3 | 6.4 | 6.4 | 3.7 | 4.2 | -3.1 | -2.1 | -2.3 | -2.3 |
| China | 7.3 | 6.9 | 6.7 | 6.5 | 2.0 | 1.4 | 2.1 | 2.3 | 2.6 | 3.0 | 2.4 | 1.6 |
| South Africa | 1.6 | 1.3 | 0.3 | 0.8 | 6.1 | 4.6 | 6.4 | 6.0 | -5.3 | -4.3 | -3.3 | -3.2 |
| **Sub-Saharan Africa** | **5.1** | **3.4** | **1.6** | **2.8** | **6.3** | **7.0** | **11.3** | **10.8** | **–3.7** | **–5.9** | **–4.5** | **–3.9** |
| **EAC-5** | **5.9** | **5.8** | **6.1** | **6.3** | **5.5** | **5.8** | **5.6** | **5.3** | **–9.9** | **–8.4** | –8.1 | –7.8 |
| Kenya | 5.4 | 5.7 | 5.8 | 6.1 | 6.9 | 6.6 | 6.3 | 9.0 | -10.4 | -6.7 | -5.2 | -6.1 |
| Tanzania | 7.0 | 7.0 | 7.2 | 7.2 | 6.1 | 5.6 | 5.2 | 5.0 | -9.5 | -8.8 | -8.8 | -8.8 |
| Uganda | 4.9 | 4.8 | 4.9 | 5.5 | 3.1 | 5.5 | 5.5 | 5.1 | -8.7 | -9.4 | -8.7 | -8.9 |
| Rwanda | 7.0 | 6.9 | 6.0 | 6.0 | 1.8 | 2.5 | 5.3 | 4.9 | -10.5 | -13.5 | -16.6 | -11.9 |
| Burundi | 4.5 | –4.0 | –0.5 | 2.0 | 4.4 | 5.6 | 6.3 | 9.4 | -18.5 | -115.9 | -4.6 | -9.6 |
| **SADC2** | **3.5** | **2.7** | **1.6** | **2.4** | **6.0** | **5.5** | **9.9** | **9.8** | **–4.9** | **–6.1** | **–5.0** | **–4.1** |
| **WAEMU3** | **6.3** | **6.3** | **6.3** | **6.5** | **–0.1** | **1.0** | **1.2** | **1.7** | **–5.0** | **–6.0** | **–6.2** | **–6.2** |
| **CEMAC** | **4.7** | **2.1** | **1.0** | **2.6** | **2.7** | **2.2** | **2.1** | **2.8** | **–2.9** | **–9.2** | **–6.7** | **–4.9** |
| **ASEAN-4** | **4.8** | **4.8** | **4.8** | **4.9** | **4.1** | **3.3** | **2.5** | **3.4** | **2.3** | **1.5** | **1.2** | **0.7** |
| Indonesia | 5.0 | 4.8 | 4.9 | 5.3 | 6.4 | 6.4 | 3.7 | 4.2 | -3.1 | -2.1 | -2.3 | -2.3 |
| Malaysia | 6.0 | 5.0 | 4.3 | 4.6 | 3.1 | 2.1 | 2.1 | 3.0 | 4.4 | 3.0 | 1.2 | 1.5 |
| Philippines | 6.2 | 5.9 | 6.4 | 6.7 | 4.2 | 1.4 | 2.0 | 3.4 | 4.4 | 3.0 | 1.2 | 1.5 |
| Thailand | 0.8 | 2.8 | 3.2 | 3.3 | 1.9 | -0.9 | 0.3 | 1.6 | 3.8 | 7.8 | 9.6 | 7.7 |
| Vietnam | 6.0 | 6.7 | 6.1 | 6.2 | 4.1 | 0.6 | 2.0 | 3.6 | 5.1 | 0.5 | 0.4 | 0.1 |
| **Maghreb** | **-2.0** | **0.8** | **1.4** | **5.7** | **3.0** | **5.2** | **5.3** | **5.3** | **-16.1** | **-19.3** | **-18.7** | **-16.8** |
| Algeria | 3.8 | 3.9 | 3.6 | 2.9 | 2.9 | 4.8 | 5.9 | 4.8 | -4.4 | -16.5 | -15.1 | -13.7 |
| Libya | -24.0 | -6.4 | -3.3 | 13.7 | 2.8 | 14.1 | 14.2 | 12.5 | -27.8 | -42.1 | -47.4 | -36.9 |
| Mauritania | 5.4 | 1.2 | 3.2 | 4.3 | 3.8 | 0.5 | 1.3 | 4.2 | -33.3 | -27.0 | -21.9 | -24.9 |
| Morocco | 2.6 | 4.5 | 1.8 | 4.8 | 0.4 | 1.5 | 1.3 | 1.3 | -5.7 | -1.9 | -1.2 | -1.4 |
| Tunisia | 2.3 | 0.8 | 1.5 | 2.8 | 4.9 | 4.9 | 3.7 | 3.9 | -9.1 | -8.8 | -8.0 | -6.9 |
| **Mashreq5** | **2.4** | **2.5** | **2.5** | **3.1** | **5.0** | **2.1** | **3.0** | **7.5** | **-11.9** | **-11.2** | **-11.7** | **-11.6** |
| Egypt | 2.2 | 4.2 | 3.8 | 4.0 | 10.1 | 11.0 | 10.2 | 18.2 | -0.8 | -3.7 | -5.8 | -5.2 |
| Jordan | 3.1 | 2.4 | 2.8 | 3.3 | 2.9 | -0.9 | -0.5 | 2.3 | -6.8 | -9.0 | -9.0 | -8.9 |
| Lebanon | 2.0 | 1.0 | 1.0 | 2.0 | 1.9 | -3.7 | -0.7 | 2.0 | -28.1 | -21.0 | -20.4 | -20.6 |

Source: World Economic Outlook, October 2016 and Regional Economic Outlook - Various Issues except Kenya whose actual accounts are shown

* Provisional

+ Revised

[1] Projections

[2]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.

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

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

[5] Excludes Syria due to unavailability of data

### East African Community

1.21. During the year under review, real GDP in the East Africa Community (EAC) is estimated to have grown by 6.1 per cent compared to 5.8 per cent growth in 2015. The growth was fueled by public infrastructure investment, buoyant private consumption and low oil prices. Tanzania recorded the highest real GDP growth in the region, expanding by 7.2 per cent in 2016 compared to a growth of 7.0 per cent in 2015. In Burundi, real GDP contracted by 0.5 per cent in 2016 compared to a contraction of 4.0 per cent in 2015. The bloc's inflation eased to 5.6 per cent in 2016 from 5.8 per cent in 2015. Currency stability helped to keep inflation within the Central Bank target in Kenya, Uganda and Tanzania. The current account deficit as a percentage of GDP narrowed to 8.1 per cent in 2016.

### Southern African Development Community

1.22. The Southern African Development Community (SADC) recorded a slower growth of 1.6 per cent during the year under review compared to a growth of 2.7 per cent in 2015, mainly due to decelerating growth of South Africa's economy. Growth was constrained by severe drought, which affected agricultural production in some member countries. In Zambia, drought significantly disrupted hydroelectric power generation. Inflation increased to 9.9 per cent in 2016 compared to 5.5 per cent in 2015, due to rising food prices. The region's current account deficit narrowed to 5.0 per cent in 2016 from 6.1 per cent in 2015.

### Maghreb

1.23. The average real GDP of Maghreb countries grew by 1.4 per cent in 2016 compared to a growth of 0.8 per cent in 2015, supported by investment and public spending. Inflation rose to 5.3 per cent in 2016 from 5.2 per cent in 2015. Current account deficit as a percentage of GDP narrowed to 18.7 per cent in the year under review, an improvement from a deficit of 19.3 per cent in 2015. In oil importing countries, notably Morocco and Tunisia, falling oil prices helped to lower the current account deficit.

### Mashreq

1.24. The Mashreq region recorded a growth rate of 2.5 per cent in 2016 similar to that of 2015. The economy of Egypt grew by 3.8 per cent in 2016 compared to a growth of 4.2 per cent in 2015. The slowdown was mainly due to shortage of foreign currency that dampened manufacturing activities and the crash of a Russian plane in the Sinai Peninsula, which negatively impacted on tourism activities. The bloc's current account deficit as percentage of GDP worsened to 11.7 per cent in 2016. In Egypt, a drop in remittances and official transfers coupled with weak tourism led to widening of the current account deficit to 5.8 per cent in 2016 from 3.7per cent in 2015. During the review period, Lebanon's current account deficit as a percentage of GDP improved slightly to 20.4 per cent on account of falling oil prices.

## Outlook

1.25. The global real GDP is projected to grow by 3.3 per cent in 2017 based on the sustained growth in emerging and advanced economies. The real GDP in the advanced economies is projected to expand by 1.9 per cent in 2017 following strengthened recovery in the United States of America and fiscal stimulus in Japan. However, uncertainty associated with policies of the new administration in the United States of America and the decision of the United Kingdom to leave the European Union are likely to influence growth of the advanced economies.

1.26. The OECD real GDP is projected to grow by 2.0 per cent in 2017. The increased policy uncertainty from UK decision to leave the EU and the banking sector concerns in the Euro Area are projected to slow down the economic growth of the bloc to 1.6 per cent in 2017. Real

GDP growth in the emerging economies of Brazil, Russia, India, and China, is projected to grow by 3.5 per cent in 2017. Growth in China is projected to slow to 6.5 per cent in 2017, reflecting weak external demand, uncertainty surrounding global trade and slower private investment.

1.27. In the Sub-Saharan Africa, the expected stabilization of commodity prices and a projected large fiscal adjustments are expected to boost the economic activity in the region to a forecast real GDP growth of 2.8 per cent in 2017. In EAC countries, real GDP is projected to be 6.3 per cent in 2017.

1.28. Real GDP growth in ASEAN~5 countries is projected to expand by 4.9 per cent in 2017 supported by domestic demand. In Maghreb countries, real GDP growth is expected to remain robust with a projected growth of 5.7 per cent in 2017.

# Domestic Economy

02 Chapter

## Overview

The economy experienced a relatively conducive environment for growth during the first three quarters of 2016. However, the last quarter's growth was undermined by a persistent drought that impacted negatively on the agriculture sector and a slower growth of the electricity supply industry, though to a smaller extent. The country's real Gross Domestic Product (GDP) is estimated to have maintained growth momentum for the third consecutive year to expand at 5.8 per cent in 2016 compared to a revised growth of 5.7 per cent in 2015. Generally, the growth was well spread and robust in most sectors but subdued in a few. Accommodation and food services registered the most improved growth of 13.3 per cent in 2016 from a contraction of 1.3 per cent in 2015.

2.2. Other remarkable improvements in economic activities were realized in the information and communication sector; real estate; and transport and storage. On the other hand, construction; mining and quarrying; and financial and insurance activities registered the most notable slowdown in growths. From the demand side of the GDP, the growth was mainly driven by consumption in both the private and public sectors. Addition to fixed assets (Gross Fixed Capital Formation) contracted significantly, mainly due to a considerable decline in investments in transport equipment in 2016. Declines in investments in civil works and residential buildings also contributed to a slowdown in additions to fixed assets during the review period.

2.3. Key macroeconomic indicators remained fairly stable in 2016. Annual average inflation was contained within the Central Bank's target of ±5.0 per cent to stand at 6.3 per cent compared to an average of 6.6 per cent in 2015. The easing in inflation was mostly due to significant slowdowns in prices of transportation; housing and utilities; and communication. Transport costs were benefitted from a fall of 21.7 per cent in the international oil prices to an average of USD 40.68 in 2016. The Kenyan shilling's performance against its main trading currencies varied significantly during the period under review. The Shilling strengthened against the Pound Sterling, South African Rand, Ugandan Shilling, Tanzanian Shilling and the Rwandan Franc but weakened against the US Dollar, Euro, and the Yen in 2016. On the whole, the shilling depreciated as reflected in the overall foreign exchange index which rose by 0.5 per cent to 114.83 in 2016.

2.4. The Central Bank Rate (CBR) was revised downward twice to 10.50 per cent in June and 10.00 per cent in December. The amendment of the Banking Act in August 2016 to cap the lending rates to a maximum of 4.0 per cent above the Central Bank Rate (CBR) resulted in a substantial decline in the interest rates during the month of September to 13.84 compared to 16.75 during the same month in 2015. However, there was a decline in credit to the private sector despite the capping of the rates. Overall, domestic credit growth decelerated from 20.8 per cent in 2015 to 6.4 per cent in 2016, with credit to private sector expanding by 4.3 per cent against a target of 6.8 per cent.

2.5. The current account deficit narrowed further to stand at KSh 370.8 billion in 2016 after declining by 24.9 per cent to KSh 421.1 billion in 2015. In line with the improvement in the current account, the overall balance of payments improved to a surplus of KSh 13.1 billion

in 2016 from a deficit of KSh 24.9 billion 2015. The fiscal deficit as a percentage of GDP is expected to rise to 9.9 per cent in 2016/17 compared to 8.6 per cent in 2015/16.

## Sectoral Analysis

### Agriculture, Forestry and Fishing

2.6. Activity in the Agriculture, Forestry and Fishing sector in 2016 were depressed compared to the performance recorded in 2015. The sector is estimated to have expanded by 4.0 per cent in 2016 down from a revised growth of 5.5 per cent in 2016. The decelerated performance was attributed to unfavourable weather conditions especially during the second part of the year when the country experienced a near failure of short rains. Though there were notable growths in production of coffee and tea, the sector's growth was dampened by considerable declines in production of food crops. Production of tea and coffee increased by 18.5 and 10.8 per cent, in 2016, respectively. On the other hand, production of cereals and leguminous crops went down significantly in 2016. Specifically, production of maize declined from 42.5 million bags in 2015 to 37.1 million bags in 2016 while that of beans dropped from 8.5 million bags in 2015 to 8.1 million bags in 2016. Production of potatoes and drought resistant crops such as sorghum and millet recorded significant declines.

2.7. The volume of exports of cut flowers, fruits and vegetables rose by 8.9, 5.4 and 13.1 per cent, respectively, in 2016. This led to a 12.3 per cent growth in the value of fresh horticultural exports from KSh 90.4 billion in 2015 to KSh 101.5 billion in 2016. Performance of the sugarcane sub-sector was subdued by the dry weather conditions. As a result, the volume of cane deliveries declined from 7.2 million tonnes in 2015 to 7.1 million tonnes in 2016.

2.8. The livestock sub-sector showed mixed performance during the period under review. The volume of milk production increased from 615.9 in 2015 to 650.3 million litres in 2016. The number of animals slaughtered increased markedly in all categories of livestock.

### Manufacturing

2.9. The manufacturing sector recorded a decelerated growth of 3.5 per cent in 2016 from a revised growth of 3.6 per cent in 2015. The sector's growth remained stifled in the period under review mainly attributable to underperformance of other sectors such as agriculture and electricity that provide inputs for manufacturing activities. The near stagnation in the growth of manufacturing was also manifest in the slow uptake of credit from KSh 290.1 billion in 2015 to KSh 276.7 billion in 2016.

2.10. The sector's growth was mainly driven by processing of food products that recorded improved performance in 2016 though with evidently low magnitudes. The bulk of the growth was primarily accounted for by the value of output of processing and preservation of meat, and processing of dairy products in 2016. The expansion of the sub-sector was largely attributable to increased off take of livestock in 2016 occasioned by dry weather conditions. The growth was also supported by an increment of 45.4 per cent in the output of processed coffee in 2016. However, growth in the manufacture of food products was curtailed by poor performance in processing and preservation of fish as well as processing of fruits and vegetables that posted declines in the period under review.

2.12. Performance of the non-food sub-sector was varied in 2016. The sub-sector's growth in output was mainly supported by manufacture of pharmaceutical products and preparations that rose by 25.7 per cent and manufacture of textiles and apparels that grew by 13.4 per cent in the period under review. Nevertheless, the growth was dampened by a significant drop in the output of manufacture of transport equipment at 27.4 per cent in 2016.

### Transport and Storage

2.13. The sector's growth accelerated to 8.4 per cent in 2016 from a revised growth of 8.0 per cent in 2015. Most sub-sectors in transport and storage posted notable growths except railways services that recorded a decelerated growth of 9.4 per cent in 2016 from a growth of 24.4 per cent in 2015. This was attributable to a 10.6 per cent drop in earnings from freight stream despite a marginal growth (2.0 per cent) in earnings from passenger traffic. Notably, air transport sub-sector rallied from a contraction of 0.7 per cent in 2015 to record a growth rate of 2.1 per cent in 2016. The sector was further supported by considerable growth in activity in transport through pipeline. Total pipeline throughput in thousand cubic metres increased from 5,712 in 2015 to 5,872.9 in 2016.

2.14 During the period under review, the sector benefited from a downturn in Murban ADNOC crude oil prices that dropped from USD 55.53 per barrel in 2015 to USD 44.18 per barrel in 2016. Consumption of all fuels used in transport namely; motor spirit, light diesel and jet fuel increased by 6.7, 12.0 and 5.0 per cent, respectively in 2016. In the domestic market, the average retail price of light diesel, which is a key input in the transport sector, dropped by 4.2 per cent in the year under review and therefore resulted in improved earnings from the sector.

### Information and Communication

2.15 Performance in the information and communication sector remained robust during the period under review mainly supported by the continued expansion of the scope of use of information and communication technologies coupled with greatly enhanced efficiency in connectivity. The sector recorded an accelerated growth of 9.7 per cent in 2016 after slowing down in 2015. This performance was significantly buoyed by improvement in the telecommunications sub-sector that grew by 11.2 per cent in 2016 compared to 8.6 per cent growth in 2015. In addition, the growth was evidenced by a 7.7 per cent growth in the number of minutes of domestic calls made from 39.2 billion in 2015 to 42.2 billion minutes in 2016.The sector's growth was further boosted by mobile money transfer and mobile commerce transactions that expanded to KSh 1.5 trillion and KSh 1.8 trillion, respectively.

### Financial Intermediation

2.16 The sector posted the slowest growth since 2012 to stand at 6.9 per cent in 2016 compared to 9.4 per cent in 2015. The relatively depressed performance was mainly as a result of a decelerated growth of 6.7 per cent in earnings from banking institutions partly due to uncertainty associated with the capping of interest rates that came into effect in September 2016. The sector's performance was mirrored by the growth in broad money supply (M3) from 14.1 per cent in 2015 to 3.6 per cent in 2016. Similarly, expansion of domestic credit slowed notably from 20.8 per cent in 2015 to 6.4 per cent in 2016. Nonetheless, the sector's growth was somewhat supported by the insurance sub-sector that posted a growth rate of 5.3 per cent in 2016 compared to 5.0 per cent in 2015.The underperformance in the financial sector was also manifest in the growth of credit to both the public sector and private enterprises. In 2016, growth of credit to the public sector plummeted from 24.5 per cent in 2015 to 9.1 per cent in 2016.

### Electricity Supply

2.17 The sector recorded a decelerated growth of 9.1 per cent in 2016 down from a revised growth rate of 11.5 per cent in 2015. The growth was supported by a significant increase in the total electricity generation increased from 9,514.9 GWh in 2015 to 10,057 GWh in 2016 on account of sufficient rains in the main catchment areas during the long rains season. The

slowed growth is partly occassioned by the substitution of geothermal generation with the relatively more costly thermal generation to facilitate scheduled maintenance of the plants. Consequently, generation from geothermal sources declined from 4,520.7 GWh in 2015 to 4,484.2 GWh in 2016 while that from thermal sources rose from 1,412.4 GWh in 2015 to 1,470.0 GWh, respectively in the review period. Generation of hydroelectric power was immensely constrained in the fourth quarter of 2016 as a result of failed short rains that characterized the quarter.

### Construction

2.18 The construction sector is estimated to have expanded by 9.2 per cent in 2016 compared to a relatively higher growth rate of 13.9 per cent recorded in 2015. The slower growth was principally due to a considerable reduction in the activity of the construction of the Standard Gauge Railway (SGR) as it neared completion. The significant reduction in the import of key construction materials such iron and steel (14.5 per cent) and non-ferrous metals (2.2 per cent) were also an indication of scaling down of construction activities related to the SGR. Further, the slowed growth was also evidenced by a slow uptake of loans in the building and construction sector from KSh 106.3 billion in 2015 to KSh 104.8 billion in 2016. The estimated value of building works completed in Nairobi City County rose from KSh 70.9 billion in 2015 to 76.2 billion in 2016. Similarly, the number of new private buildings in Nairobi City County grew from 9,054 in 2015 to 10,002 in 2016. The construction of new public residential buildings rose from 45 in 2015 to 1,062 in 2016. During the period under review, cement consumption increased by 10.4 per cent from 5.7 million tonnes in 2015 to 6.3 million tonnes in 2016, an indication of a robust growth despite the slowdown.

### Accommodation and Food Services (Hotel and restaurants)

2.19 The accommodation and food services sector recovered from a contraction of 1.3 per cent in 2015 to post a marked growth of 13.3 per cent in 2016. Earnings from tourism activities grew by 36.8 per cent from KSh 84.5 billion in 2015 to KSh 99.7 billion in 2016. The number of international visitor arrivals rose from 1,180.5 thousand in 2015 to 1,339.7 thousand in 2016. Consequently, hotel bed-nights occupancy rose by 9.7 per cent from 5,878.6 thousand in 2015 to 6,448.5 thousand in 2016. The satisfactory performance in this sector was supported by increased activity in conference tourism that comprised of visits by heads of states and high profile conferences coupled with concerted efforts to market Kenya as a preferred tourist destination. Further, the sector's performance benefited from the reversal of travel advisories and other programmes such as charter incentive programmes and waiving of visa fees.

2.20 Tables 2.1 to Table 2.6 present details on the Gross Domestic Product (GDP) for the period 2012-2016. The GDP at current prices increased from KSh 6,260.6 billion in 2015 to KSh 7,158.7 billion in 2016 as shown in Table 2.1. Table 2.2 shows the percentage contribution of the various industries of the economy to total GDP. The contribution of the agriculture, forestry and fishing sector expanded from 30.4 to 32.6 and continued to be the dominant contributor to GDP mainly due to a faster growth in prices of agricultural products relative to other sectors.

## Table 2.1: Gross Domestic Product by Activity

Current Prices, KSh Million

| Industry | 2012+ | 2013+ | 2014+ | 2015+ | 2016* |
|---|---|---|---|---|---|
| Agriculture, forestry and fishing | 1,115,198 | 1,254,813 | 1,482,840 | 1,900,965 | 2,334,147 |
| Growing of crops | 765,641 | 875,165 | 1,066,344 | 1,448,929 | 1,852,017 |
| Animal production | 234,080 | 249,171 | 274,845 | 294,635 | 314,247 |
| Support activities to agriculture | 28,644 | 28,932 | 30,770 | 37,457 | 43,147 |
| Forestry & logging | 57,931 | 67,230 | 72,148 | 79,619 | 89,723 |
| Fishing & aquaculture | 28,903 | 34,315 | 38,732 | 40,324 | 35,013 |
| Mining and quarrying | 46,628 | 40,742 | 44,936 | 54,806 | 59,402 |
| Manufacturing | 469,104 | 506,612 | 537,999 | 589,597 | 657,950 |
| Manufacture of food, beverages and tobacco | 182,421 | 201,269 | 207,730 | 231,405 | 260,071 |
| Other manufacturing and repair and installation | 286,683 | 305,343 | 330,269 | 358,192 | 397,878 |
| Electricity supply | 48,194 | 53,901 | 55,190 | 89,377 | 122,571 |
| Water supply; sewerage, waste management | 37,807 | 40,442 | 42,102 | 46,794 | 49,251 |
| Construction | 190,851 | 213,565 | 262,090 | 309,046 | 359,656 |
| Wholesale and retail trade; repairs | 334,331 | 380,646 | 431,985 | 473,119 | 520,483 |
| Transport and storage | 339,526 | 378,525 | 462,457 | 518,043 | 563,684 |
| Land transport | 254,326 | 287,053 | 351,796 | 387,327 | 412,568 |
| Air transport including support services | 15,260 | 17,522 | 16,960 | 18,348 | 22,119 |
| All other transport including postal and courier activities | 69,940 | 73,950 | 93,700 | 112,368 | 128,997 |
| Accommodation and food service activities | 57,175 | 58,037 | 49,151 | 49,389 | 51,501 |
| Information and communication | 68,445 | 68,478 | 65,592 | 60,485 | 68,853 |
| Telecommunications | 33,682 | 31,937 | 27,647 | 21,666 | 26,778 |
| Publishing, broadcasting, other IT and information activities | 34,763 | 36,541 | 37,945 | 38,819 | 42,075 |
| Financial and insurance activities | 251,622 | 313,120 | 366,764 | 423,540 | 504,688 |
| Financial activities | 206,653 | 241,478 | 261,282 | 326,192 | 394,411 |
| Insurance activities | 44,970 | 71,643 | 105,483 | 97,347 | 110,277 |
| Real estate | 343,029 | 375,588 | 417,829 | 474,388 | 532,644 |
| Professional, scientific and technical activities | 43,102 | 48,349 | 51,992 | 55,812 | 60,011 |
| Administrative and support service activities | 54,877 | 57,312 | 61,067 | 63,891 | 67,765 |
| Public administration and defence | 185,689 | 208,647 | 243,526 | 267,675 | 290,280 |
| Education | 229,193 | 251,958 | 279,543 | 308,424 | 312,971 |
| Pre-primary and Primary education | 104,822 | 115,460 | 126,156 | 137,609 | 140,447 |
| General secondary education | 79,566 | 87,370 | 96,581 | 107,590 | 98,387 |
| Higher and other education | 44,805 | 49,127 | 56,807 | 63,224 | 74,137 |
| Human health and social work activities | 70,459 | 75,157 | 91,969 | 107,936 | 119,537 |
| Arts, entertainment and recreation | 6,173 | 6,636 | 7,490 | 8,046 | 8,904 |
| Other service activities | 26,069 | 30,109 | 34,506 | 39,526 | 43,066 |
| Activities of households as employers; | 24,138 | 25,462 | 28,090 | 30,625 | 32,420 |
| Financial Intermediation Services Indirectly Measured (FISIM) | -111,574 | -124,136 | -134,588 | -163,233 | -202,720 |
| **All economic activities** | **3,830,038** | **4,263,964** | **4,882,532** | **5,708,251** | **6,557,066** |
| Taxes on products | 431,332 | 481,179 | 519,878 | 552,396 | 601,629 |
| **GDP at market prices** | **4,261,370** | **4,745,143** | **5,402,410** | **6,260,646** | **7,158,695** |

* Provisional

+ Revised

**Table 2.2: Contribution to Gross Domestic Product by Activity**

Percent

| Industry | 2012+ | 2013+ | 2014+ | 2015+ | 2016* |
|---|---|---|---|---|---|
| Agriculture, forestry and fishing | 26.2 | 26.4 | 27.4 | 30.4 | 32.6 |
| Growing of crops | 18.0 | 18.4 | 19.7 | 23.1 | 25.9 |
| Animal production | 5.5 | 5.3 | 5.1 | 4.7 | 4.4 |
| Support activities to agriculture | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 |
| Forestry & logging | 1.4 | 1.4 | 1.3 | 1.3 | 1.3 |
| Fishing & aquaculture | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 |
| Mining and quarrying | 1.1 | 0.9 | 0.8 | 0.9 | 0.8 |
| Manufacturing | 11.0 | 10.7 | 10.0 | 9.4 | 9.2 |
| Manufacture of food, beverages and tobacco | 4.3 | 4.2 | 3.8 | 3.7 | 3.6 |
| Other manufacturing and repair and installation | 6.7 | 6.4 | 6.1 | 5.7 | 5.6 |
| Electricity supply | 1.1 | 1.1 | 1.0 | 1.4 | 1.7 |
| Water supply; sewerage, waste management | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 |
| Construction | 4.5 | 4.5 | 4.9 | 4.9 | 5.0 |
| Wholesale and retail trade; repairs | 7.8 | 8.0 | 8.0 | 7.6 | 7.3 |
| Transport and storage | 8.0 | 8.0 | 8.6 | 8.3 | 7.9 |
| Land transport | 6.0 | 6.0 | 6.5 | 6.2 | 5.8 |
| Air transport including support services | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 |
| All other transport including postal and courier activities | 1.6 | 1.6 | 1.7 | 1.8 | 1.8 |
| Accommodation and food service activities | 1.3 | 1.2 | 0.9 | 0.8 | 0.7 |
| Information and communication | 1.6 | 1.4 | 1.2 | 1.0 | 1.0 |
| Telecommunications | 0.8 | 0.7 | 0.5 | 0.3 | 0.4 |
| Publishing, broadcasting, other IT and information activities | 0.8 | 0.8 | 0.7 | 0.6 | 0.6 |
| Financial and insurance activities | 5.9 | 6.6 | 6.8 | 6.8 | 7.1 |
| Financial activities | 4.8 | 5.1 | 4.8 | 5.2 | 5.5 |
| Insurance activities | 1.1 | 1.5 | 2.0 | 1.6 | 1.5 |
| Real estate | 8.0 | 7.9 | 7.7 | 7.6 | 7.4 |
| Professional, scientific and technical activities | 1.0 | 1.0 | 1.0 | 0.9 | 0.8 |
| Administrative and support service activities | 1.3 | 1.2 | 1.1 | 1.0 | 0.9 |
| Public administration and defence | 4.4 | 4.4 | 4.5 | 4.3 | 4.1 |
| Education | 5.4 | 5.3 | 5.2 | 4.9 | 4.4 |
| Primary education | 2.5 | 2.4 | 2.3 | 2.2 | 2.0 |
| General secondary education | 1.9 | 1.8 | 1.8 | 1.7 | 1.4 |
| Higher and other education | 1.1 | 1.0 | 1.1 | 1.0 | 1.0 |
| Human health and social work activities | 1.7 | 1.6 | 1.7 | 1.7 | 1.7 |
| 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; | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 |
| Financial Intermediation Services Indirectly Measured (FISIM) | -2.6 | -2.6 | -2.5 | -2.6 | -2.8 |
| **All economic activities** | **89.9** | **89.9** | **90.4** | **91.2** | **91.6** |
| Taxes on products | 10.1 | 10.1 | 9.6 | 8.8 | 8.4 |
| **GDP at market prices** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** |

* Provisional

+ Revised

2.21 Table 2.3 presents the contribution of the various sectors of the economy to GDP at constant prices while growth rates for the respective sectors and sub-sectors are shown in Table 2.4. Total GDP at constant prices that entails the value of all goods and services produced minus the value of goods and services used as inputs and valued at 2009 prices rose from KSh 4,061.5 billion in 2015 to KSh 4,299.1 billion in 2016. This translated to an overall growth of 5.8 per cent in 2016 compared to a revised growth of 5.7 per cent in 2015. The accommodation and food services registered the highest growth from a contraction of 1.3 per cent in 2015 to a growth of 13.3 per cent, mainly on account of significant recovery of the tourism sector. The various sectors showed mixed performance in 2016 with some registering slowed growths while others recorded improvements. Some of the sectors that recorded higher growths in 2016 compared to 2015 include; education and, transport and storage.

## Table 2.3: Gross Domestic Product by Activity

Constant 2009 Prices, KSh Million

| Industry | 2012+ | 2013+ | 2014+ | 2015+ | 2016* |
|---|---|---|---|---|---|
| Agriculture, forestry and fishing | 776,703 | 819,026 | 854,599 | 901,197 | 937,187 |
| Growing of crops | 527,549 | 562,510 | 595,801 | 638,862 | 680,024 |
| Animal production | 164,181 | 167,409 | 169,644 | 174,187 | 174,752 |
| Support activities to agriculture | 25,028 | 25,983 | 24,189 | 24,684 | 20,008 |
| Forestry & logging | 39,581 | 41,567 | 42,946 | 43,328 | 45,749 |
| Fishing & aquaculture | 20,364 | 21,557 | 22,019 | 20,137 | 16,653 |
| Mining and quarrying | 33,839 | 32,405 | 37,235 | 41,854 | 45,827 |
| Manufacturing | 381,750 | 403,128 | 413,281 | 427,972 | 442,829 |
| Manufacture of food, beverages and tobacco | 136,828 | 151,260 | 153,450 | 162,654 | 167,292 |
| Other manufacturing and repair and installation | 244,922 | 251,868 | 259,831 | 265,318 | 275,537 |
| Electricity supply | 52,187 | 57,301 | 61,461 | 68,499 | 74,756 |
| Water supply; sewerage, waste management | 29,380 | 29,659 | 30,826 | 31,654 | 32,487 |
| Construction | 154,796 | 164,220 | 185,696 | 211,430 | 230,984 |
| Wholesale and retail trade; repairs | 253,955 | 275,291 | 294,357 | 311,667 | 323,566 |
| Transport and storage | 237,930 | 241,112 | 254,358 | 274,731 | 297,820 |
| Land transport | 157,134 | 164,166 | 172,910 | 183,711 | 195,660 |
| Air transport including support services | 20,460 | 21,570 | 21,508 | 21,275 | 22,118 |
| All other transport including postal and courier activities | 60,337 | 55,376 | 59,941 | 69,745 | 80,041 |
| Accommodation and food service activities | 54,972 | 52,441 | 43,657 | 43,086 | 48,803 |
| Information and communication | 108,324 | 121,890 | 139,623 | 149,969 | 164,487 |
| Telecommunications | 77,901 | 91,216 | 109,528 | 118,965 | 132,280 |
| Publishing, broadcasting, other IT and information activities | 30,423 | 30,674 | 30,095 | 31,004 | 32,207 |
| Financial and insurance activities | 196,189 | 212,185 | 229,819 | 251,376 | 268,651 |
| Financial activities | 167,117 | 180,674 | 196,614 | 216,499 | 231,916 |
| Insurance activities | 29,072 | 31,511 | 33,206 | 34,877 | 36,735 |
| Real estate | 283,061 | 294,747 | 311,148 | 333,537 | 362,724 |
| Professional, scientific and technical activities | 36,644 | 39,111 | 40,712 | 42,173 | 44,188 |
| Administrative and support service activities | 47,619 | 48,201 | 49,361 | 50,113 | 52,060 |
| Public administration and defence | 137,873 | 141,678 | 149,556 | 157,740 | 166,069 |
| Education | 234,135 | 249,001 | 268,359 | 280,540 | 298,331 |
| Pre-primary and Primary education | 109,760 | 111,490 | 112,041 | 113,775 | 116,693 |
| General secondary education | 83,662 | 93,881 | 107,902 | 116,385 | 124,596 |
| Higher and other education | 40,713 | 43,630 | 48,417 | 50,381 | 57,042 |
| Human health and social work activities | 59,023 | 63,579 | 68,728 | 72,912 | 77,160 |
| Arts, entertainment and recreation | 4,892 | 5,039 | 5,190 | 5,269 | 5,482 |
| Other service activities | 22,732 | 24,403 | 25,989 | 27,551 | 29,213 |
| Activities of households as employers; | 18,177 | 18,449 | 18,726 | 19,007 | 19,292 |
| Financial Intermediation Services Indirectly Measured | -82,648 | -86,932 | -96,763 | -109,821 | -113,092 |
| **All economic activities** | **3,041,531** | **3,205,934** | **3,385,921** | **3,592,457** | **3,808,822** |
| Taxes on products | 402,809 | 440,924 | 456,111 | 469,085 | 490,265 |
| **GDP at market prices** | **3,444,339** | **3,646,858** | **3,842,032** | **4,061,542** | **4,299,088** |

* Provisional

\+ Revised

**Table 2.4: Growth Rate of Gross Domestic Product by Activity**

Percent (2009 Prices)

| Industry | 2012+ | 2013+ | 2014+ | 2015 | 2016* |
|---|---|---|---|---|---|
| Agriculture, forestry and fishing | 2.8 | 5.4 | 4.3 | 5.5 | 4.0 |
| Growing of crops | 2.2 | 6.6 | 5.9 | 7.2 | 6.4 |
| Animal production | 1.7 | 2.0 | 1.3 | 2.7 | 0.3 |
| Support activities to agriculture | 15.8 | 3.8 | -6.9 | 2.0 | -18.9 |
| Forestry & logging | 7.9 | 5.0 | 3.3 | 0.9 | 5.6 |
| Fishing & aquaculture | 5.1 | 5.9 | 2.1 | -8.5 | -17.3 |
| Mining and quarrying | 19.0 | -4.2 | 14.9 | 12.4 | 9.5 |
| Manufacturing | -0.6 | 5.6 | 2.5 | 3.6 | 3.5 |
| Manufacture of food, beverages and tobacco | 5.7 | 10.5 | 1.4 | 6.0 | 2.9 |
| Other manufacturing and repair and installation | -3.7 | 2.8 | 3.2 | 2.1 | 3.9 |
| Electricity supply | 13.6 | 9.8 | 7.3 | 11.5 | 9.1 |
| Water supply; sewerage, waste management | 3.1 | 0.9 | 3.9 | 2.7 | 2.6 |
| Construction | 11.3 | 6.1 | 13.1 | 13.9 | 9.2 |
| Wholesale and retail trade; repairs | 7.0 | 8.4 | 6.9 | 5.9 | 3.8 |
| Transport and storage | 2.6 | 1.3 | 5.5 | 8.0 | 8.4 |
| Land transport | 2.6 | 4.5 | 5.3 | 6.2 | 6.5 |
| Air transport including support services | 2.4 | 5.4 | -0.3 | -1.1 | 4.0 |
| All other transport including postal and courier activities | 2.9 | -8.2 | 8.2 | 16.4 | 14.8 |
| Accommodation and food services | 3.1 | -4.6 | -16.7 | -1.3 | 13.3 |
| Information and communication | 2.6 | 12.5 | 14.5 | 7.4 | 9.7 |
| Telecommunications | 5.0 | 17.1 | 20.1 | 8.6 | 11.2 |
| Publishing, broadcasting, other IT and information activities | -3.2 | 0.8 | -1.9 | 3.0 | 3.9 |
| Financial and insurance activities | 6.0 | 8.2 | 8.3 | 9.4 | 6.9 |
| Financial activities | 5.0 | 8.1 | 8.8 | 10.1 | 7.1 |
| Insurance activities | 11.8 | 8.4 | 5.4 | 5.0 | 5.3 |
| Real estate | 4.0 | 4.1 | 5.6 | 7.2 | 8.8 |
| Professional, scientific and technical activities | 6.2 | 6.7 | 4.1 | 3.6 | 4.8 |
| Administrative and support service activities | 2.3 | 1.2 | 2.4 | 1.5 | 3.9 |
| Public administration and defence | 4.0 | 2.8 | 5.6 | 5.5 | 5.3 |
| Education | 11.1 | 6.3 | 7.8 | 4.5 | 6.3 |
| Primary education | 12.3 | 1.6 | 0.5 | 1.5 | 2.6 |
| General secondary education | 14.5 | 12.2 | 14.9 | 7.9 | 7.1 |
| Higher and other education | 1.7 | 7.2 | 11.0 | 4.1 | 13.2 |
| Human health and social work activities | -2.8 | 7.7 | 8.1 | 6.1 | 5.8 |
| Arts, entertainment and recreation | -2.6 | 3.0 | 3.0 | 1.5 | 4.0 |
| Other service activities | 4.0 | 7.3 | 6.5 | 6.0 | 6.0 |
| Activities of households as employers; | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Financial Intermediation Services Indirectly Measured | 10.1 | 5.2 | 11.3 | 13.5 | 3.0 |
| **All industries at basic prices** | **4.1** | **5.4** | **5.6** | **6.1** | **6.0** |
| Taxes on products | 7.7 | 9.5 | 3.4 | 2.8 | 4.5 |
| **GDP at market prices** | **4.5** | **5.9** | **5.4** | **5.7** | **5.8** |

* Provisional

+Revised

2.22 Table 2.5 shows the extent to which the various sectors contributed to the growth for the period 2012- 2016. The agriculture, forestry and fishing sector contribution contracted from 21.2 per cent in 2015 to 15.2 per cent in 2016 but remained the main source of growth. The real estate, transport and storage, and education sectors registered notable contribution to growth in 2016 of 12.3, 9.7 and 7.5 per cent, respectively. In contrast, contribution from financial and insurance, and wholesale and retail trade sectors dropped by 2.5 and 2.9 percentage points, respectively, in 2016. This was in tandem with the performance of these sectors that showed reduced activity in the year under review.

**Table 2.5: Sources of Growth, 2012 - 2016**

Percent

| Industry | 2012+ | 2013+ | 2014+ | 2015 | 2016* |
|---|---|---|---|---|---|
| Agriculture, forestry and fishing | 14.3 | 20.9 | 18.2 | 21.2 | 15.2 |
| Growing of crops | 7.6 | 17.3 | 17.1 | 19.6 | 17.3 |
| Animal production | 1.9 | 1.6 | 1.1 | 2.1 | 0.2 |
| Support activities to agriculture | 2.3 | 0.5 | -0.9 | 0.2 | -2.0 |
| Forestry & logging | 1.9 | 1.0 | 0.7 | 0.2 | 1.0 |
| Fishing & aquaculture | 0.7 | 0.6 | 0.2 | -0.9 | -1.5 |
| Mining and quarrying | 3.6 | -0.7 | 2.5 | 2.1 | 1.7 |
| Manufacturing | -1.4 | 10.6 | 5.2 | 6.7 | 6.3 |
| Manufacture of food, beverages and tobacco | 4.9 | 7.1 | 1.1 | 4.2 | 2.0 |
| Other manufacturing and repair and installation | -6.4 | 3.4 | 4.1 | 2.5 | 4.3 |
| Electricity supply | 4.2 | 2.5 | 2.1 | 3.2 | 2.6 |
| Water supply; sewerage, waste management | 0.6 | 0.1 | 0.6 | 0.4 | 0.4 |
| Construction | 10.6 | 4.7 | 11.0 | 11.7 | 8.2 |
| Wholesale and retail trade; repairs | 11.2 | 10.5 | 9.8 | 7.9 | 5.0 |
| Transport and storage | 4.1 | 1.6 | 6.8 | 9.3 | 9.7 |
| Land transport | 2.6 | 3.5 | 4.5 | 4.9 | 5.0 |
| Air transport including support services | 0.3 | 0.5 | 0.0 | -0.1 | 0.4 |
| All other transport including postal and courier activities | 1.1 | -2.4 | 2.3 | 4.5 | 4.3 |
| Accommodation and food services | 1.1 | -1.2 | -4.5 | -0.3 | 2.4 |
| Information and communication | 1.8 | 6.7 | 9.1 | 4.7 | 6.1 |
| Telecommunications | 2.5 | 6.6 | 9.4 | 4.3 | 5.6 |
| Publishing, broadcasting, other IT and information activities | -0.7 | 0.1 | -0.3 | 0.4 | 0.5 |
| Financial and insurance activities | 7.4 | 7.9 | 9.0 | 9.8 | 7.3 |
| Financial activities | 5.3 | 6.7 | 8.2 | 9.1 | 6.5 |
| Insurance activities | 2.1 | 1.2 | 0.9 | 0.8 | 0.8 |
| Real estate | 7.4 | 5.8 | 8.4 | 10.2 | 12.3 |
| Professional, scientific and technical activities | 1.4 | 1.2 | 0.8 | 0.7 | 0.8 |
| Administrative and support service activities | 0.7 | 0.3 | 0.6 | 0.3 | 0.8 |
| Public administration and defence | 3.5 | 1.9 | 4.0 | 3.7 | 3.5 |
| Education | 15.6 | 7.3 | 9.9 | 5.5 | 7.5 |
| Primary education | 8.1 | 0.9 | 0.3 | 0.8 | 1.2 |
| General secondary education | 7.1 | 5.0 | 7.2 | 3.9 | 3.5 |
| Higher and other education | 0.5 | 1.4 | 2.5 | 0.9 | 2.8 |
| Human health and social work activities | -1.1 | 2.2 | 2.6 | 1.9 | 1.8 |
| Arts, entertainment and recreation | -0.1 | 0.1 | 0.1 | 0.0 | 0.1 |
| Other service activities | 0.6 | 0.8 | 0.8 | 0.7 | 0.7 |
| Activities of households as employers; | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 |
| Financial Intermediation Services Indirectly Measured | -5.1 | -2.1 | -5.0 | -5.9 | -1.4 |
| **All industries at basic prices** | **80.6** | **81.2** | **92.2** | **94.1** | **91.1** |
| Taxes on products | 19.4 | 18.8 | 7.8 | 5.9 | 8.9 |
| **GDP at market prices** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** |

*Provisional

+ Revised

2.23 The annual production accounts for all industries for the period 2012-2016 are presented in Table 2.6. Total output generated by all industries stood at KSh 11,220.4 billion in 2016 up from KSh 10,069.7 billion recorded in 2015. The intermediate consumption grew slower in 2016 at 6.9 per cent compared to a 10.3 per cent growth in 2015. Gross value added for industries at current prices increased by 14.9 per cent from KSh 5,708.3 billion in 2015 to KSh 6,557.1 billion in 2016.

## Table 2.6: Annual Production Accounts by Industry, 2012-2016

KSh Million

| Industry | 2012+ | 2013+ | 2014+ | 2015+ | 2016* |
|---|---|---|---|---|---|
| **Agriculture, forestry and fishing** | | | | | |
| Output at basic prices | 1,335,499 | 1,502,303 | 1,762,657 | 2,217,262 | 2,701,274 |
| Intermediate consumption | 220,301 | 247,490 | 279,817 | 316,297 | 367,127 |
| Value added, gross | 1,115,198 | 1,254,813 | 1,482,840 | 1,900,965 | 2,334,147 |
| Compensation of employees | 117,312 | 131,413 | 154,409 | 205,137 | 265,294 |
| Operating surplus/mixed income, gross | 997,886 | 1,123,400 | 1,328,431 | 1,695,827 | 2,068,853 |
| **Mining and quarrying** | | | | | |
| Output at basic prices | 76,628 | 69,514 | 78,638 | 91,477 | 99,953 |
| Intermediate consumption | 30,001 | 28,772 | 33,702 | 36,670 | 40,551 |
| Value added, gross | 46,628 | 40,742 | 44,936 | 54,806 | 59,402 |
| Compensation of employees | 6,921 | 8,768 | 15,627 | 17,854 | 20,050 |
| Operating surplus/mixed income, gross | 39,707 | 31,974 | 29,309 | 36,953 | 39,352 |
| **Manufacturing** | | | | | |
| Output at basic prices | 1,619,622 | 1,737,699 | 1,820,369 | 1,976,793 | 2,132,259 |
| Intermediate consumption | 1,150,518 | 1,231,087 | 1,282,369 | 1,387,196 | 1,474,309 |
| Value added, gross | 469,104 | 506,612 | 537,999 | 589,597 | 657,950 |
| Compensation of employees | 105,714 | 127,186 | 147,453 | 163,395 | 175,235 |
| Operating surplus/mixed income, gross | 363,390 | 379,426 | 390,546 | 426,202 | 482,715 |
| **Electricity, gas and water supply** | | | | | |
| Output at basic prices | 161,129 | 171,628 | 175,523 | 209,139 | 240,017 |
| Intermediate consumption | 75,128 | 77,285 | 78,231 | 72,968 | 68,195 |
| Value added, gross | 86,001 | 94,343 | 97,292 | 136,170 | 171,822 |
| Compensation of employees | 21,694 | 27,127 | 25,308 | 24,269 | 28,621 |
| Operating surplus/mixed income, gross | 64,307 | 67,215 | 71,985 | 111,902 | 143,201 |
| **Construction** | | | | | |
| Output at basic prices | 513,390 | 582,896 | 683,376 | 805,703 | 819,448 |
| Intermediate consumption | 322,540 | 369,331 | 421,285 | 496,657 | 459,792 |
| Value added, gross | 190,851 | 213,565 | 262,090 | 309,046 | 359,656 |
| Compensation of employees | 83,044 | 98,694 | 126,564 | 185,235 | 188,326 |
| Operating surplus/mixed income, gross | 107,807 | 114,872 | 135,526 | 123,811 | 171,330 |
| **Wholesale and retail trade** | | | | | |
| Output at basic prices | 606,205 | 685,949 | 773,371 | 838,312 | 923,706 |
| Intermediate consumption | 271,875 | 305,303 | 341,386 | 365,194 | 403,222 |
| Value added, gross | 334,331 | 380,646 | 431,985 | 473,119 | 520,483 |
| Compensation of employees | 118,951 | 143,960 | 174,523 | 178,816 | 200,598 |
| Operating surplus/mixed income, gross | 215,380 | 236,686 | 257,462 | 294,302 | 319,886 |
| **Transport and storage** | | | | | |
| Output at basic prices | 706,028 | 775,826 | 893,141 | 956,257 | 1,022,868 |
| Intermediate consumption | 366,502 | 397,301 | 430,684 | 438,214 | 459,184 |
| Value added, gross | 339,526 | 378,525 | 462,457 | 518,043 | 563,684 |
| Compensation of employees | 98,790 | 111,466 | 132,050 | 145,492 | 151,618 |
| Operating surplus/mixed income, gross | 240,736 | 267,059 | 330,407 | 372,551 | 412,066 |
| **Accomodation and Food Services** | | | | | |
| Output at basic prices | 132,560 | 132,153 | 113,503 | 116,720 | 134,507 |
| Intermediate consumption | 75,386 | 74,115 | 64,351 | 67,331 | 83,006 |
| Value added, gross | 57,175 | 58,037 | 49,151 | 49,389 | 51,501 |
| Compensation of employees | 25,533 | 29,678 | 30,466 | 33,887 | 35,257 |
| Operating surplus/mixed income, gross | 31,642 | 28,359 | 18,685 | 15,502 | 16,244 |
| **Information and communication** | | | | | |
| Output at basic prices | 203,924 | 228,405 | 259,000 | 280,434 | 311,069 |
| Intermediate consumption | 135,479 | 159,928 | 193,408 | 219,949 | 242,216 |
| Value added, gross | 68,445 | 68,478 | 65,592 | 60,485 | 68,853 |
| Compensation of employees | 41,623 | 50,086 | 57,971 | 62,603 | 71,234 |
| Operating surplus/mixed income, gross | 26,822 | 18,391 | 7,621 | -2,117 | -2,381 |
| **Financial and insurance activities** | | | | | |
| Output at basic prices | 337,400 | 413,707 | 492,198 | 555,266 | 640,285 |
| Intermediate consumption | 85,777 | 100,587 | 125,434 | 131,726 | 135,597 |
| Value added, gross | 251,622 | 313,120 | 366,764 | 423,540 | 504,688 |
| Compensation of employees | 82,057 | 93,209 | 102,276 | 83,181 | 89,215 |
| Operating surplus/mixed income, gross | 169,566 | 219,912 | 264,488 | 340,358 | 415,474 |

* Provisional

\+ Revised

## Table 2.6: Annual Production Accounts by Industry, 2012-2016 (Cont'd)

KSh Million

| Industry | 2012+ | 2013+ | 2014+ | 2015+ | 2016* |
|---|---|---|---|---|---|
| **Real estate** | | | | | |
| Output at basic prices | 384,519 | 420,365 | 467,885 | 531,735 | 601,937 |
| Intermediate consumption | 41,490 | 44,777 | 50,056 | 57,348 | 69,293 |
| Value added, gross | 343,029 | 375,588 | 417,829 | 474,388 | 532,644 |
| Compensation of employees | 29,325 | 32,644 | 36,436 | 40,820 | 44,831 |
| Operating surplus/mixed income, gross | 313,704 | 342,944 | 381,393 | 433,568 | 487,813 |
| **Professional, scientific and technical activities** | | | | | |
| Output at basic prices | 64,607 | 71,247 | 72,950 | 74,812 | 78,032 |
| Intermediate consumption | 21,506 | 22,898 | 20,958 | 18,999 | 18,021 |
| Value added, gross | 43,102 | 48,349 | 51,992 | 55,812 | 60,011 |
| Compensation of employees | 24,743 | 28,230 | 30,387 | 32,551 | 34,673 |
| Operating surplus/mixed income, gross | 18,359 | 20,119 | 21,605 | 23,261 | 25,338 |
| **Administrative and support service activities** | | | | | |
| Output at basic prices | 65,144 | 68,239 | 72,794 | 75,866 | 80,656 |
| Intermediate consumption | 10,267 | 10,927 | 11,726 | 11,975 | 12,891 |
| Value added, gross | 54,877 | 57,312 | 61,067 | 63,891 | 67,765 |
| Compensation of employees | 27,264 | 34,428 | 37,985 | 43,110 | 47,440 |
| Operating surplus/mixed income, gross | 27,613 | 22,884 | 23,082 | 20,781 | 20,325 |
| **Public administration and defence** | | | | | |
| Output at basic prices | 316,010 | 363,287 | 417,742 | 498,867 | 530,400 |
| Intermediate consumption | 130,320 | 154,639 | 174,216 | 231,192 | 240,120 |
| Value added, gross | 185,689 | 208,647 | 243,526 | 267,675 | 290,280 |
| Compensation of employees | 145,469 | 164,585 | 191,806 | 203,790 | 228,964 |
| Operating surplus/mixed income, gross | 40,221 | 44,062 | 51,720 | 63,885 | 61,317 |
| **Education** | | | | | |
| Output at basic prices | 387,479 | 430,102 | 483,396 | 537,610 | 565,969 |
| Intermediate consumption | 158,286 | 178,144 | 203,852 | 229,186 | 252,998 |
| Value added, gross | 229,193 | 251,958 | 279,543 | 308,424 | 312,971 |
| Compensation of employees | 211,552 | 234,474 | 266,008 | 294,325 | 289,248 |
| Operating surplus/mixed income, gross | 17,641 | 17,484 | 13,536 | 14,098 | 23,723 |
| **Health and social work** | | | | | |
| Output at basic prices | 136,968 | 154,479 | 164,850 | 186,415 | 210,028 |
| Intermediate consumption | 66,509 | 79,322 | 72,881 | 78,478 | 90,491 |
| Value added, gross | 70,459 | 75,157 | 91,969 | 107,936 | 119,537 |
| Compensation of employees | 63,270 | 84,875 | 104,938 | 105,359 | 121,304 |
| Operating surplus/mixed income, gross | 7,190 | -9,718 | -12,969 | 2,577 | -1,768 |
| **Other service activities** | | | | | |
| Output at basic prices | 85,778 | 95,188 | 106,339 | 116,995 | 128,027 |
| Intermediate consumption | 29,396 | 32,982 | 36,252 | 38,798 | 43,637 |
| Value added, gross | 56,381 | 62,206 | 70,086 | 78,197 | 84,390 |
| Compensation of employees | 45,998 | 51,439 | 57,499 | 62,864 | 69,302 |
| Operating surplus/mixed income, gross | 10,383 | 10,767 | 12,587 | 15,333 | 15,088 |
| Less: Financial services indirectly measured | | | | | |
| Intermediate consumption | 111,574 | 124,136 | 134,588 | 163,233 | 202,720 |
| Value added, gross | -111,574 | -124,136 | -134,588 | -163,233 | -202,720 |
| **All industries at basic prices** | | | | | |
| Output at basic prices | 7,132,892 | 7,902,986 | 8,837,729 | 10,069,662 | 11,220,435 |
| Intermediate consumption | 3,302,854 | 3,639,022 | 3,955,197 | 4,361,412 | 4,663,369 |
| Gross value added at basic prices | 3,830,038 | 4,263,964 | 4,882,532 | 5,708,251 | 6,557,066 |
| Other taxes on production | 128,291 | 137,804 | 151,789 | 162,385 | 178,911 |
| Less: Subsidies | | | | | |
| Compensation of employees | 1,249,259 | 1,452,262 | 1,691,705 | 1,882,689 | 2,061,210 |
| Gross operating surplus/mixed income | 2,452,488 | 2,673,898 | 3,039,037 | 3,663,177 | 4,316,945 |
| **Total economy** | | | | | |
| Output at basic prices | 7,132,892 | 7,902,986 | 8,837,729 | 10,069,662 | 11,220,435 |
| Taxes on products less subsidies on products | 431,332 | 481,179 | 519,878 | 552,396 | 601,629 |
| Intermediate consumption | 3,302,854 | 3,639,022 | 3,955,197 | 4,361,412 | 4,663,369 |
| **GDP at market prices** | 4,261,370 | 4,745,143 | 5,402,410 | 6,260,646 | 7,158,695 |

* Provisional

\+ Revised

2.24 Tables 2.7 and Table 2.8 present the components of expenditure on GDP at current prices and their respective shares to GDP at market prices. Gross domestic expenditure stood at KSh 7,917.4 billion in 2016 from KSh 7,199.3 billion in 2015. The increase in expenditure on GDP was mainly attributable to final private consumption that accounts for over three quarters of total gross domestic expenditure. The contribution of Gross Fixed Capital Formation (GFCF) declined from 21.7 per cent in 2015 to 17.2 per cent in 2016 mainly on account of reduced investment in transport equipment and civil works. The value of export of goods and services increased marginally while that of imports declined by 4.7 per cent in 2016.

**Table 2.7: Expenditure on the Gross Domestic Product**

**Current Prices - KSh Million**

| Expenditure category | 2012+ | 2013+ | 2014+ | 2015+ | 2016* |
|---|---|---|---|---|---|
| Government final consumption expenditure | 590,538 | 670,936 | 750,450 | 894,853 | 976,510 |
| Private final consumption expenditure | 3,317,738 | 3,787,901 | 4,272,830 | 4,905,448 | 5,661,970 |
| Final consumption expenditure by NPISH | 37,374 | 43,552 | 43,709 | 47,652 | 52,171 |
| Gross fixed capital formation | 901,305 | 976,086 | 1,236,107 | 1,360,448 | 1,236,835 |
| Changes in inventories | 13,850 | -22,059 | -24,203 | -9,125 | -4,808 |
| **Gross domestic expenditure** | **4,860,805** | **5,456,416** | **6,278,893** | **7,199,277** | **7,922,678** |
| Exports of goods and services | 947,190 | 945,478 | 988,521 | 1,042,700 | 1,043,002 |
| Imports of goods and services | 1,514,394 | 1,575,731 | 1,782,945 | 1,735,621 | 1,672,236 |
| Discrepancy [1] | -32,230 | -81,020 | -82,059 | -245,708 | -134,749 |
| **Gross domestic product at market prices** | **4,261,370** | **4,745,143** | **5,402,410** | **6,260,647** | **7,158,695** |

[1] Difference between GDP production approach and GDP expenditure approach

[2] Non Profit Institutions Serving Households

**Table 2.8: Expenditure on the Gross Domestic Product**

**Percentage contributions to GDP**

| Expenditure category | 2012+ | 2013+ | 2014+ | 2015+ | 2016* |
|---|---|---|---|---|---|
| Government final consumption expenditure | 13.9 | 14.1 | 13.9 | 14.3 | 13.6 |
| Private final consumption expenditure | 77.9 | 79.8 | 79.1 | 78.4 | 79.1 |
| Final consumption expenditure by NPISH | 0.9 | 0.9 | 0.8 | 0.8 | 0.7 |
| Gross fixed capital formation | 21.2 | 20.6 | 22.9 | 21.7 | 17.3 |
| Changes in inventories | 0.3 | -0.5 | -0.4 | -0.1 | -0.1 |
| **Gross domestic expenditure** | **114.1** | **115.0** | **116.2** | **115.0** | **110.7** |
| Exports of goods and services | 22.2 | 19.9 | 18.3 | 16.7 | 14.6 |
| Imports of goods and services | 35.5 | 33.2 | 33.0 | 27.7 | 23.4 |
| Discrepancy | -0.8 | -1.7 | -1.5 | -3.9 | -1.9 |
| **Gross domestic product at market prices** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** |

* Provisional

+ Revised

2.25 The components of GDP valued at 2009 prices, that show how supply of resources generated in the economy are utilized as either final consumption expenditure or assets, are presented in Table 2.9. The growth of gross domestic expenditure slowed from 6.1 per cent in 2015 to 2.1 per cent in 2016, mainly occasioned by declines in private and general Government consumption in 2016, and capital formation. The GFCF valued at 2009 prices slumped from a growth of 6.7 per cent in 2015 to a contraction of 9.7 per cent in 2016.

**Table 2.9: Expenditure on the Gross Domestic Product, 2012-2016**

Constant 2009 Prices - KSh Million

| Expenditure category | 2012+ | 2013+ | 2014+ | 2015+ | 2016* |
|---|---|---|---|---|---|
| Government final consumption expenditure | 502,440 | 532,890 | 541,923 | 612,516 | 655,249 |
| Private final consumption expenditure | 2,606,055 | 2,824,756 | 2,946,395 | 3,096,563 | 3,244,445 |
| Final consumption expenditure by NPISH | 32,025 | 33,150 | 33,502 | 34,328 | 35,143 |
| Gross fixed capital formation | 710,110 | 725,143 | 828,131 | 883,604 | 801,196 |
| Changes in inventories | 8,729 | -8,545 | -33,774 | -48,392 | -57,252 |
| **Gross domestic expenditure** | **3,859,358** | **4,107,394** | **4,316,176** | **4,578,620** | **4,678,781** |
| Exports of goods and services | 727,502 | 711,768 | 753,318 | 800,319 | 804,957 |
| Imports of goods and services | 1,137,099 | 1,132,058 | 1,249,558 | 1,264,839 | 1,205,155 |
| Discrepancy [1] | -5,422 | -40,245 | 22,095 | -52,558 | 20,505 |
| **Gross domestic product at market prices** | **3,444,339** | **3,646,858** | **3,842,032** | **4,061,542** | **4,299,088** |

[1] Difference between GDP production approach and GDP expenditure approach

**Table 2.10: Growth Rates of Expenditure on the Gross Domestic Product**

Percent

| Expenditure category | 2012+ | 2013+ | 2014+ | 2015+ | 2016* |
|---|---|---|---|---|---|
| Government final consumption expenditure | 7.1 | 6.1 | 1.7 | 13.0 | 7.0 |
| Private final consumption expenditure | 5.8 | 8.4 | 4.3 | 5.1 | 4.8 |
| Final consumption expenditure by NPISH | 3.3 | 3.5 | 1.1 | 2.5 | 2.4 |
| Gross fixed capital formation | 13.3 | 2.1 | 14.2 | 6.7 | -9.3 |
| **Gross domestic expenditure** | **6.7** | **6.4** | **5.1** | **6.1** | **2.2** |
| Exports of goods and services | 0.4 | -2.2 | 5.8 | 6.2 | 0.6 |
| Imports of goods and services | 5.1 | -0.4 | 10.4 | 1.2 | -4.7 |
| **Gross domestic product at market prices** | **4.5** | **5.9** | **5.4** | **5.7** | **5.8** |

* Provisional

+ Revised

2.26 Table 2.11a provides details of the value of additions to fixed assets by type less disposals at current prices for the period 2012 to 2016. The shares of the various types of asset for the same period are presented in Table 2.11b. The value of additions to fixed assets declined from KSh 1,360.4 billion in 2015 to KSh 1,236.8 billion in 2016. The major contributors to this decline were the value of additions to transport and, other machinery and equipment categories. The share of transport equipment declined from 22.3 per cent in 2015 to 14.2 per cent in 2016 in congruence with a considerable drop in imports of transport equipment.

**Table 2.11a: Gross Fixed Capital Formation**

Current Prices - KSh Million

| Type of Asset | 2012+ | 2013+ | 2014+ | 2015+ | 2016* |
|---|---|---|---|---|---|
| Dwellings | 172,272 | 197,336 | 231,539 | 258,838 | 271,818 |
| Buildings other than dwellings | 168,322 | 195,630 | 224,904 | 245,158 | 259,765 |
| Other structures | 103,434 | 109,016 | 133,706 | 180,291 | 165,006 |
| Transport equipment | 182,236 | 182,236 | 298,121 | 302,856 | 175,507 |
| ICT equipment | 64,014 | 63,247 | 57,896 | 73,407 | 79,052 |
| Other machinery and equipment | 172,641 | 190,000 | 249,141 | 251,648 | 235,488 |
| Animal resources yielding repeat products | 8,538 | 9,407 | 9,674 | 11,030 | 8,852 |
| Tree, crop and plant resources yielding repeat products | 6,409 | 6,832 | 6,322 | 6,619 | 6,976 |
| Intellectual property products | 23,439 | 22,382 | 24,804 | 30,601 | 34,372 |
| **Total** | **901,305** | **976,086** | **1,236,107** | **1,360,448** | **1,236,835** |

**Table 2.11b: Gross Fixed Capital Formation**

Percentage Contribution

| Type of Asset | 2012+ | 2013+ | 2014+ | 2015 | 2016* |
|---|---|---|---|---|---|
| Dwellings | 19.1 | 20.2 | 18.7 | 19.0 | 22.0 |
| Buildings other than dwellings | 18.7 | 20.0 | 18.2 | 18.0 | 21.0 |
| Other structures | 11.5 | 11.2 | 10.8 | 13.3 | 13.3 |
| Transport equipment | 20.2 | 18.7 | 24.1 | 22.3 | 14.2 |
| ICT equipment | 7.1 | 6.5 | 4.7 | 5.4 | 6.4 |
| Other machinery and equipment | 19.2 | 19.5 | 20.2 | 18.5 | 19.0 |
| Animal resources yielding repeat products | 0.9 | 1.0 | 0.8 | 0.8 | 0.7 |
| Tree crop and plant resources yielding repeat products | 0.7 | 0.7 | 0.5 | 0.5 | 0.6 |
| Intellectual property products | 2.6 | 2.3 | 2.0 | 2.2 | 2.8 |
| **Total** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** |

* Provisional

+ Revised

2.27 Tables 2.12a and 2.12b present the values of real gross fixed capital formation by type of asset and the corresponding growth rates for the period 2012 to 2016. The total value of real GFCF contracted by 9.3 per cent in 2016 compared to a growth rate of 6.7 per cent in 2015, mainly due to a substantial drop in the real value of additions to transport equipment in 2016. The real value of dwellings rose from KSh 188.2 billion in 2015 to KSh 190.6 billion in 2016. The real value of ICT equipment increased from KSh 34.5 billion in 2015 to KSh 47.4 billion in 2016.

**Table 2.12a: Gross Fixed Capital Formation**

Constant 2009 Prices - KSh Million

| Type of Asset | 2012+ | 2013+ | 2014+ | 2015+ | 2016 |
|---|---|---|---|---|---|
| Dwellings | 142,179 | 156,739 | 172,082 | 188,228 | 190,588 |
| Buildings other than dwellings | 139,601 | 156,352 | 170,332 | 182,434 | 187,367 |
| Other structures | 85,785 | 87,128 | 101,263 | 134,163 | 119,017 |
| Transport equipment | 136,693 | 140,838 | 225,839 | 218,525 | 123,997 |
| ICT equipment | 50,760 | 47,791 | 36,357 | 34,521 | 47,412 |
| Other machinery and equipment | 124,948 | 106,167 | 90,862 | 89,126 | 94,440 |
| Animal resources yielding repeat products | 5,881 | 6,173 | 5,944 | 6,450 | 5,071 |
| Tree crop and plant resources yielding repeat products | 5,467 | 5,607 | 4,971 | 5,049 | 5,165 |
| Intellectual property products | 18,797 | 18,348 | 20,480 | 25,108 | 28,140 |
| **Total** | **710,110** | **725,143** | **828,131** | **883,604** | **801,196** |

* Provisional

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**Table 2.12b: Gross Fixed Capital Formation**

Percentage Changes (growth)

| Type of Asset | 2012+ | 2013+ | 2014+ | 2015+ | 2016 |
|---|---|---|---|---|---|
| Dwellings | 14.9 | 10.2 | 9.8 | 9.4 | 1.3 |
| Buildings other than dwellings | 15.7 | 12.0 | 8.9 | 7.1 | 2.7 |
| Other structures | 17.0 | 1.6 | 16.2 | 32.5 | -11.3 |
| Transport equipment | 1.4 | 3.0 | 60.4 | -3.2 | -43.3 |
| ICT equipment | 8.1 | -5.8 | -23.9 | -5.1 | 37.3 |
| Other machinery and equipment | 23.7 | -15.0 | -14.4 | -1.9 | 6.0 |
| Animal resources yielding repeat products | 0.3 | 5.0 | -3.7 | 8.5 | -21.4 |
| Tree crop and plant resources yielding repeat products | 2.4 | 2.6 | -11.3 | 1.6 | 2.3 |
| Intellectual property products | 25.0 | -2.4 | 11.6 | 22.6 | 12.1 |
| **Total** | **13.3** | **2.1** | **14.2** | **6.7** | **-9.3** |

* Provisional

+ Revised

2.28 The relationship between the GDP and Gross National Income (GNI) for the period 2012 to 2016 is shown in Tables 2.13 and 2.14. The GNI registered a nominal growth of 14.5 per cent to stand at KSh 7,089.3 billion in 2016. Similarly, the Gross National Disposable Income (GNDI) at current prices increased by 14.7 per cent from KSh 6,532.5 million in 2015 to KSh 7,417.1 million in 2016. Gross domestic product per capita rose from KSh 141,644 in 2015 to KSh 162,121 in 2016. Primary incomes receivable from the rest of the world decreased from KSh 48.3 billion in 2015 to KSh 44.0 billion in 2016. Despite a significant rise in diaspora remittances from KSh 154.1 billion in 2015 to KSh 177.1 billion in 2016, current transfers receivable from the rest of the world declined by 3.5 per cent to stand at KSh 333.0 billion in 2016. This was largely on account of a decline in the current transfers receivable to general government.

## Table 2.13: Gross Domestic Product and Gross National Income, 2012-2016

Current Prices - KSh Million

| | 2012+ | 2013+ | 2014+ | 2015+ | 2016* |
|---|---|---|---|---|---|
| **Current Prices, KSh Million** | | | | | |
| Compensation of employees | 1,248,611 | 1,452,923 | 1,694,151 | 1,886,506 | 2,064,249 |
| Consumption of fixed capital | 475,466 | 561,868 | 730,422 | 816,364 | 857,961 |
| Net operating surplus | 2,105,962 | 2,249,172 | 2,457,959 | 3,005,381 | 3,634,855 |
| Taxes on products | 431,332 | 481,179 | 519,878 | 552,396 | 601,629 |
| **Gross domestic product at market prices** | **4,261,370** | **4,745,143** | **5,402,410** | **6,260,646** | **7,158,695** |
| Primary incomes | | | | | |
| Receivable from the rest of the world | 29,290 | 28,712 | 43,643 | 48,298 | 43,991 |
| Payable to rest of the world | -55,973 | -80,384 | -119,981 | -115,459 | -113,407 |
| **Gross national income at market prices** | **4,234,686** | **4,693,472** | **5,326,072** | **6,193,485** | **7,089,280** |
| Current transfers | | | | | |
| Receivable from the rest of the world | 240,850 | 268,925 | 327,853 | 345,218 | 333,039 |
| Payable to rest of the world | -3,352 | -4,020 | -17,853 | -6,217 | -5,192 |
| **Gross national disposable income** | **4,472,185** | **4,958,377** | **5,636,073** | **6,532,486** | **7,417,127** |
| **Per capita, KSh** | | | | | |
| Gross domestic product at market prices | 104,702 | 113,520 | 125,637 | 141,644 | 157,681 |
| Gross national income at market prices | 104,046 | 112,284 | 123,862 | 140,124 | 156,152 |
| **Constant prices** | | | | | |
| GDP at market prices, KSh Million | 3,444,339 | 3,646,858 | 3,842,032 | 4,061,542 | 4,299,088 |
| Per capita | 84,721 | 87,105 | 89,240 | 91,890 | 94,757 |
| - Annual percentage change | 1.7 | 2.8 | 2.5 | 3.0 | 3.1 |

* Provisional

\+ Revised

## Table 2.14: National Disposable Income and Saving, 2012-2016

Current Prices - KSh Million

| | 2012+ | 2013+ | 2014+ | 2015+ | 2016* |
|---|---|---|---|---|---|
| **Gross national disposable income** | **4,472,185** | **4,958,377** | **5,636,073** | **6,532,486** | **7,417,127** |
| Consumption of fixed capital | 475,466 | 561,868 | 730,422 | 816,364 | 857,961 |
| **Net national disposable income** | **3,996,719** | **4,396,509** | **4,905,651** | **5,716,121** | **6,559,166** |
| Final consumption expenditure | 3,945,650 | 4,502,389 | 5,066,989 | 5,847,954 | 6,690,651 |
| Private | 3,317,738 | 3,787,901 | 4,272,830 | 4,905,448 | 5,661,970 |
| Non-Profit Institutions Serving Householuds | 37,374 | 43,552 | 43,709 | 47,652 | 52,171 |
| General government | 590,538 | 670,936 | 750,450 | 894,853 | 976,510 |
| **Saving, net** | **51,070** | **-105,881** | **-161,338** | **-131,833** | **-131,486** |
| **Financing of capital formation** | | | | | |
| Saving, net | 51,070 | -105,881 | -161,338 | -131,833 | -131,486 |
| Capital transfers from abroad, net | 19,890 | 13,644 | 24,204 | 25,219 | 20,878 |
| **Total** | **70,960** | **-92,237** | **-137,134** | **-106,614** | **-110,608** |
| Gross fixed capital formation | 901,305 | 976,086 | 1,236,107 | 1,360,448 | 1,236,835 |
| Consumption of fixed capital | -475,466 | -561,868 | -730,422 | -816,364 | -857,961 |
| Changes in inventories | 13,850 | -22,059 | -24,203 | -9,125 | -4,808 |
| Net lending (+) / Net borrowing(-) | -368,730 | -484,396 | -618,616 | -641,572 | -484,673 |
| **Total** | **70,960** | **-92,237** | **-137,134** | **-106,614** | **-110,608** |

* 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2012 | | 1,115,256 | 46,630 | 469,128 | 86,006 | 190,861 | 334,348 | 57,177 | 339,544 | 68,449 | 251,635 |
| 2013 | | 1,254,813 | 40,742 | 506,612 | 94,343 | 213,565 | 380,646 | 58,037 | 378,525 | 68,478 | 313,120 |
| 2014 | | 1,482,840 | 44,936 | 537,999 | 97,292 | 262,090 | 431,985 | 49,151 | 462,457 | 65,592 | 366,764 |
| 2015 | | 1,900,965 | 54,806 | 589,597 | 136,170 | 309,046 | 473,119 | 49,389 | 518,043 | 60,485 | 423,540 |
| 2016 | | 2,334,147 | 59,402 | 650,838 | 122,571 | 49,251 | 359,656 | 520,483 | 563,684 | 51,501 | 504,688 |
| | | | | | | | | | | | |
| 2012 | 1 | 385,294 | 10,407 | 112,055 | 19,248 | 44,901 | 73,263 | 20,056 | 79,472 | 15,548 | 60,316 |
| | 2 | 285,368 | 11,177 | 112,337 | 21,430 | 46,344 | 82,318 | 11,134 | 80,880 | 14,729 | 61,784 |
| | 3 | 221,445 | 12,296 | 118,943 | 21,901 | 48,565 | 94,864 | 13,009 | 87,833 | 15,521 | 55,490 |
| | 4 | 223,149 | 12,751 | 125,792 | 23,426 | 51,051 | 83,902 | 12,978 | 91,358 | 22,651 | 74,045 |
| | | | | | | | | | | | |
| 2013 | 1 | 406,058 | 11,201 | 128,057 | 23,797 | 52,692 | 84,341 | 17,298 | 81,876 | 17,938 | 67,686 |
| | 2 | 313,959 | 8,747 | 120,881 | 24,606 | 53,361 | 94,698 | 12,896 | 90,390 | 15,253 | 79,135 |
| | 3 | 276,596 | 11,541 | 127,351 | 22,987 | 55,687 | 106,978 | 15,299 | 96,673 | 14,877 | 79,994 |
| | 4 | 258,200 | 9,252 | 130,324 | 22,953 | 51,826 | 94,628 | 12,544 | 109,585 | 20,410 | 86,305 |
| | | | | | | | | | | | |
| 2014 | 1 | 478,013 | 12,620 | 137,669 | 19,600 | 56,860 | 101,617 | 14,694 | 96,180 | 16,681 | 86,427 |
| | 2 | 370,541 | 9,945 | 135,021 | 23,663 | 67,651 | 106,012 | 10,466 | 114,293 | 14,934 | 92,478 |
| | 3 | 348,587 | 10,462 | 133,764 | 28,545 | 67,304 | 117,757 | 11,529 | 122,302 | 15,286 | 85,762 |
| | 4 | 285,699 | 11,908 | 131,546 | 25,484 | 70,275 | 106,599 | 12,463 | 129,683 | 18,691 | 102,097 |
| | | | | | | | | | | | |
| 2015+ | 1 | 576,492 | 15,600 | 147,127 | 27,108 | 69,527 | 110,774 | 13,405 | 118,075 | 15,285 | 96,174 |
| | 2 | 498,631 | 12,557 | 147,308 | 32,029 | 76,288 | 116,576 | 10,558 | 125,466 | 13,658 | 101,359 |
| | 3 | 460,799 | 14,345 | 147,794 | 37,717 | 77,752 | 130,116 | 12,418 | 134,610 | 13,767 | 104,233 |
| | 4 | 365,053 | 12,304 | 147,368 | 39,317 | 85,479 | 115,653 | 13,007 | 139,892 | 17,775 | 121,774 |
| | | | | | | | | | | | |
| 2016* | 1 | 616,957 | 14,804 | 141,244 | 23,081 | 12,127 | 78,444 | 116,671 | 106,736 | 12,891 | 116,448 |
| | 2 | 695,793 | 14,118 | 178,309 | 35,850 | 12,298 | 90,476 | 123,871 | 133,140 | 10,769 | 125,245 |
| | 3 | 633,832 | 14,056 | 177,142 | 32,162 | 12,379 | 93,028 | 146,805 | 137,787 | 13,729 | 125,253 |
| | 4 | 387,565 | 16,425 | 154,142 | 31,478 | 12,446 | 97,708 | 133,137 | 186,022 | 14,112 | 137,742 |

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* Provisional

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

Current 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2012 | | 185,699 | 97,984 | 343,047 | 229,204 | 70,463 | 56,384 | -111,579 | 3,830,235 | 431,354 | 4,261,370 | |
| 2013 | | 208,647 | 105,661 | 375,588 | 251,958 | 75,157 | 62,206 | -124,136 | 4,263,964 | 481,179 | 4,745,143 | |
| 2014 | | 243,526 | 113,059 | 417,829 | 279,543 | 91,969 | 70,086 | -134,588 | 4,882,532 | 519,878 | 5,402,410 | |
| 2015 | | 267,675 | 119,703 | 474,388 | 283,018 | 107,936 | 78,197 | -163,233 | 5,682,845 | 552,396 | 6,235,241 | |
| 2016 | | 532,644 | 127,776 | 290,280 | 312,971 | 119,537 | 84,390 | -202,720 | 6,556,467 | 602,228 | 7,158,695 | |
| | | | | | | | | | | | | |
| 2012 | 1 | 42,196 | 21,628 | 83,282 | 59,224 | 17,984 | 13,462 | -26,960 | 1,031,375 | 97,820 | 1,074,506 | 1,014,820 |
| | 2 | 44,880 | 22,906 | 84,749 | 55,715 | 17,798 | 13,662 | -27,688 | 939,522 | 104,222 | 1,058,142 | 1,049,823 |
| | 3 | 44,150 | 25,766 | 87,008 | 57,695 | 17,517 | 14,460 | -23,951 | 912,513 | 116,151 | 1,039,635 | 1,069,318 |
| | 4 | 54,474 | 27,684 | 88,008 | 56,571 | 17,164 | 14,800 | -32,980 | 946,826 | 113,161 | 1,089,087 | 1,143,343 |
| | | | | | | | | | | | | |
| 2013 | 1 | 51,716 | 24,352 | 90,929 | 64,718 | 17,158 | 14,810 | -28,042 | 1,126,586 | 111,142 | 1,237,729 | 1,159,272 |
| | 2 | 54,629 | 25,276 | 92,467 | 61,952 | 18,642 | 15,088 | -31,652 | 1,050,330 | 119,220 | 1,169,550 | 1,158,375 |
| | 3 | 51,475 | 27,084 | 94,833 | 62,340 | 18,736 | 15,760 | -31,209 | 1,047,003 | 130,951 | 1,177,953 | 1,203,302 |
| | 4 | 50,827 | 28,949 | 97,359 | 62,948 | 20,621 | 16,549 | -33,234 | 1,040,045 | 119,866 | 1,159,912 | 1,242,614 |
| | | | | | | | | | | | | |
| 2014 | 1 | 59,526 | 25,432 | 100,103 | 73,280 | 19,926 | 16,711 | -31,803 | 1,283,537 | 120,216 | 1,403,753 | 1,306,336 |
| | 2 | 64,979 | 26,922 | 103,653 | 69,172 | 23,211 | 17,056 | -34,101 | 1,215,895 | 132,502 | 1,348,397 | 1,326,203 |
| | 3 | 56,852 | 29,301 | 106,165 | 67,359 | 23,397 | 17,547 | -31,145 | 1,210,774 | 138,096 | 1,348,869 | 1,368,820 |
| | 4 | 62,169 | 31,405 | 107,908 | 69,732 | 25,435 | 18,772 | -37,540 | 1,172,326 | 129,065 | 1,301,390 | 1,423,449 |
| | | | | | | | | | | | | |
| 2015+ | 1 | 62,103 | 28,140 | 111,992 | 82,855 | 23,495 | 18,791 | -34,550 | 1,482,394 | 125,855 | 1,608,249 | 1,493,984 |
| | 2 | 73,700 | 28,854 | 116,303 | 77,880 | 27,590 | 19,095 | -40,653 | 1,437,199 | 138,399 | 1,575,597 | 1,532,195 |
| | 3 | 63,128 | 30,594 | 120,999 | 60,075 | 27,526 | 19,979 | -37,987 | 1,417,854 | 144,195 | 1,562,050 | 1,575,462 |
| | 4 | 68,744 | 32,116 | 125,094 | 62,209 | 29,326 | 20,331 | -50,043 | 1,345,398 | 143,946 | 1,489,344 | 1,661,270 |
| | | | | | | | | | | | | |
| 2016* | 1 | 124,101 | 29,987 | 65,164 | 85,591 | 25,706 | 20,743 | -46,300 | 1,562,093 | 136,497 | 1,698,590 | 1,578,681 |
| | 2 | 134,056 | 31,290 | 78,710 | 78,375 | 30,615 | 20,810 | -52,076 | 1,759,498 | 149,406 | 1,908,904 | 1,831,322 |
| | 3 | 136,164 | 32,300 | 69,814 | 73,845 | 31,099 | 21,520 | -50,121 | 1,718,412 | 159,650 | 1,878,061 | 1,882,367 |
| | 4 | 138,324 | 34,199 | 76,592 | 75,161 | 32,116 | 21,316 | -54,223 | 1,516,465 | 156,675 | 1,673,140 | 1,896,606 |

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* Provisional

## 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2012 | | 776,703 | 33,839 | 381,750 | 81,567 | 154,796 | 253,955 | 54,972 | 237,930 | 108,324 | 196,189 |
| 2013 | | 819,026 | 32,405 | 403,128 | 86,961 | 164,220 | 275,291 | 52,441 | 241,112 | 121,890 | 212,185 |
| 2014 | | 854,599 | 37,235 | 413,281 | 92,287 | 185,696 | 294,357 | 43,657 | 254,358 | 139,623 | 229,819 |
| 2015 | | 901,197 | 41,854 | 427,972 | 100,153 | 211,430 | 311,667 | 43,086 | 274,731 | 149,969 | 251,377 |
| 2016 | | 937,187 | 45,827 | 442,829 | 107,242 | 230,984 | 323,566 | 48,803 | 297,820 | 164,487 | 268,651 |
| | | | | | | | | | | | |
| 2012 | 1 | 235,179 | 7,906 | 93,598 | 19,984 | 36,390 | 54,849 | 20,305 | 58,704 | 25,658 | 46,661 |
| | 2 | 211,271 | 8,454 | 91,472 | 20,031 | 36,932 | 62,127 | 10,729 | 57,860 | 23,468 | 47,875 |
| | 3 | 164,907 | 8,718 | 95,458 | 20,283 | 39,246 | 72,499 | 12,016 | 59,676 | 23,877 | 50,001 |
| | 4 | 165,347 | 8,761 | 101,222 | 21,269 | 42,228 | 64,480 | 11,922 | 61,691 | 35,321 | 51,653 |
| | | | | | | | | | | | |
| 2013 | 1 | 247,645 | 9,243 | 102,483 | 21,106 | 39,810 | 63,479 | 16,318 | 53,582 | 29,516 | 51,666 |
| | 2 | 225,715 | 6,752 | 98,321 | 22,112 | 40,543 | 69,125 | 10,857 | 58,502 | 26,194 | 52,662 |
| | 3 | 174,461 | 8,754 | 100,552 | 21,694 | 42,883 | 76,603 | 13,504 | 61,355 | 26,880 | 53,531 |
| | 4 | 171,205 | 7,656 | 101,772 | 22,048 | 40,985 | 66,084 | 11,762 | 67,673 | 39,300 | 54,326 |
| | | | | | | | | | | | |
| 2014 | 1 | 257,913 | 10,328 | 107,565 | 21,913 | 42,844 | 69,357 | 13,255 | 55,526 | 33,400 | 55,414 |
| | 2 | 235,543 | 8,559 | 105,381 | 23,137 | 47,230 | 72,442 | 8,222 | 61,839 | 28,658 | 56,443 |
| | 3 | 186,725 | 8,875 | 101,099 | 23,347 | 46,631 | 80,704 | 10,060 | 66,672 | 31,939 | 58,071 |
| | 4 | 174,418 | 9,473 | 99,237 | 23,891 | 48,991 | 71,853 | 12,120 | 70,321 | 45,626 | 59,891 |
| | | | | | | | | | | | |
| 2015+ | 1 | 278,835 | 11,249 | 110,522 | 24,155 | 48,336 | 73,175 | 11,812 | 59,922 | 36,357 | 60,994 |
| | 2 | 246,606 | 9,738 | 108,456 | 25,964 | 52,942 | 75,925 | 8,041 | 67,195 | 31,016 | 61,362 |
| | 3 | 194,288 | 10,534 | 105,787 | 25,475 | 54,558 | 86,213 | 10,145 | 73,532 | 33,835 | 64,823 |
| | 4 | 181,468 | 10,333 | 103,207 | 24,560 | 55,594 | 76,354 | 13,088 | 74,083 | 48,760 | 64,198 |
| | | | | | | | | | | | |
| 2016* | 1 | 294,108 | 12,001 | 112,407 | 26,229 | 53,252 | 75,840 | 13,037 | 66,026 | 40,304 | 66,012 |
| | 2 | 257,314 | 10,768 | 114,252 | 28,465 | 56,948 | 77,650 | 9,307 | 73,113 | 33,840 | 66,338 |
| | 3 | 200,658 | 11,563 | 110,400 | 26,840 | 58,794 | 89,896 | 11,512 | 80,080 | 36,814 | 69,454 |
| | 4 | 185,107 | 11,494 | 105,771 | 25,709 | 61,990 | 80,181 | 14,946 | 78,600 | 53,529 | 66,847 |

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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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2012 | | 137,873 | 84,263 | 283,061 | 234,135 | 59,023 | 45,801 | -82,648 | 3,041,530 | 402,809 | 3,444,339 | |
| 2013 | | 141,678 | 87,312 | 294,747 | 249,001 | 63,579 | 47,891 | -86,932 | 3,205,934 | 440,924 | 3,646,858 | |
| 2014 | | 149,556 | 90,073 | 311,148 | 268,359 | 68,728 | 49,905 | -96,763 | 3,385,921 | 456,111 | 3,842,032 | |
| 2015 | | 157,740 | 92,286 | 333,537 | 280,540 | 72,912 | 51,827 | -109,821 | 3,592,323 | 469,085 | 4,061,542 | |
| 2016 | | 166,069 | 96,248 | 362,724 | 298,331 | 77,160 | 53,986 | -113,092 | 3,808,822 | 490,265 | 4,299,088 | |
| | | | | | | | | | | | | |
| 2012 | 1 | 34,918 | 18,849 | 69,818 | 57,719 | 15,133 | 11,288 | -19,347 | 787,611 | 93,220 | 885,368 | 840,105 |
| | 2 | 34,407 | 19,737 | 70,444 | 57,305 | 14,818 | 11,192 | -20,067 | 758,054 | 95,392 | 854,348 | 848,105 |
| | 3 | 34,213 | 22,071 | 71,078 | 59,463 | 14,704 | 11,596 | -21,371 | 738,433 | 109,287 | 841,814 | 865,628 |
| | 4 | 34,335 | 23,606 | 71,721 | 59,648 | 14,368 | 11,724 | -21,862 | 757,433 | 104,909 | 862,535 | 887,025 |
| | | | | | | | | | | | | |
| 2013 | 1 | 36,175 | 20,342 | 72,468 | 61,552 | 14,849 | 11,652 | -21,267 | 830,618 | 103,627 | 934,245 | 900,023 |
| | 2 | 35,711 | 20,966 | 73,212 | 61,948 | 16,249 | 11,739 | -21,350 | 809,257 | 108,294 | 917,551 | 908,883 |
| | 3 | 36,636 | 22,390 | 74,058 | 62,680 | 15,954 | 12,065 | -21,892 | 782,107 | 120,218 | 902,325 | 919,729 |
| | 4 | 33,156 | 23,615 | 75,010 | 62,821 | 16,528 | 12,434 | -22,423 | 783,952 | 108,786 | 892,738 | 928,553 |
| | | | | | | | | | | | | |
| 2014 | 1 | 37,954 | 20,488 | 76,045 | 67,065 | 15,529 | 12,270 | -22,980 | 873,887 | 109,179 | 983,066 | 941,306 |
| | 2 | 40,292 | 21,459 | 77,320 | 67,292 | 17,535 | 12,284 | -23,650 | 859,984 | 112,875 | 972,859 | 960,133 |
| | 3 | 34,222 | 23,288 | 78,811 | 67,179 | 17,355 | 12,417 | -24,702 | 822,692 | 121,271 | 943,964 | 968,765 |
| | 4 | 37,088 | 24,839 | 78,972 | 66,823 | 18,310 | 12,934 | -25,431 | 829,358 | 112,786 | 942,143 | 980,579 |
| | | | | | | | | | | | | |
| 2015+ | 1 | 37,402 | 21,934 | 80,725 | 69,885 | 16,339 | 12,710 | -26,039 | 928,283 | 110,903 | 1,039,186 | 997,936 |
| | 2 | 43,930 | 22,332 | 82,562 | 70,227 | 18,608 | 12,734 | -26,752 | 910,846 | 115,317 | 1,026,163 | 1,010,039 |
| | 3 | 37,212 | 23,449 | 84,303 | 70,213 | 18,476 | 13,169 | -27,788 | 878,185 | 121,436 | 999,621 | 1,023,792 |
| | 4 | 39,197 | 24,572 | 85,948 | 70,216 | 19,489 | 13,214 | -29,242 | 875,009 | 121,429 | 996,438 | 1,040,914 |
| | | | | | | | | | | | | |
| 2016* | 1 | 39,517 | 22,657 | 88,873 | 74,197 | 17,178 | 13,350 | -28,236 | 986,751 | 114,783 | 1,101,535 | 1,057,489 |
| | 2 | 46,832 | 23,544 | 90,418 | 74,436 | 19,844 | 13,323 | -28,139 | 968,254 | 118,298 | 1,086,552 | 1,067,755 |
| | 3 | 39,106 | 24,329 | 91,456 | 75,025 | 19,779 | 13,729 | -28,260 | 931,176 | 125,257 | 1,056,433 | 1,072,565 |
| | 4 | 40,614 | 25,717 | 91,977 | 74,673 | 20,358 | 13,584 | -28,456 | 922,641 | 131,927 | 1,054,568 | 1,079,341 |

+ Revised

* Provisional

## Table 2.17: Gross Domestic Product by Activity

Constant 2009 Prices –KSh Million

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2012 | | 2.8 | 19.0 | -0.6 | 9.6 | 11.3 | 7.0 | 3.1 | 2.6 | 2.6 | 6.0 |
| 2013 | | 5.4 | -4.2 | 5.6 | 6.6 | 6.1 | 8.4 | -4.6 | 1.3 | 12.5 | 8.2 |
| 2014 | | 4.3 | 14.9 | 2.5 | 6.1 | 13.1 | 6.9 | -16.7 | 5.5 | 14.5 | 8.3 |
| 2015 | | 5.5 | 12.4 | 3.6 | 8.5 | 13.9 | 5.9 | -1.3 | 8.0 | 7.4 | 9.4 |
| 2016 | | 4.0 | 9.5 | 3.5 | 7.1 | 9.2 | 3.8 | 13.3 | 8.4 | 9.7 | 6.9 |
| | | | | | | | | | | | |
| 2012 | 1 | 3.5 | 13.4 | -0.6 | 11.6 | 19.7 | -3.1 | 8.7 | 7.3 | 13.6 | 0.3 |
| | 2 | 2.3 | 19.7 | -1.6 | 6.5 | 7.0 | 11.5 | -3.0 | 8.2 | -5.3 | 5.1 |
| | 3 | 2.5 | 18.4 | -0.5 | 10.8 | 11.7 | 17.2 | -2.8 | -2.1 | -12.2 | 7.2 |
| | 4 | 2.8 | 24.6 | 0.4 | 9.5 | 8.4 | 2.2 | 6.2 | -1.6 | 13.8 | 11.2 |
| | | | | | | | | | | | |
| 2013 | 1 | 5.3 | 16.9 | 9.5 | 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 | 3.5 | -12.6 | 0.5 | 3.7 | -2.9 | 2.5 | -1.3 | 9.7 | 11.3 | 5.2 |
| | | | | | | | | | | | |
| 2014 | 1 | 4.1 | 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 | 5.7 | 9.4 | 7.2 |
| | 3 | 7.0 | 1.4 | 0.5 | 7.6 | 8.7 | 5.4 | -25.5 | 8.7 | 18.8 | 8.5 |
| | 4 | 1.9 | 23.7 | -2.5 | 8.4 | 19.5 | 8.7 | 3.0 | 3.9 | 16.1 | 10.2 |
| | | | | | | | | | | | |
| 2015+ | 1 | 8.1 | 8.9 | 2.7 | 10.2 | 12.8 | 5.5 | -10.9 | 7.9 | 8.9 | 10.1 |
| | 2 | 4.7 | 13.8 | 2.9 | 12.2 | 12.1 | 4.8 | -2.2 | 8.7 | 8.2 | 8.7 |
| | 3 | 4.1 | 18.7 | 4.6 | 9.1 | 17.0 | 6.8 | 0.8 | 10.3 | 5.9 | 11.6 |
| | 4 | 4.0 | 9.1 | 4.0 | 2.8 | 13.5 | 6.3 | 8.0 | 5.3 | 6.9 | 7.2 |
| | | | | | | | | | | | |
| 2016* | 1 | 5.5 | 6.7 | 1.7 | 8.6 | 10.2 | 3.6 | 10.4 | 10.2 | 10.9 | 8.2 |
| | 2 | 4.4 | 10.6 | 5.3 | 9.6 | 7.6 | 2.3 | 15.8 | 8.8 | 9.1 | 8.1 |
| | 3 | 3.3 | 9.8 | 4.4 | 5.4 | 7.8 | 4.3 | 13.5 | 8.9 | 8.8 | 7.1 |
| | 4 | 2.0 | 11.2 | 2.5 | 4.7 | 11.5 | 5.0 | 14.2 | 6.1 | 9.8 | 4.1 |

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* Provisional

## Table 2.17: Gross Domestic Product by Activity (Cont'd)

Constant 2009 prices – Kshs 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2012 | | 4.0 | 4.0 | 4.0 | 11.1 | -2.8 | 2.3 | 10.1 | 4.1 | 7.7 | 4.5 | |
| 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 | 4.5 | 6.1 | 3.9 | 13.5 | 6.1 | 2.8 | 5.7 | |
| 2016 | | 5.3 | 4.3 | 8.8 | 6.3 | 5.8 | 4.2 | 3.0 | 6.0 | 4.5 | 5.8 | |
| | | | | | | | | | | | | |
| 2012 | 1 | 6.7 | -7.3 | 4.4 | 10.6 | -1.4 | 1.6 | 5.5 | 4.2 | 4.1 | 4.2 | 1.0 |
| | 2 | 3.3 | 6.3 | 4.1 | 9.7 | -3.2 | 2.1 | 10.8 | 3.8 | 8.4 | 4.3 | 1.0 |
| | 3 | 2.3 | 5.9 | 3.9 | 11.4 | -3.6 | 1.9 | 11.2 | 4.0 | 12.1 | 5.0 | 2.1 |
| | 4 | 3.6 | 10.7 | 3.8 | 12.6 | -3.0 | 3.4 | 12.6 | 4.5 | 6.1 | 4.7 | 2.5 |
| | | | | | | | | | | | | |
| 2013 | 1 | 3.6 | 7.9 | 3.8 | 6.6 | -1.9 | 3.2 | 9.9 | 5.5 | 11.2 | 6.1 | 1.5 |
| | 2 | 3.8 | 6.2 | 3.9 | 8.1 | 9.7 | 4.9 | 6.4 | 6.8 | 13.5 | 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 | 3.7 | 3.5 | 1.0 |
| | | | | | | | | | | | | |
| 2014 | 1 | 4.9 | 0.7 | 4.9 | 9.0 | 4.6 | 5.3 | 8.1 | 5.2 | 5.4 | 5.2 | 1.4 |
| | 2 | 12.8 | 2.4 | 5.6 | 8.6 | 7.9 | 4.6 | 10.8 | 6.3 | 4.2 | 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 | 0.9 |
| | 4 | 11.9 | 5.2 | 5.3 | 6.4 | 10.8 | 4.0 | 13.4 | 5.8 | 3.7 | 5.5 | 1.2 |
| | | | | | | | | | | | | |
| 2015+ | 1 | -1.5 | 7.1 | 6.2 | 4.2 | 5.2 | 3.6 | 13.3 | 6.2 | 1.6 | 5.7 | 1.8 |
| | 2 | 9.0 | 4.1 | 6.8 | 4.4 | 6.1 | 3.7 | 13.1 | 5.9 | 2.2 | 5.5 | 1.2 |
| | 3 | 8.7 | 0.7 | 7.0 | 4.5 | 6.5 | 6.1 | 12.5 | 6.7 | 0.1 | 5.9 | 1.4 |
| | 4 | 5.7 | -1.1 | 8.8 | 5.1 | 6.4 | 2.2 | 15.0 | 5.5 | 7.7 | 5.8 | 1.7 |
| | | | | | | | | | | | | |
| 2016* | 1 | 5.7 | 3.3 | 10.1 | 6.2 | 5.1 | 5.0 | 8.4 | 6.3 | 3.5 | 6.0 | 1.6 |
| | 2 | 6.6 | 5.4 | 9.5 | 6.0 | 6.6 | 4.6 | 5.2 | 6.3 | 2.6 | 5.9 | 1.0 |
| | 3 | 5.1 | 3.8 | 8.5 | 6.9 | 7.1 | 4.3 | 1.7 | 6.0 | 3.1 | 5.7 | 0.5 |
| | 4 | 3.6 | 4.7 | 7.0 | 6.3 | 4.5 | 2.8 | -2.7 | 5.4 | 8.6 | 5.8 | 0.6 |

+ Revised

* Provisional

# Social Scene

03 Chapter

## Overview

National Government total expenditure on the social sector is expected to increase by 23.3 per cent, to KSh 495.5 billion in 2016/17 from KSh 401.9 billion in 2015/16. The total recurrent expenditure is expected to increase by 17.5 per cent to KSh 402.7 billion in 2016/17. The gross recurrent expenditure for the Ministry of Education including that of Teachers Service Commission (TSC) is expected to rise by 13.5 per cent from KSh 280.3 billion in 2015/16 to KSh 318.2 billion in 2016/17. The recurrent expenditure for State Department of Sports/Arts and Culture is expected grow by 45.5 per cent to KSh 6.4 billion while that of Youth Empowerment and Development is expected to increase by 20.8 per cent in 2016/17. Development expenditure on social services by the National Government is expected to substantially increase by 57.5 per cent from KSh 59.0 billion 2015/16 to KSh 92.9 billion in 2016/17 while that of the Ministry of Education is expected to grow by 65.4 per cent to KSh 24.2 billion. In 2016/17, development expenditure for the State Department of Gender Affairs is expected to substantially grow to KSh 3.4 billion while that of State Department for Youth Empowerment and Development is expected to increase by 25.7 per cent to 12.7 billion.

3.2. The total number of educational institutions grew by 4.0 per cent from 82,889 in 2015 to 86,180 in 2016 supported by a 6.0 per cent increase in the number of primary schools and a 5.3 per cent increase in the number of secondary schools. The number of National Polytechnics increased significantly from three in 2015 to eleven in 2016. The total number of public universities increased to 30 in 2016 after granting charters to seven university colleges to full university status. Total enrolment in pre-primary schools marginally increased to 3.2 million in 2016 while total enrolment in primary schools went up by 2.0 per cent to 10.3 million in 2016.

3.3. Secondary schools total enrolment rose by 6.3 per cent to 2.7 million in 2016. Student enrolment in technical institutions increased from 153.3 thousand in 2015 to 202.6 thousand in 2016 while university enrolment is expected to grow by 10.5 per cent to 564.5 thousand in 2016/17. The number of loan applicants and beneficiaries in public and private universities as well as TVET colleges is expected to increase by 10.3 per cent and 10.4 per cent in 2016/17, respectively. The number of bursary beneficiaries in public universities and TVET colleges is expected to grow by 11.2 per cent to 33.9 thousand while the amount of bursary awarded is expected to grow by 7.1 per cent to KSh 231.7 million in 2016/17.

3.4. The overall membership of the National Hospital Insurance Fund (NHIF) grew by 16.5 per cent to 6.1 million in 2015/16. The formal sector continued to contribute the largest share of total membership representing 58.9 per cent in 2015/16. Consequently, annual contributions from members more than doubled from KSh 12.4 billion in 2014/15 to KSh 28.5 billion in 2015/16 with benefits paid to members significantly increasing by 74.2 per cent to KSh 10.2 billion in 2015/16. Full immunization coverage increased from 73.0 per cent in 2015 to 76.0 per cent in 2016. Diseases of the respiratory system and malaria, which jointly accounted for 55.2 per cent of the total disease causing morbidity, remained the leading diseases in 2016.

3.5. The number of employers and employees registered with National Social Security Fund (NSSF) went up by 26.7 per cent and 9.5 per cent, respectively. Annual contributions to the Fund increased by 9.6 per cent to KSh 12.9 billion in 2016. Despite this increase in contributions, annual benefits rose marginally in the same year. Government loans disbursed through the Uwezo Fund is expected to increase by 5.9 per cent from KSh 5.1 billion in 2015/16 to KSh 5.4 billion in 2016/17. However, loans disbursed through the Women Enterprise Fund is expected to decline by 27.8 per cent to KSh 1.8 billion in 2016/17.

**Social Sector Expenditure**

3.6. Table 3.1 presents National Government expenditure on social sector services from 2012/13 to 2016/17. Total expenditure in the social sector is expected to increase by 23.3 per cent from KSh 401.9 billion in 2015/16 to KSh 495.5 billion in 2016/17. Total recurrent expenditure is expected to grow by 17.5 per cent from KSh 342.8 billion in 2015/16 to KSh 402.7 billion in 2016/17, with increases expected in all Ministries, Departments and Agencies (MDAs') in the sector. The gross recurrent expenditure for the Ministry of Education is expected to rise by 13.5 per cent from KSh 280.3 billion in 2015/16 to KSh 318.2 billion compared to an increase of 7.2 per cent in 2015/16. This can partly be attributed to recruitment and promotion of teachers.

3.7. Total development expenditure on social services by the National Government is expected to increase by 57.5 per cent from KSh 59.0 billion in 2015/16 to KSh 92.9 billion in 2016/17. The Ministry of Health is expected to remain the leading recipient of development expenditure on social services in 2016/17, accounting for 37.8 per cent of total development expenditure on social services in the year. Expenditure in this ministry is expected to more than double to KSh 35.1 billion in 2016/17. The Ministry of Education is expected to be the second leading beneficiary of total development expenditure on social services in 2016/17, which at KSh 24.2 billion, will account for 26.0 per cent of total development expenditure. This represents a 65.4 per cent increase in development expenditure in the education ministry partly due to expansion of university education; and continued funding of FPE and FDSE. Development expenditure to the State Department of Gender Affairs is expected to substantially increase from KSh 539.2 million in 2015/16 to KSh 3.4 billion in 2016/17. The growth is mainly attributable to the infrastructure development in the social sector.

**Table 3.1: National Government Expenditure on Social Services, 2012/13 - 2016/17**

KSh Million

| | 2012/13 | 2013/14 | 2014/15 | 2015/16+ | 2016/17** |
|---|---|---|---|---|---|
| **RECURRENT EXPENDITURE-** | | | | | |
| Ministry of Education[1] | 233,102.87 | 237,214.84 | 261,546.11 | 280,322.75 | 318,179.40 |
| Ministry of Health | 54,810.99 | 19,829.94 | 20,828.36 | 25,214.77 | 34,144.02 |
| State Department of Social Protection[2] | 1,560.21 | 7,770.13 | 7,894.07 | 8,731.96 | 15,448.76 |
| State Department for Correctional Services[3] | 15,146.80 | 13,376.73 | 16,059.64 | 16,724.20 | 18,897.01 |
| State Department of Gender Affairs | 190.14 | 221.40 | 176.97 | 268.53 | 876.14 |
| State Department for Sports Development/Arts and Culture[4] | 1,705.04 | 3,441.89 | 2,632.61 | 4,361.86 | 6,395.58 |
| State Department of Public Service and Youth Affairs[5] | 6,410.33 | 3,539.57 | 3,886.59 | 7,195.91 | 8,727.04 |
| **TOTAL** | **312,926.38** | **285,394.49** | **313,024.35** | **342,819.97** | **402,667.95** |
| **DEVELOPMENT EXPENDITURE-** | | | | | |
| Ministry of Education[1] | 27,019.50 | 13,997.76 | 22,618.78 | 14,608.41 | 24,168.90 |
| Ministry of Health | 21,217.03 | 14,373.83 | 18,007.88 | 17,152.28 | 35,083.23 |
| State Department of Social Protection[2] | 1,080.80 | 4,364.20 | 6,062.58 | 13,774.43 | 14,455.30 |
| State Department for Correctional Services[3] | 1,783.24 | 542.79 | 419.88 | 596.00 | 525.00 |
| State Department of Gender Affairs | 210.21 | 135.38 | 209.84 | 539.18 | 3,442.20 |
| State Department for Sports Development/Arts and Culture[4] | 571.70 | 901.30 | 1,172.56 | 2,221.45 | 2,506.32 |
| State Department of Public Service and Youth Affairs[5] | 4,280.03 | 10,491.34 | 15,727.42 | 10,140.47 | 12,684.91 |
| **TOTAL** | **56,162.50** | **44,806.59** | **64,218.94** | **59,032.22** | **92,865.86** |
| **TOTAL EXPENDITURE** | **369,088.89** | **330,201.07** | **377,243.29** | **401,852.19** | **495,533.81** |

Source: The National Treasury

**Estimates

+ Revised

[1] Includes Teachers Service Commission

[2] Formerly Ministry of Labour, Social Security and Services

[3] Formerly Prisons Service Department, Probation and Aftercare Department

[4] Formerly Ministry of Sports, Culture and Arts

[5] Includes only funds for youth empowerment and youth development under NYS

## Education

3.8. **Expenditure:** Expenditure by the Ministry of Education is shown in Table 3.2. The gross total expenditure is expected to grow by 16.1 per cent from KSh 294.9 billion in 2015/16 to KSh 342.3 billion in 2016/17. Similarly, recurrent expenditure is expected to increase by 13.5 per cent to KSh 318.2 billion in 2016/17. Recurrent expenditures for State Departments of Basic Education, University Education; and Vocational and Technical Training are expected to increase by 1.1, 60.8 and 2.7 per cent, respectively, in 2016/17. Teachers Service Commission (TSC) remains the largest beneficiary of recurrent expenditure in the Ministry of Education with expenditure expected to register a 7.3 per cent increase in 2016/17.

3.9. Total development expenditure is expected to grow substantially from KSh 14.6 billion in 2015/16 to KSh 24.2 billion in 2016/17. The increase is mainly attributable to a new policy put in place on financing of universities based on enrolment by course. This also covers the expansion of universities, financing of FPE and FDSE as well as the provision of loans and bursaries due to increased enrolment in university education, and vocational and technical training during the reference period. Development expenditures for State Department of Basic Education and University Education are expected to account for 46.7 per cent and 38.6 per cent of the total development expenditure of the ministry, respectively, in 2016/17.

**Table 3.2: Expenditure for the Ministry of Education[1], 2012/13 - 2016/17**

KSh Million

| | 2012/13 | 2013/14 | 2014/15 | 2015/16+ | 2016/17* |
|---|---|---|---|---|---|
| **RECURRENT EXPENDITURE** | | | | | |
| Ministry of Education | | | | | |
| State Department of Basic Education | 54,698.92 | 42,204.06 | 51,316.39 | 57,519.21 | 58,135.50 |
| Teachers Service Commission | 127,632.51 | 154,778.10 | 157,209.10 | 180,970.14 | 194,120.00 |
| State Department for University Education | 48,117.61 | 37,976.67 | 51,775.82 | 39,525.27 | 63,554.20 |
| State Department for Vocational and Technical Training | 2,653.84 | 2,256.01 | 1,244.80 | 2,308.13 | 2,369.70 |
| **Sub Total** | **233,102.87** | **237,214.84** | **261,546.11** | **280,322.75** | **318,179.40** |
| **DEVELOPMENT EXPENDITURE** | | | | | |
| Ministry of Education | | | | | |
| State Department of Basic Education | 11,558.01 | 8,843.94 | 11,156.42 | 5,258.23 | 11,288.97 |
| Teachers Service Commission | - | - | - | 100.00 | 100.00 |
| State Department for University Education | 8,260.72 | 3,085.08 | 9,595.41 | 5,002.01 | 9,331.22 |
| State Department for Vocational and Technical Training | 7,200.76 | 2,068.73 | 1,866.95 | 4,248.17 | 3,448.74 |
| **Sub Total** | **27,019.50** | **13,997.76** | **22,618.78** | **14,608.41** | **24,168.93** |
| **GROSS TOTAL EXPENDITURE** | **260,122.37** | **251,212.59** | **284,164.89** | **294,931.16** | **342,348.33** |

Source: The National Treasury

* Provisional

\+ Revised Estimates

[1] Table revised according to new expenditure Vote Code

3.10. **Educational Institutions:** Table 3.3 shows that the total number of educational institutions grew by 4.0 per cent from 82,889 in 2015 to 86,180 in 2016. The number of pre-primary schools increased by 1.2 per cent from 40,775 in 2015 to 41,248 in 2016. Primary schools registered a growth of 6.0 per cent from 31,333 in 2015 to 33,202 in 2016 with private schools having a higher increase of 15.1 per cent compared to public schools at 2.3 per cent. The number of secondary schools grew by 5.3 per cent to 9,942 in 2016. Private secondary schools registered higher growth of 18.1 per cent compared to public schools which increased by 3.6 per cent. The number of National Polytechnics increased significantly from three in 2015 to eleven in 2016. This can be attributed to elevation of eight Technical and Vocational Colleges to National Polytechnic status. The number of public universities increased from 23 in 2015 to 30 in 2016 after granting charters to seven university colleges to full university status.

## Table 3.3: Educational Institutions by Category, 2012 – 2016

Number

| Category | | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| **Schools:** | | | | | | |
| | Pre-Primary : | | | | | |
| | Public | 24,654 | 24,702 | 24,768 | 24,862 | 25,175 |
| | Private | 15,104 | 15,443 | 15,451 | 15,913 | 16,073 |
| | **Sub Total** | **39,758** | **40,145** | **40,219** | **40,775** | **41,248** |
| | Primary: | | | | | |
| | Public | 20,307 | 21,205 | 21,718 | 22,414 | 22,939 |
| | Private | 6,242 | 6,821 | 7,742 | 8,919 | 10,263 |
| | **Sub Total** | **26,549** | **28,026** | **29,460** | **31,333** | **33,202** |
| | Secondary: | | | | | |
| | Public | 6,188 | 6,807 | 7,680 | 8,297 | 8,592 |
| | Private | 986 | 1,027 | 1,067 | 1,143 | 1,350 |
| | **Sub Total** | **7,174** | **7,834** | **8,747** | **9,440** | **9,942** |
| **Teacher Training Colleges:** | | | | | | |
| | Pre-primary: | | | | | |
| | Public | 20 | 22 | 25 | 25 | 26 |
| | Private | 105 | 109 | 115 | 118 | 121 |
| | **Sub Total** | **125** | **131** | **140** | **143** | **147** |
| | Primary: | | | | | |
| | Public | 21 | 22 | 24 | 24 | 28 |
| | Private | 97 | 101 | 101 | 101 | 105 |
| | **Sub Total** | **118** | **123** | **125** | **125** | **133** |
| | Secondary [1] | 2 | 2 | 2 | 3 | 3 |
| | **Sub Total** | **245** | **256** | **267** | **271** | **283** |
| **TVET Institutions** | | | | | | |
| | Public Youth Polytechnics | 647 | 701 | 701 | 816 | 816 |
| | Private Youth Polytechnics | .. | .. | .. | .. | 29 |
| | Public Technical and Vocational Colleges | 49 | 49 | 51 | 55 | 62 |
| | Private Technical and Vocational Colleges | .. | .. | .. | .. | 382 |
| | National Polytechnics | 3 | 3 | 3 | 3 | 11 |
| | Polytechnic University Colleges | 2 | - | - | - | - |
| | **Sub Total** | **701** | **753** | **755** | **874** | **1,300** |
| **Universities** | | | | | | |
| | Public | 8 | 22 | 22 | 23 | 30 |
| | Private | 27 | 30 | 31 | 30 | 28 |
| | **Sub Total** | **35** | **52** | **53** | **53** | **58** |
| **GRAND TOTAL** | | **74,587** | **77,197** | **79,641** | **82,889** | **86,180** |

Source : Ministry of Education

* Provisional

[1] Diploma teacher training colleges

.. Data not available

3.11. **Pre-Primary Education:** Pupil enrolment and the number of teachers in Early Childhood Development Education (ECDE) centers from 2012 to 2016 are as shown in Table 3.4. The total enrolment in pre-primary schools increased marginally from 3,167.9 thousand to 3,199.8 thousand in 2016. The number of ECDE teachers rose by 3.4 per cent from 107,187 in 2015 to 110,819 in 2016. The number of trained ECDE teachers grew by 5.2 per cent to stand at 97,717 in 2016. The growth was mainly attributable to employment of more teachers by the County Governments. In 2016, the Pupil Teacher Ratio in ECDE was 29:1 compared to 30:1 in 2015. Gross Enrolment Rate (GER) increased marginally from 76.4 per cent in 2015 to 76.6 per cent in 2016. Similarly, as shown in Figure 3.1, Net Enrolment Rate (NER) rose from 74.6 per cent in 2015 to 74.9 per cent in 2016.

**Table 3.4: Pupil Enrolment and Teacher Numbers in ECDE Centres, 2012 – 2016**

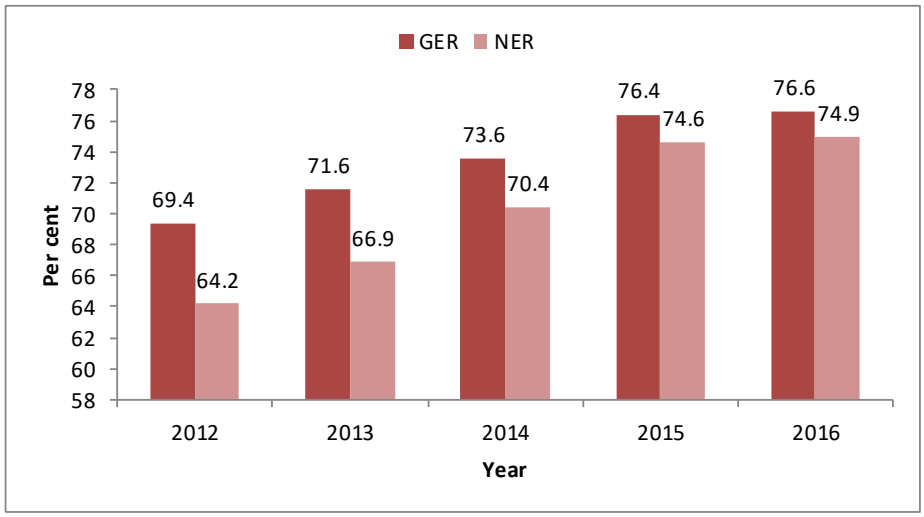
Number

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **Enrolment** | | | | | |
| Boys | 1,346,235 | 1,411,309 | 1,476,383 | 1,607,353 | 1,634,194 |
| Girls | 1,364,595 | 1,454,039 | 1,543,482 | 1,560,502 | 1,565,647 |
| **TOTAL** | **2,710,830** | **2,865,348** | **3,019,865** | **3,167,855** | **3,199,841** |
| **Trained Teachers** | | | | | |
| Male | 13,450 | 13,854 | 13,968 | 14,721 | 15,366 |
| Female | 67,076 | 69,960 | 74,186 | 78,185 | 82,351 |
| **Sub Total** | **80,526** | **83,814** | **88,154** | **92,906** | **97,717** |
| **Untrained Teachers** | | | | | |
| Male | 4,342 | 3,430 | 3,307 | 2,840 | 2,606 |
| Female | 15,021 | 13,818 | 13,323 | 11,441 | 10,496 |
| **Sub Total** | **19,363** | **17,248** | **16,630** | **14,281** | **13,102** |
| **TOTAL** | **99,889** | **101,062** | **104,784** | **107,187** | **110,819** |

Source: Ministry of Education

* Provisional

**Figure 3.1: Pre-primary Gross Enrolment Rate (GER) and Net Enrolment Rate (NER), 2012-2016**



3.12. **Primary Education:** Table 3.5 shows enrolment in primary schools by class and sex for the period 2012 to 2016. Total enrolment rose by 2.0 per cent from 10.1 million in 2015 to 10.3 million in 2016. The enrolment in standard one registered a marginal decline from 1,361.4 thousand in 2015 to 1,350.5 thousand in 2016, mainly due to adherence to the admission of children of official primary school going age of six years. The number of boys and girls enrolment increased by 1.7 per cent and 1.9 per cent, respectively, in 2016. During the period under review, the survival rate of boys from Std 1 to Std 5 was 93.6 per cent while that of girls was 98.8 per cent. The retention rate for boys in Std 8 was 78.9 per cent compared to that of girls at 77.0 per cent.

**Table 3.5: Primary School Enrolment by Class and Sex, 2012 – 2016**

'000

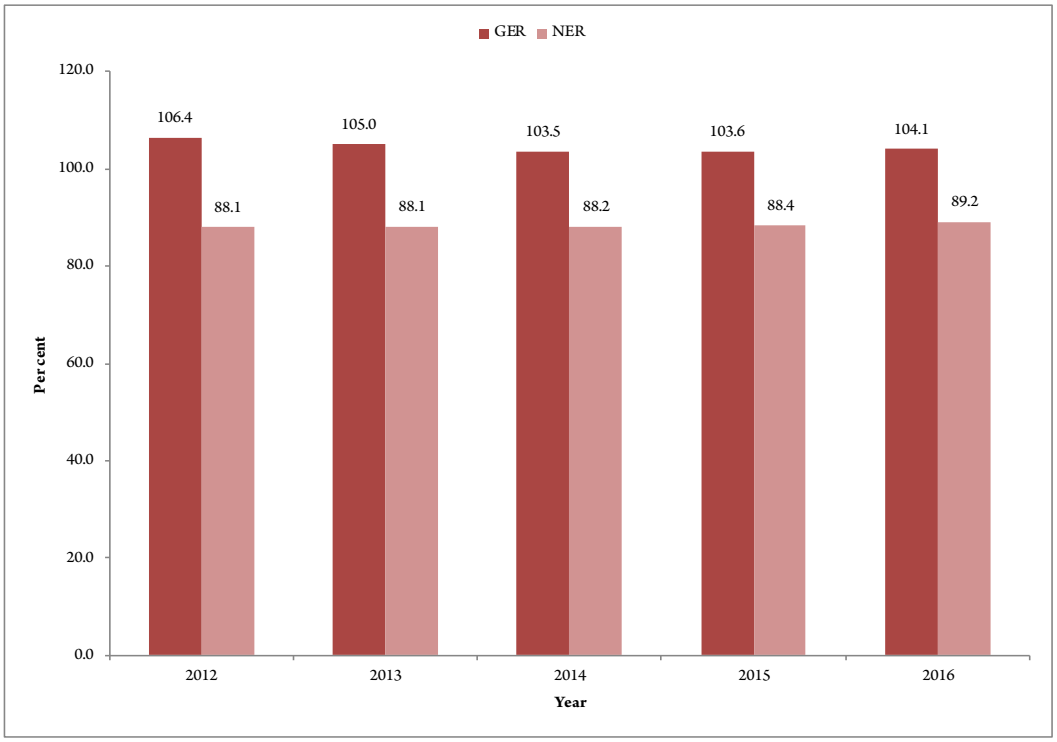
| | 2012 | | 2013 | | 2014 | | 2015 | | 2016* | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Class** | Boys | Girls | Boys | Girls | Boys | Girls | Boys | Girls | Boys | Girls |
| Standard 1 | 712.2 | 658.1 | 710.5 | 659.1 | 712.1 | 670.4 | 702.0 | 659.4 | 695.6 | 654.9 |
| Standard 2 | 677.8 | 654.9 | 676.2 | 639.8 | 679.9 | 644.9 | 682.7 | 648.3 | 686.3 | 650.0 |
| Standard 3 | 676.0 | 648.6 | 676.1 | 652.0 | 674.5 | 637.7 | 675.9 | 641.9 | 683.6 | 653.2 |
| Standard 4 | 674.2 | 643.3 | 672.6 | 645.3 | 677.9 | 651.7 | 683.9 | 657.3 | 692.6 | 668.7 |
| Standard 5 | 646.5 | 625.7 | 644.8 | 631.5 | 640.5 | 628.2 | 657.4 | 641.1 | 666.9 | 650.5 |
| Standard 6 | 589.0 | 567.5 | 631.4 | 613.0 | 621.4 | 618.5 | 638.7 | 633.9 | 657.5 | 650.0 |
| Standard 7 | 547.2 | 553.9 | 560.0 | 560.3 | 598.2 | 601.0 | 616.6 | 619.7 | 645.7 | 650.4 |
| Standard 8 | 449.8 | 433.0 | 448.1 | 436.8 | 448.0 | 446.1 | 470.7 | 461.3 | 486.2 | 477.2 |
| **TOTAL** | **4,972.7** | **4,784.9** | **5,019.7** | **4,837.9** | **5,052.5** | **4,898.5** | **5,127.9** | **4,962.9** | **5,214.5** | **5,054.9** |
| **GRAND TOTAL** | **9,757.6** | | **9,857.6** | | **9,951.0** | | **10,090.8** | | **10,269.4** | |

Source : Ministry of Education

* Provisional

3.13. Figure 3.2 shows primary school GER and NER for the years 2012 to 2016. The GER increased from 103.6 per cent in 2015 to 104.1 per cent in 2016 while the NER increased from 88.4 per cent in 2015 to 89.2 per cent in 2016.

**Figure 3.2: Primary School Gross Enrolment Rate (GER) and Net Enrolment Rate (NER), 2012-2016**



3.14. **Kenya Certificate of Primary Education (KCPE):** Table 3.6 shows the number of candidates by sex and mean subject percentage score in KCPE from 2012 to 2016. The number of candidates rose by 2.7 per cent from 927,789 in 2015 to 952,390 in 2016 compared to an increase of 5.4 per cent in 2015. The number of female candidates increased by 4.1 per cent from 459,885 in 2015 to 478,706 in 2016, while that of male candidates rose by 1.2 per cent to 473,684 in 2016. The national mean score increased from 52.78 per cent in 2015 to 52.98 per cent in 2016. During the review period, all the subjects registered increases in mean score except in English Composition, Kiswahili Insha and Mathematics. Social Studies registered the highest rise of 7.40 percentage points while Mathematics registered the highest decline of 10.77 percentage points.

**Table 3.6: Candidates by Sex and Mean Subject Score in KCPE, 2012-2016**

Number

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **Number of candidates** | | | | | |
| Male | 415,620 | 426,369 | 443,258 | 467,904 | 473,684 |
| Female | 396,310 | 413,390 | 437,228 | 459,885 | 478,706 |
| **Total** | **811,930** | **839,759** | **880,486** | **927,789** | **952,390** |
| **Subject** | **Mean score (%)** | | | | |
| English Language+ | 49.88 | 53.06 | 47.64 | 49.98 | 50.52 |
| English Composition | 42.43 | 41.90 | 41.47 | 41.38 | 40.26 |
| Kiswahili Lugha | 46.38 | 45.78 | 45.04 | 44.68 | 49.20 |
| Kiswahili Insha | 54.98 | 52.43 | 58.00 | 54.38 | 48.27 |
| Mathematics | 56.30 | 52.86 | 52.04 | 56.16 | 45.39 |
| Science | 62.76 | 61.82 | 66.00 | 55.48 | 61.82 |
| Social Studies | 60.87 | 54.75 | 55.26 | 49.98 | 57.38 |
| Religious Education | 75.75 | 70.43 | 68.97 | 70.20 | 70.99 |
| **National Mean Score** | **56.17** | **54.13** | **54.30** | **52.78** | **52.98** |

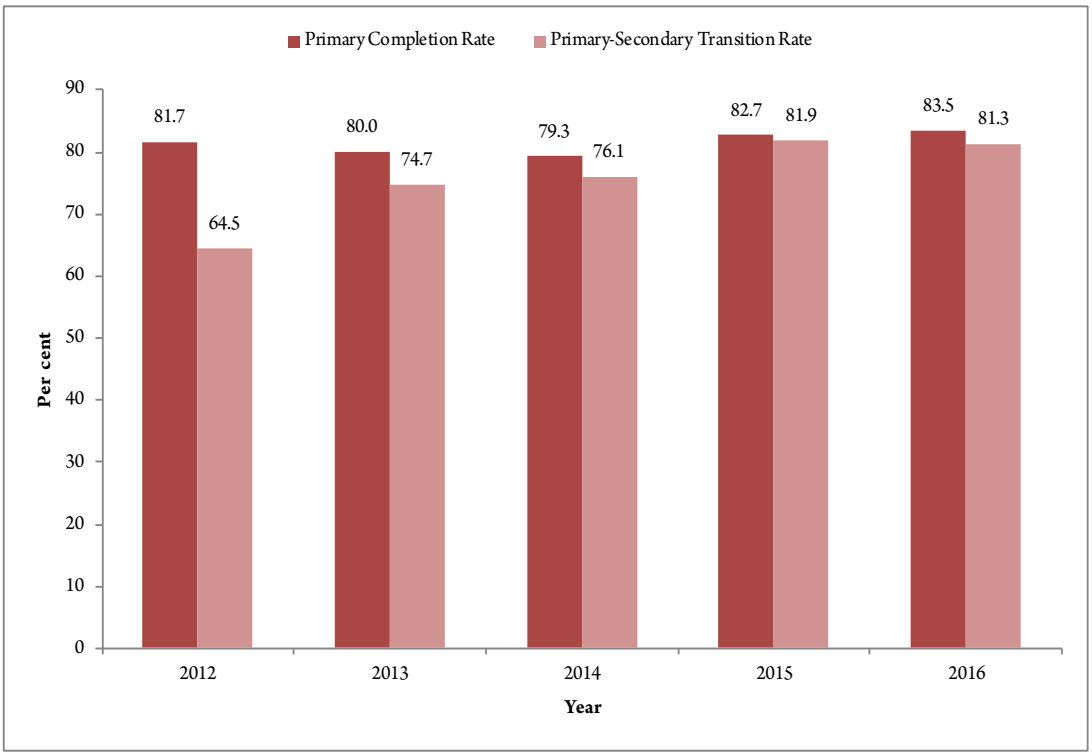
Source: Kenya National Examinations Council

* Provisional

+ Revised in 2012

3.15. Figure 3.3 shows the Pupil Completion Rate (PCR) and Primary to Secondary Transition Rate from 2012 to 2016. The PCR rose from 82.7 per cent in 2015 to 83.5 per cent in 2016, while the Primary to Secondary transition rate dropped from 81.9 per cent in 2015 to 81.3 per cent in 2016.

**Figure 3.3 Pupil Completion Rate and Primary to Secondary Transition Rate, 2012-2016**




3.16. **Primary Teachers:** The number of public primary school teachers by grade and sex from 2012 to 2016 is presented in Table 3.7. The total number of teachers in public primary schools increased by 1.8 per cent from 210,991 in 2015 to 214,719 in 2016. The number of approved teachers grew by 2.8 per cent mainly because of upgrading of diploma and P1 teachers. The number of graduate teachers marginally increased to 21,302 while that of SI/diploma teachers declined to 39,121 in 2016. The number of P1 teachers rose by 4.0 per cent from 98,149 in 2015 to 102,070 in 2016. There was a 5.2 per cent increase in male P1 teachers compared with 2.8 per cent increase in female P1 teachers in 2016. The public primary school pupil teacher ratio was 40:1 in 2016 compared to 41:1 in 2015. The services of contract teachers were terminated and the affected teachers had to re-apply for permanent employment.

## Table 3.7: Public Primary School Teachers[1] by Grade and Sex, 2012 - 2016

Number

| Grade | 2012 | | | 2013 | | | 2014 | | | 2015 | | | 2016* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Graduate | 3,484 | 3,381 | 6,865 | 9,448 | 9,825 | 19,273 | 9,353 | 10,001 | 19,354 | 10,267 | 10,951 | 21,218 | 10,315 | 10,987 | 21,302 |
| Approved | 32,347 | 23,246 | 55,593 | 29,964 | 20,195 | 50,159 | 29,010 | 20,722 | 49,732 | 29,669 | 21,050 | 50,719 | 29,770 | 22,352 | 52,122 |
| S1/Diploma | 6,989 | 8,580 | 15,569 | 14,528 | 19,520 | 34,048 | 15,236 | 20,850 | 36,086 | 16,421 | 22,722 | 39,143 | 16,386 | 22,735 | 39,121 |
| Dip/Technical | - | - | - | - | - | - | 17 | 26 | 43 | 18 | 27 | 45 | 23 | 32 | 55 |
| P1 | 52,063 | 53,193 | 105,256 | 48,287 | 47,919 | 96,206 | 48,118 | 47,317 | 95,435 | 48,426 | 49,723 | 98,149 | 50,965 | 51,105 | 102,070 |
| Cert./Technical | - | - | - | - | - | - | 30 | 17 | 47 | 31 | 15 | 46 | 36 | 13 | 49 |
| P2 | 3,484 | 4,267 | 7,751 | - | - | - | - | - | - | - | - | - | - | - | - |
| Contract Teachers | - | - | - | - | - | - | - | - | - | 647 | 1,024 | 1,671 | - | - | - |
| **TOTAL** | **98,367** | **92,667** | **191,034** | **102,227** | **97,459** | **199,686** | **101,764** | **98,933** | **200,697** | **105,479** | **105,512** | **210,991** | **107,495** | **107,224** | **214,719** |

Source: Teachers Service Commision

* Provisional

[1]Data is exclusively for public schools and does not include teachers on study leave, disciplinary cases and those performing non-teaching duties.

3.17. **Secondary Education:** Enrolment in secondary schools by class and sex, from 2012 to 2016 is as shown in Table 3.8. The total enrolment in both public and private secondary schools increased by 6.3 per cent from 2,559.0 thousand in 2015 to 2,720.6 thousand in 2016. Total enrolment of girls rose by 9.3 per cent from 1,210.5 thousand in 2015 to 1,323.6 thousand in 2016 while that of boys grew by 3.6 per cent to 1,396.9 thousand in 2016. The survival rate at secondary school level from Form 1 to Form 4 declined from 95.4 per cent in 2015 to 91.2 per cent in 2016. The Form 4 retention rate for girls and boys was 89.8 per cent and 89.6 per cent, respectively.

**Table 3.8: Enrolment in Secondary Schools by Class and Sex, 2012 – 2016**

Number

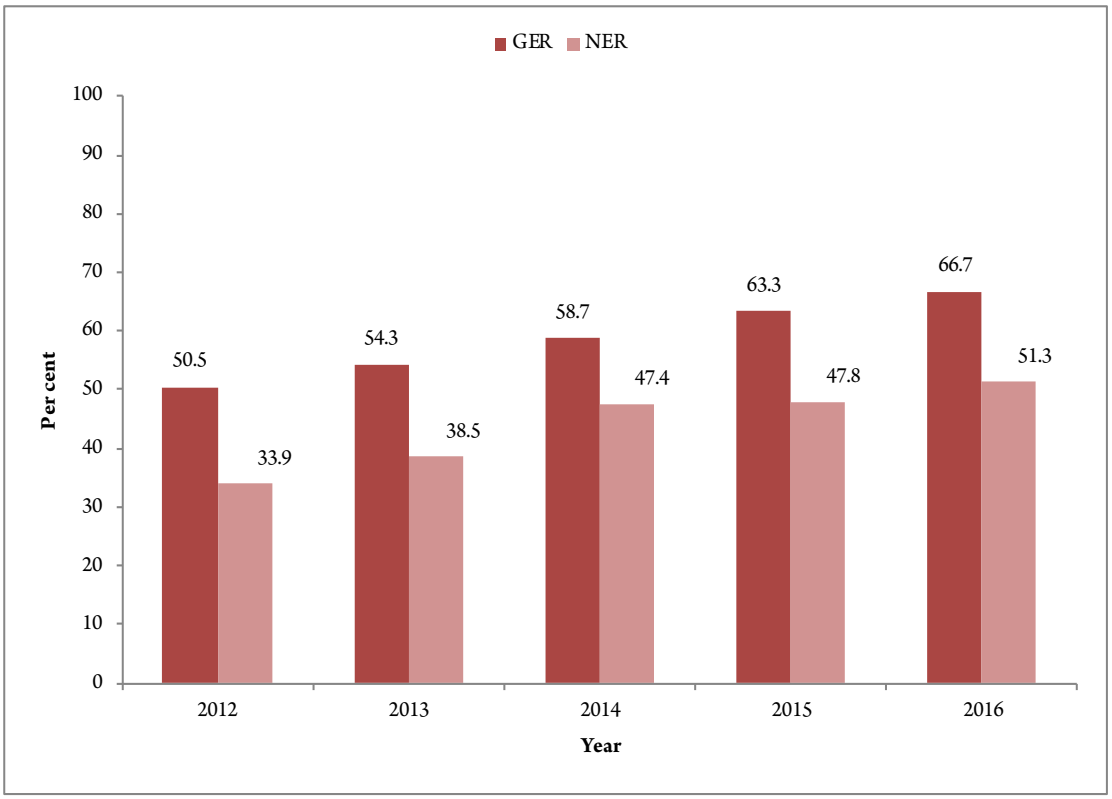
| | 2012 | | 2013 | | 2014 | | 2015 | | 2016* | |
|---|---|---|---|---|---|---|---|---|---|---|
| Class | Boys | Girls | Boys | Girls | Boys | Girls | Boys | Girls | Boys | Girls |
| Form 1 | 282,555 | 249,573 | 327,775 | 289,753 | 342,378 | 331,041 | 380,448 | 352,216 | 382,774 | 375,130 |
| Form 2 | 274,195 | 239,743 | 288,238 | 253,739 | 326,389 | 307,256 | 359,762 | 331,649 | 372,498 | 357,881 |
| Form 3 | 239,149 | 218,278 | 267,221 | 228,869 | 294,263 | 263,671 | 331,147 | 296,366 | 345,005 | 324,349 |
| Form 4 | 223,132 | 188,198 | 244,463 | 204,204 | 250,236 | 216,463 | 277,091 | 230,302 | 296,649 | 266,277 |
| TOTAL | 1,019,031 | 895,792 | 1,127,697 | 976,565 | 1,213,266 | 1,118,431 | 1,348,448 | 1,210,533 | 1,396,926 | 1,323,637 |
| **GRAND TOTAL** | **1,914,823** | | **2,104,262** | | **2,331,697** | | **2,558,981** | | **2,720,563** | |

Source : Ministry of Education

* Provisional.

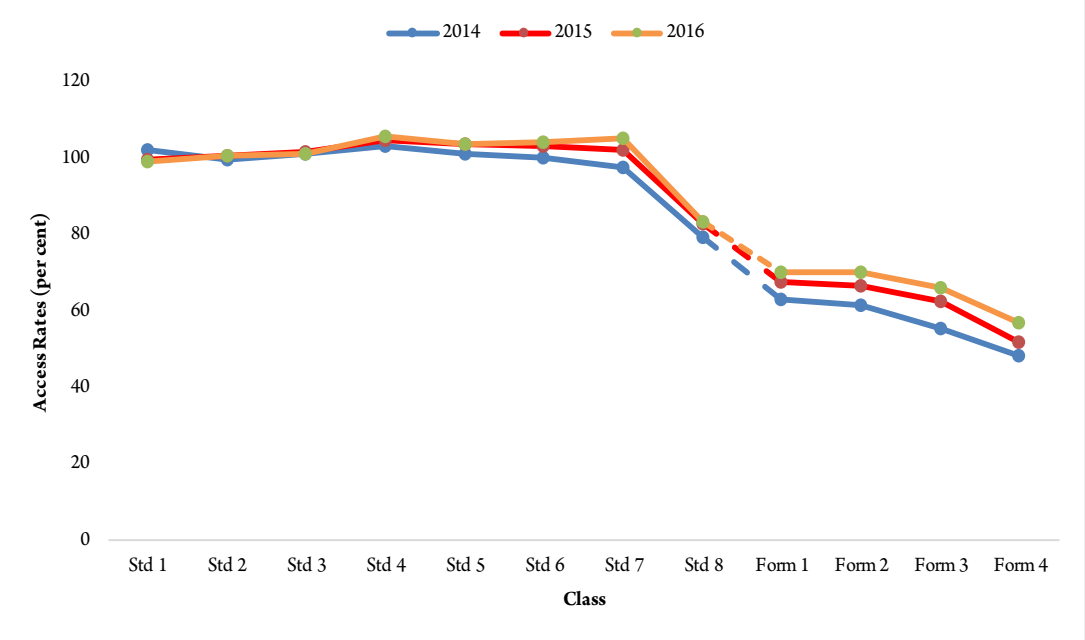
3.18. The GER rose from 63.3 per cent in 2015 to 66.7 per cent in 2016 as shown in Figure 3.4. Similarly, NER rose from 47.8 per cent in 2015 to 51.3 per cent in 2016. The change in both GER and NER can partly be attributed to the continued implementation of Free Day Secondary Education (FDSE) and the disbursements of bursaries from the National and County Governments; and the Constituency Development Fund.

**Figure 3.4: Secondary School Gross Enrolment Rate (GER) and Net Enrolment Rate (NER), 2012-2016**



3.19. Figure 3.5 indicates the schooling profiles from 2014 to 2016. The schooling profile shows the overall advancement of students within the education system from standard one to form four and the change in schooling profile. The schooling profiles of 2014, 2015 and 2016 show that retention at secondary level of education has greatly improved compared with primary level. Retention in Std 4 to Std 7 improved compared to that of Std 1 to Std 3. However, progression from Std 7 to Std 8 depicts a sudden drop for all the years. Access to Std 1 over the period is almost universal.

**Figure 3.5 Schooling Profile, 2014-2016**




3.20. **Kenya Certificate of Secondary Education (KCSE):** Table 3.9 presents the number of candidates by mean grade attained in KCSE from 2012 to 2016. The number of KCSE candidates increased by 9.6 per cent from 521,240 in 2015 to 571,161 in 2016. The number of female candidates rose by 12.0 per cent from 242,853 in 2015 to 271,893 in 2016 while the number of male candidates rose by 7.5 per cent from 278,387 candidates to 299,268 candidates over the same period. The number of candidates who scored a minimum university entry score of "C+" and above declined by 47.5 per cent from 169,492 in 2015 to 88,929 in 2016 with the number of female candidates decreasing by 46.0 per cent compared to that of male candidates at 48.7 per cent. The number of candidates who scored "A" minus and above declined by 67.6 per cent from 14,754 in 2015 to 4,786 in 2016, with more female candidates scoring grade "A". The number of candidates who scored grade "D" plus and below increased significantly by 77.0 per cent to 376,414 in 2016 and constituted 65.9 per cent of the total candidates in 2016 compared to 40.8 per cent in 2015. The decline in examination performance is attributable to the teachers' strike that affected learning in most public schools and the reforms relating to the strict enforcement on the administration of the examination that was carried out by the Government.

**Table 3.9: National trends in KCSE candidates mean grade by Sex, 2012-2016**

Number

| KCSE Grade | 2012 | | 2013 | | 2014 | | 2015 | | 2016* | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| A | 1,277 | 698 | 1,855 | 867 | 2,133 | 940 | 2,024 | 661 | 58 | 83 |
| A- | 5,947 | 3,288 | 6,276 | 3,492 | 7,644 | 4,124 | 7,952 | 4,117 | 2,685 | 1,960 |
| B+ | 11,753 | 5,977 | 10,776 | 6,237 | 12,606 | 7,208 | 13,517 | 8,410 | 6,581 | 4,394 |
| B | 15,962 | 9,221 | 15,315 | 9,341 | 17,941 | 11,378 | 19,826 | 13,634 | 10,204 | 7,012 |
| B- | 18,936 | 12,174 | 18,216 | 12,648 | 21,997 | 16,318 | 25,312 | 19,269 | 13,649 | 10,096 |
| C+ | 22,180 | 16,291 | 21,836 | 16,515 | 25,978 | 21,450 | 29,556 | 25,214 | 17,238 | 14,969 |
| C | 27,134 | 21,771 | 26,492 | 22,079 | 30,699 | 27,989 | 33,437 | 31,476 | 22,960 | 21,832 |
| C- | 31,582 | 27,166 | 32,385 | 28,378 | 36,015 | 34,662 | 37,482 | 36,633 | 30,979 | 30,047 |
| D+ | 35,655 | 31,548 | 37,703 | 34,100 | 38,749 | 37,449 | 40,181 | 38,976 | 41,632 | 39,319 |
| D | 37,694 | 35,872 | 39,672 | 38,505 | 37,365 | 36,136 | 40,442 | 39,113 | 57,487 | 54,648 |
| D- | 26,436 | 25,997 | 28,542 | 27,251 | 24,542 | 23,174 | 25,531 | 23,127 | 77,718 | 72,211 |
| E | 4,263 | 3,621 | 3,913 | 3,126 | 3,227 | 2,409 | 3,127 | 2,223 | 18,077 | 15,322 |
| **Total** | **238,819** | **193,624** | **242,981** | **202,539** | **258,896** | **223,237** | **278,387** | **242,853** | **299,268** | **271,893** |
| **Grand Total** | **432,443** | | **445,520** | | **482,133** | | **521,240** | | **571,161** | |

Source: Kenya National Examinations Council

* Provisional

3.21. **Secondary School Teachers:** Table 3.10 presents the number of public secondary school and tertiary teachers by sex and grade from 2012 to 2016. The total number of public secondary school and tertiary teachers expanded by 4.4 per cent from 85,438 in 2015 to 89,187 in 2016. Similarly, the total number of trained teachers rose by the same margin to 88,981 in 2016. The number of female-trained teachers increased by 5.3 per cent to 35,666 while that of male teachers grew by 3.8 per cent to 53,315 in 2016. During the period under review, the number of trained Approved and S1/Diploma teachers combined declined from 15,999 in 2015 to 15,442 in 2016. This decline can be attributed to the number of teachers who had exited the service through natural attrition and teachers who were promoted to next grade after completion of studies.

## Table 3.10: Public Secondary School Teachers by Grade and Sex[1], 2012 – 2016

Number

| Grade | 2012 | | | 2013 | | | 2014 | | | 2015 | | | 2016* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| TRAINED | | | | | | | | | | | | | | | |
| Graduate ... ... ... ... ... | 31,783 | 19,731 | 51,514 | 32,111 | 20,378 | 52,489 | 37,641 | 24,795 | 62,436 | 40,610 | 27,081 | 67,691 | 43,128 | 29,120 | 72,248 |
| Approved... ... ... ... ... ... ... | 5,159 | 2,782 | 7,941 | 3,787 | 1,858 | 5,645 | 4,269 | 2,116 | 6,385 | 4,082 | 2,025 | 6,107 | 3,845 | 1,985 | 5,830 |
| S1/Diploma... ... ... ... ... ... | 2,056 | 1,523 | 3,579 | 3,689 | 2,614 | 6,303 | 4,853 | 3,687 | 8,540 | 5,650 | 4,242 | 9,892 | 5,432 | 4,180 | 9,612 |
| Dip/Technical ... ... ... ... ... | 719 | 356 | 1,075 | 326 | 141 | 467 | 572 | 299 | 871 | 577 | 296 | 873 | 568 | 285 | 853 |
| Cert./Technical ... ... .... | - | - | - | 324 | 109 | 433 | 366 | 121 | 487 | 350 | 116 | 466 | 342 | 96 | 438 |
| Contract Teachers ... ... ... ... | - | - | - | - | - | - | - | - | - | 81 | 121 | 202 | | | - |
| **SUB TOTAL** | **39,717** | **24,392** | **64,109** | **40,237** | **25,100** | **65,337** | **47,701** | **31,018** | **78,719** | **51,350** | **33,881** | **85,231** | **53,315** | **35,666** | **88,981** |
| UNTRAINED | | | | | | | | | | | | | | | |
| Graduate ... ... ... ... ... ... | 6 | 4 | 10 | 134 | 15 | 149 | - | - | - | 169 | 30 | 199 | 165 | 35 | 200 |
| Dip/Technical ... ... ... ... ... | 165 | 54 | 219 | 6 | 2 | 8 | 6 | 2 | 8 | 6 | 2 | 8 | 4 | 2 | 6 |
| **SUB TOTAL... ... ... ... ... ...** | **171** | **58** | **229** | **140** | **17** | **157** | **6** | **2** | **8** | **175** | **32** | **207** | **169** | **37** | **206** |
| **GRAND TOTAL... ... ... ...** | **39,888** | **24,450** | **64,338** | **40,377** | **25,117** | **65,494** | **47,707** | **31,020** | **78,727** | **51,525** | **33,913** | **85,438** | **53,484** | **35,703** | **89,187** |

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.

3.22. **Teacher Training Institutions:** Teacher trainees enrolment by year and sex from 2012 to 2016 is presented in Table 3.11. The total number of teacher trainees in P1 and Diploma colleges grew marginally from 41,402 in 2015 to 41,707 in 2016. The enrolment of P1 teacher trainees declined by 0.9 per cent from 39,431 in 2015 to 39,067 in 2016 with the number of teacher trainees in public colleges decreasing by 6.7 per cent to 21,294 in 2016. However, the number of teacher trainees enrolled in private colleges grew by 7.0 per cent to 17,773. The teacher trainees in diploma colleges increased by 33.9 per cent from 1,971 in 2015 to 2,640 in 2016. First year P1 trainees enrolment declined by 13.3 per cent, while that of second year P1 trainees increased marginally during the review period.

**Table 3.11: Teacher Trainees Enrolment by Year and Sex, 2012- 2016**

Number

| TYPE OF INSTITUTION/ CERTIFICATION | 2012 | | 2013 | | 2014 | | 2015 | | 2016* | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| **Public primary (P 1)** | | | | | | | | | | |
| 1st Year | 4,403 | 4,497 | 5,249 | 5,435 | 4,994 | 5,536 | 5,769 | 6,270 | 4,489 | 5,945 |
| 2nd Year | 4,365 | 4,402 | 4,967 | 5,357 | 5,249 | 5,435 | 5,513 | 5,266 | 5,074 | 5,786 |
| **Sub Total** | **8,768** | **8,899** | **10,216** | **10,792** | **10,243** | **10,971** | **11,282** | **11,536** | **9,563** | **11,731** |
| **Private primary (P1)** | **5,342** | **5,943** | **6,997** | **7,392** | **7,905** | **8,352** | **8,102** | **8,511** | **8,401** | **9,372** |
| **Total Private P1** | **11,285** | | **14,389** | | **16,257** | | **16,613** | | **17,773** | |
| **SUB TOTAL** | **14,110** | **14,842** | **17,213** | **18,184** | **18,148** | **19,323** | **19,384** | **20,047** | **17,964** | **21,103** |
| **Diploma** | | | | | | | | | | |
| 1st Year | 392 | 226 | 316 | 269 | 671 | 516 | 419 | 411 | 573 | 558 |
| 2nd Year | 329 | 215 | 379 | 226 | 317 | 260 | 300 | 280 | 392 | 369 |
| 3rd Year | 349 | 233 | 327 | 199 | 387 | 231 | 305 | 256 | 404 | 344 |
| **SUB TOTAL** | **1,070** | **674** | **1,022** | **694** | **1,375** | **1,007** | **1,024** | **947** | **1,369** | **1,271** |
| **TOTAL** | **15,180** | **15,516** | **18,235** | **18,878** | **19,523** | **20,330** | **20,408** | **20,994** | **19,333** | **22,374** |
| **GRAND TOTAL** | **30,696** | | **37,113** | | **39,853** | | **41,402** | | **41,707** | |

Source: Ministry of Education

*Provisional

3.23. **Technical and Vocational Educational Training Institutions (TVET)**: Table 3.12 presents enrolment in registered TVET institutions from 2012 to 2016. The total enrolment in TVET institutions grew by 32.1 per cent from 153,314 in 2015 to 202,556 in 2016. The increase was mainly due to the expansion of TVET institutions and implementation of the TVET Act 2012, which stipulates that all TVET institutions must register with the Technical Vocational Education and Training Authority (TVETA). The enrolment in national polytechnics and technical universities substantially increased by 79.7 per cent from 20,541 in 2015 to 36,915 in 2016. Student enrolment in other TVET colleges, mainly the Technical and Vocational Colleges and Vocational Training Colleges rose by 24.8 per cent from 132,773 in 2015 to 165,641 in 2016. The enrolment in Vocational Training Colleges went up by 4.4 per cent from 77,465 in 2015 to 80,905 in 2016, mainly due to the expansion of these colleges by the county governments.

**Table 3.12: Student Enrolment in Technical Institutions by Sex, 2012 – 2016**

Number

| INSTITUTION | 2012 | | 2013 | | 2014+ | | 2015 | | 2016* | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Technical University of Kenya[1] | 1,698 | 1,024 | 4,814 | 2,607 | 4,432 | 2,769 | 3,911 | 2,517 | 2,425 | 1,249 |
| Technical University of Mombasa[1] | 2,190 | 1,150 | 3,048 | 1,506 | 3,250 | 1,708 | 2,835 | 1,633 | 1,789 | 1,236 |
| Kenya Technical Trainers College | .. | .. | .. | .. | 858 | 597 | 913 | 1,119 | 2,806 | 2,114 |
| Kisumu National Polytechnic | 2,256 | 1,136 | 2,223 | 1,267 | 2,926 | 1,551 | 2,078 | 1,325 | 2,941 | 1,415 |
| Eldoret National Polytechnic | 2,730 | 1,669 | 3,081 | 1,949 | 3,194 | 1,977 | 2,726 | 1,484 | 3,793 | 2,174 |
| Meru National Polytechnic | .. | .. | .. | .. | .. | .. | .. | .. | 744 | 287 |
| North Eastern National Polytechnic | .. | .. | .. | .. | .. | .. | .. | .. | 613 | 428 |
| Kenya Coast National Polytechnic | .. | .. | .. | .. | .. | .. | .. | .. | 736 | 1,142 |
| Kitale National Polytechnic | .. | .. | .. | .. | .. | .. | .. | .. | 907 | 512 |
| Kisii National Polytechnic | .. | .. | .. | .. | .. | .. | .. | .. | 1,733 | 1,217 |
| Kabete National Polytechnic | .. | .. | .. | .. | .. | .. | .. | .. | 2,048 | 979 |
| Nyeri National Polytechnic | .. | .. | .. | .. | .. | .. | .. | .. | 1,218 | 646 |
| Sigalagala National Polytechnic | .. | .. | .. | .. | .. | .. | .. | .. | 1,001 | 762 |
| **Sub Total** | **8,874** | **4,979** | **13,166** | **7,329** | **14,660** | **8,602** | **12,463** | **8,078** | **22,754** | **14,161** |
| **Other TVET Institutions** | | | | | | | | | | |
| Public Technical and Vocational Colleges[2] | 28,153 | 18,631 | 31,956 | 23,989 | 29,632 | 21,232 | 32,221 | 23,087 | 17,589 | 9,569 |
| Private Technical and Vocational Colleges[2] | .. | .. | .. | .. | .. | .. | .. | .. | 27,280 | 30,298 |
| Vocational Traning Colleges[3] | 40,233 | 26,821 | 42,942 | 28,627 | 45,473 | 28,222 | 47,625 | 29,840 | 46,340 | 34,565 |
| **Sub Total** | **68,386** | **45,452** | **74,898** | **52,616** | **75,105** | **49,454** | **79,846** | **52,927** | **91,209** | **74,432** |
| **TOTAL** | **127,691** | | **148,009** | | **147,821** | | **153,314** | | **202,556** | |

Source: Technical Vocational Education and Training Authority (TVETA)

* Provisional

+Data relating to Technical University of Kenya, Technical University of Mombasa and Kisumu National Polytechnic has been revised

[1] Diploma and Certificate courses only

[2]Formerly Technical Training Institutes

[3]Formerly Youth Polytechnics

.. Data not available

3.24. **University Education:** Student enrolment by sex in public and private universities from 2013/14 to 2016/17 academic years is as shown in Table 3.13. Total university student enrolment is expected to increase by 10.5 per cent from 510,685 in 2015/16 to 564,507 in 2016/17. The growth is attributable to the increase in the number of public universities and financing of students in private universities by the Government. Female students enrolment is expected to rise by 10.0 per cent from 212,872 in 2015/16 to 234,120 in 2016/17 while that of male students is expected to increase by 10.9 per cent to 330,387 in 2016/17. Student enrolment in public universities is expected to grow by 10.8 per cent to 479,312 in 2016/17 while private universities enrolment is expected to rise by 9.3 per cent from 77,929 in 2015/16 to 85,195 in 2016/17. The number of male students enrolled in public universities is expected to increase by 10.9 per cent to 286,840 in 2016/17 compared to a 10.6 per cent increase in enrolment of female students.

## Table 3.13: Student Enrolment[1] by Sex in Universities, 2013/14 - 2016/17

Number

| INSTITUTION | 2013/14 | | 2014/15 | | 2015/16 | | 2016/17* | |
|---|---|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female | Male | Female |
| **Public Universities** | | | | | | | | |
| Nairobi | 38,693 | 25,376 | 42,328 | 27,618 | 60,103 | 38,612 | 62,541 | 39,733 |
| Kenyatta | 37,758 | 32,248 | 43,165 | 33,714 | 40,254 | 31,237 | 41,426 | 31,004 |
| Moi | 18,547 | 15,684 | 22,458 | 20,838 | 24,775 | 21,951 | 24,608 | 18,062 |
| Egerton | 7,044 | 4,896 | 8,661 | 5,267 | 7,087 | 5,433 | 7,178 | 5,623 |
| Jomo Kenyatta (JKUAT) | 19,729 | 10,847 | 20,860 | 11,469 | 21,623 | 12,752 | 24,747 | 15,198 |
| Maseno | 3,922 | 2,247 | 7,356 | 7,412 | 11,157 | 7,115 | 10,729 | 7,618 |
| Masinde Muliro | 5,606 | 3,445 | 7,480 | 4,213 | 8,619 | 5,612 | 11,344 | 7,542 |
| Technical University of Kenya | 5,102 | 1,915 | 5,391 | 2,024 | 7,586 | 2,446 | 7,460 | 2,693 |
| Technical University of Mombasa | 3,993 | 1,050 | 4,186 | 1,234 | 5,061 | 1,814 | 5,086 | 2,397 |
| Dedan Kimathi | 1,546 | 584 | 4,715 | 1,578 | 4,538 | 1,558 | 4,554 | 1,558 |
| Chuka | 7,318 | 2,663 | 9,716 | 3,931 | 6,469 | 4,074 | 8,689 | 5,844 |
| Karatina | 2,700 | 2,014 | 3,095 | 2,209 | 4,590 | 3,046 | 3,631 | 2,653 |
| Kisii | 913 | 531 | 4,780 | 3,495 | 7,567 | 5,979 | 13,913 | 8,995 |
| Meru | 2,001 | 903 | 2,825 | 1,174 | 3,067 | 1,272 | 4,362 | 2,156 |
| Multimedia | 697 | 331 | 754 | 346 | 2,568 | 1,373 | 3,527 | 1,780 |
| South Eastern | 1,988 | 1,037 | 3,676 | 2,138 | 4,274 | 2,624 | 4,591 | 3,153 |
| Jaramogi Oginga Odinga | 1,259 | 771 | 2,537 | 1,638 | 6,682 | 3,974 | 7,529 | 5,213 |
| Laikipia | 857 | 574 | 3,260 | 2,652 | 4,999 | 4,007 | 5,297 | 4019 |
| University of Eldoret | 8,059 | 4,507 | 9,447 | 6,215 | 13,963 | 9,875 | 9,675 | 7261 |
| Kabianga | 1,004 | 681 | 3,375 | 2,366 | 1,249 | 1,017 | 4,661 | 3,855 |
| Pwani | 2,666 | 1,591 | 2,981 | 1,603 | 3,781 | 2,494 | 3,989 | 2,692 |
| Kibabii | .. | .. | .. | .. | 3,527 | 1,815 | 3,610 | 2,440 |
| Embu University College | .. | .. | .. | .. | .. | .. | 687 | 677 |
| Machakos | .. | .. | .. | .. | .. | .. | 1,085 | 873 |
| Murang'a University College | .. | .. | .. | .. | .. | .. | 1,473 | 871 |
| Rongo | .. | .. | .. | .. | .. | .. | 3,029 | 2,220 |
| Kirinyaga University College | .. | .. | .. | .. | .. | .. | 317 | 242 |
| Co-operative University College | .. | .. | .. | .. | .. | .. | 1,259 | 1,594 |
| Taita Taveta Univereity College | .. | .. | .. | .. | .. | .. | 503 | 272 |
| Masai Mara | 2,585 | 1,851 | 4,118 | 3,036 | 5,149 | 3,988 | 5,340 | 4,234 |
| **SUB-TOTAL** | **173,987** | **115,746** | **217,164** | **146,170** | **258,688** | **174,068** | **286,840** | **192,472** |
| **Private Universities** | 39,980 | 31,666 | 42,454 | 37,994 | 39,125 | 38,804 | 43,547 | 41,648 |
| **GRAND TOTAL** | **361,379** | | **443,783** | | **510,685** | | **564,507** | |

Source: Individual Universities/ Commission for University Education

* Provisional

[1] Enrolment excludes Diploma/Certificate.

3.25. **Registration of Universities and other Institutions offering Degree Programmes:** The registration of universities and other institutions offering degree programmes from 2012 to 2016 is presented in Table 3.14. The number of chartered private universities increased from 17 in 2015 to 18 in 2016 after one private university was given a charter. The number of public universities increased by 30.4 per cent from 23 in 2015 to 30 in 2016 mainly due to granting of full charters to 7 university constituent colleges. This resulted into a decline in the number of public university constituent colleges to three in 2016.

**Table 3.14: Registration of Universities and Other Institutions offering Degree Programmes, 2012-2016**

Number

| Category of Institutions | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Chartered private universities | 15 | 17 | 17 | 17 | 18 |
| Universities with Letter of Interim Authority | 12 | 11 | 13 | 14 | 14 |
| Newly Registered universities | 2 | 2 | 1 | 1 | 0 |
| Institutions approved for collaboration with universities in offering university programmes | 33 | 33 | 33 | 35 | 35 |
| Public universities | 8 | 22 | 22 | 23 | 30 |
| Public university constituent colleges | 23 | 9 | 9 | 10 | 3 |
| Private university constituent colleges | 4 | 5 | 5 | 5 | 5 |
| Public university campuses established | 33 | 33 | 33 | 33 | 33 |

Source: Commission for University Education

3.26. Table 3.15 presents the number of approved degree programmes by category of institutions from 2012 to 2016. The number of approved public university degree programmes remained at 2,066 while those offered by private universities increased from 333 in 2015 to 406 in 2016. The number of approved degree programmes for collaboration with universities rose from 38 in 2015 to 41 in 2016.

**Table 3.15: Approved Degree Programmes, 2012-2016**

Number

| Programme | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Public University Degree Programmes | .. | .. | .. | 2,066 | 2,066 |
| Public University Constituent Colleges Degree Programmes | .. | .. | .. | 106 | 106 |
| Private University Degree Programmes | 160 | 362 | 333 | 333 | 406 |
| Private University Constituent Degree Programmes | .. | .. | .. | 20 | 20 |
| Universities with Letter of Interim Authority | .. | .. | .. | 58 | 58 |
| Registered Private University Degree Programmes | .. | .. | .. | 4 | 4 |
| Degree programmes for Collaboration with Universities | 38 | 38 | 38 | 38 | 41 |
| Validated diploma programmes[1] | 140 | .. | .. | .. | 72 |

Source: Commision for University Education

* Provisional

.. Data not avalable

[1]Commission stopped validation in 2013 and resumed in 2016

3.27. **Loan Applicants, Beneficiaries and Amount of Loan Awarded to Students in Colleges:** Table 3.16 shows the number of loan applicants, beneficiaries and the amount of loans awarded to students in public and private universities and the TVET institutions from 2012/13 to 2016/17 academic years. Total number of student loan applicants is expected to grow by 10.3 per cent from 204,759 in 2015/16 to 225,755 in 2016/17. The total number of students awarded loans rose by 10.4 per cent to 217,520 while the total amount of loans awarded increased by 15.8 per cent from KSh 7.6 billion in 2015/16 to KSh 8.8 billion in 2016/17. Public university students' loan applicants increased by 10.4 per cent from 183,887 in 2015/16 to 203,037 in 2016/17 while the total number of beneficiaries increased by 10.6 per cent to 195,506 in 2016/17. During the review period, the amount awarded to public student beneficiaries grew by 16.2 per cent to KSh 8.2 billion in 2016/17. TVET students' loan applicants rose by 4.2 per cent from 15,330 in 2015/16 to 15,967 in 2016/17 with all the applicants being awarded loans. Total amount of loans awarded to TVET students grew by 17.9 per cent to KSh 423.7 million in 2016/17.

**Table 3.16: Loan Applicants, Beneficiaries and Loans Awarded by Sex, 2012/13 – 2016/17**

| Year | Number of Loan Applicants | | Number of Applicants Awarded Loans | | Amount of Loans Awarded (KSh Million) | | Total Loans Awarded (KSh Million) |
|---|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female | |
| **Public University** | | | | | | | |
| 2012/2013 | 81,331 | 43,223 | 75,118 | 38,285 | 3,261.1 | 1,634.3 | 4,895.4 |
| 2013/2014 | 101,385 | 53,620 | 92,061 | 48,459 | 3,948.5 | 2,175.2 | 6,123.7 |
| 2014/2015 | 112,495 | 59,931 | 109,022 | 55,847 | 4,384.5 | 2,224.2 | 6,608.7 |
| 2015/2016 | 119,225 | 64,662 | 115,194 | 61,514 | 4,607.8 | 2,413.7 | 7,021.5 |
| 2016/2017* | 131,009 | 72,028 | 127,079 | 68,427 | 5,384.6 | 2,773.9 | 8,158.5 |
| **Private University** | | | | | | | |
| 2012/2013 | 3,483 | 2,709 | 2,587 | 1,934 | 115.9 | 85.9 | 201.8 |
| 2013/2014 | 3,903 | 2,791 | 2,987 | 2,143 | 127.8 | 90.7 | 218.5 |
| 2014/2015 | 3,335 | 2,390 | 3,011 | 2,050 | 118.7 | 80.8 | 199.5 |
| 2015/2016 | 3,198 | 2,344 | 2,896 | 2,095 | 112.0 | 80.3 | 192.3 |
| 2016/2017* | 3,897 | 2,854 | 3,507 | 2,540 | 146.3 | 106.0 | 252.3 |
| **TVET Institutions[1]** | | | | | | | |
| 2012/2013 | - | - | - | - | - | - | - |
| 2013/2014 | 2,762 | 1,234 | 2,762 | 1,234 | 71.6 | 33.3 | 104.8 |
| 2014/2015 | 5,051 | 2,551 | 5,051 | 2,551 | 88.8 | 48.2 | 137.0 |
| 2015/2016 | 9,823 | 5,507 | 9,823 | 5,507 | 224.9 | 134.4 | 359.3 |
| 2016/2017* | 10,517 | 5,450 | 10,517 | 5,450 | 275.1 | 148.6 | 423.7 |

Source: Higher Education Loans Board

*Provisional

[1]TVET institutions loans beneficiaries began in 2013/14

3.28. 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 is presented in Table 3.17. The total number of bursary applicants rose by 10.9 per cent from 34,985 in 2015/16 to 38,801 in 2016/17. Student applicants from public university rose by 16.2 per cent to 22,834 in 2016/17 while that of TVET increased by 4.2 per cent from 15,330 in 2015/16 to 15,967 in 2016/17. The number of students awarded bursaries increased by 11.2 per cent to 33,905 in 2016/17. The amount of bursary awarded to students in public universities and TVET institutions went up by 7.2 per cent from KSh 216.2 million in 2015/16 to KSh 231.7 million. Bursaries awarded to students in TVET institutions declined by 5.7 per cent to KSh 117.9 million while that of public universities increased by 24.8 per cent to KSh 113.8 million.

**Table 3.17: Bursary Applicants, Beneficiaries and Amount Awarded by Sex, 2012/13 – 2016/17**

| Year | Number of Bursary Applicants | | | Number of Applicants Awarded Bursary | | | Amount of Bursary Awarded (KSh Million) | | Total Bursary Awarded (KSh Million) |
|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | |
| **Public University** | | | | | | | | | |
| 2012/2013 | 10,058 | 3,489 | 13,547 | 10,083 | 3,489 | 13,572 | 55.6 | 20.1 | 75.7 |
| 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* | 15,984 | 6,850 | 22,834 | 12,557 | 5,381 | 17,938 | 80.8 | 33.0 | 113.8 |
| **Sub Total** | **59,919** | **22,001** | **81,920** | **52,437** | **20,532** | **72,969** | **317** | **125** | **442** |
| **TVET Institutions[2]** | | | | | | | | | |
| 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* | 10,517 | 5,450 | 15,967 | 10,517 | 5,450 | 15,967 | 77.6 | 40.3 | 117.9 |
| **Sub Total** | **28,153** | **14,742** | **42,895** | **28,153** | **14,742** | **42,895** | **232** | **126** | **358** |
| **Grand Total** | **88,072** | **36,743** | **124,815** | **80,590** | **35,274** | **115,864** | **550** | **250** | **800** |

Source: Higher Education Loans Board

*Provisional

[1]TVET bursary beneficiaries began in 2013/14

[2]All TVET Students who apply for loans automatically qualify for bursary

3.29. The Government capitation, total loans and bursary awarded; and the loan repayment are shown in Table 3.18. Total Government capitation on loans and bursaries and the loan repayment to HELB is expected to increase by 7.0 per cent from KSh 10.0 billion in 2015/16 to KSh 10.7 billion in 2016/17. The total amount of loans and bursaries awarded to university and TVET students is expected to grow by 16.7 per cent to KSh 9.1 billion in 2016/17. Similarly, loan repayments are expected to increase by 7.5 per cent from KSh 4.0 billion in 2015/16 to KSh 4.3 billion in 2016/17.

**Table 3.18: Government Capitation, Loans / Bursaries Awarded and Loan Repayments, 2012/13-2016/17**

KSh Million

| Year | GOK Loans Capitation | GOK Bursary 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 | 4,250.0 | **10,664.8** | 8,834.5 | 231.7 | **9,066.1** |

Source: Higher Education Loans Board

*Provisional

**Health and Vital Statistics**

3.30. Information on the number of registered deaths by major causes from 2012 to 2016 is shown in Table 3.19. Pneumonia followed by Malaria, Cancer and HIV/AIDS continued to be the leading causes of death, collectively accounting for 32.9 per cent of all reported deaths. Total number of registered deaths by major causes declined by 14.7 per cent to 94,130 cases.

**Table 3.19: Registered Deaths by Major Causes, 2012 – 2016**

Number

| Cause | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Malaria | 24,772 | 23,789 | 22,948 | 20,691 | 16,000 |
| Pneumonia | 22,051 | 22,918 | 21,640 | 22,473 | 21,295 |
| Cancer | 12,574 | 13,720 | 14,175 | 15,714 | 15,762 |
| HIV/AIDS | 11,111 | 11,448 | 12,235 | 11,131 | 9,471 |
| Tuberclosis | 10,611 | 11,186 | 10,986 | 10,183 | 4,735 |
| Anaemia | 8,169 | 8,124 | 8,469 | 8,472 | 8,165 |
| Road traffic accidents[1] | 4,997 | 4,942 | 4,710 | 5,488 | 4,809 |
| Other accidents | 4,630 | 4,857 | 4,187 | 3,887 | 4,166 |
| Heart disease | 5,188 | 4,544 | 5,030 | 5,799 | 5,353 |
| Menengitis | 4,480 | 4,265 | 4,555 | 4,499 | 4,374 |
| **Sub-total** | **110,595** | **111,806** | **110,949** | **110,352** | **94,130** |
| Others | 79,234 | 84,539 | 89,676 | 91,868 | 96,507 |
| **Total** | **189,829** | **196,345** | **200,625** | **202,220** | **190,637** |

Source: Civil Registration Service

*Provisional

[1]The data includes deaths that occur after the road accidents have been reported

3.31. **National Hospital Insurance Fund (NHIF):** Table 3.20 (a) shows the receipts from members' contributions and benefits paid out for the period 2011/12 to 2015/16. Total contributions received from members more than doubled from KSh 12.4 billion in 2014/15 to KSh 28.5 billion in 2015/16. In line with the contributions, the benefits to members grew significantly from KSh 5.9 billion in 2014/15 to KSh 10.2 billion in 2015/16. This substantial increase is attributed to the upward review of the rates, which took effect in April 2015. The proportion of the benefits to members relative to the members' contributions declined from 47.6 per cent in 2014/15 to 36.0 per cent in 2015/16.

**Table 3.20a: NHIF Receipts from Members' Contributions and Benefits Paid Out, 2011/2012-2015/2016**

KSh Million

| Financial Year | 2011/12 | 2012/13+ | 2013/14+ | 2014/15+ | 2015/16* |
|---|---|---|---|---|---|
| Receipts (members' contributions)... .... | 9,595.6 | 7,905.6 | 9,323.0 | 12,371.5 | 28,477.9 |
| Benefits... ... ... ... ... ... ... ... ... ... ... ... ..... | 5,999.8 | 4,838.0 | 4,314.6 | 5,883.7 | 10,248.8 |
| **Benefits contributions proportion (%)..** | **62.5** | **61.2** | **46.3** | **47.6** | **36.0** |

Source: National Hospital Insurance Fund

* Provisional

+ Revised

3.32. **National Hospital Insurance Fund Membership:** Table 3.20b shows the number of registered active members of the National Hospital Insurance Fund from 2011/12 to 2015/16. Total membership grew by 15.1 per cent from 5.3 million in 2014/15 to 6.1 million in 2015/16. The formal sector continued to contribute the largest share representing 58.9 per cent of the membership in 2015/16. The informal sector registered a 26.5 per cent increase in membership in 2015/16 compared to 12.2 per cent increase in the formal sector over the same period. Since 2011/12, the informal sector active registered membership has been growing at a faster rate than in the formal sector. This could be attributed to the spirited campaign by the Fund to recruit new members in the informal sector.

**Table 3.20b: Registered Active Members of the National Hospital Insurance Fund, 2011/12-2015/16**

Number

| Financial Year | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16* |
|---|---|---|---|---|---|
| Formal Sector... ... ... .. | 2,441,795 | 2,679,370 | 2,952,362 | 3,221,621 | 3,616,167 |
| Informal Sector... ... ... | 898,364 | 1,115,424 | 1,498,031 | 1,991,614 | 2,520,089 |
| **Total... ... ... ... ... ... ..** | **3,340,159** | **3,794,794** | **4,450,393** | **5,268,649** | **6,136,256** |

Source: National Hospital Insurance Fund

* Provisional

3.33. Table 3.21 shows the number of registered health personnel and those in training for the years 2015 and 2016. The total number of registered health personnel increased by 12.3 per cent from 153,802 in 2015 to 172,706 in 2016. The proportion of registered health personnel per 100,000 population rose to 382 in 2016 from 346 in 2015. There was no change in the proportion of the registered Pharmacists, which remained the same at 7 per 100,000 population in 2015 and 2016. The total number of health students in training rose from 11,879 in 2014/15 to 16,740 in 2015/16.

**Table 3.21: Registered Health Personnel and those in Training, 2015-2016**

| Type of Personnel[1] | Registered Health Personnel | | | | In-Training | |
|---|---|---|---|---|---|---|
| | 2015 | | 2016* | | | |
| | Number | No. Per 100,000 Population | Number | No. Per 100,000 Population | 2014/2015 | 2015/2016* |
| Medical Officers | 9,605 | 22 | 10,376 | 23 | 501 | 3,213 |
| Dentists | 1,094 | 2 | 1,149 | 3 | 30 | 251 |
| Pharmacists | 2,994 | 7 | 3,169 | 7 | 219 | 272 |
| Pharmaceutical Technologists | 7,895 | 18 | 8,673 | 19 | 825 | 783 |
| Clinical Officers | 15,443 | 35 | 17,092 | 38 | 1,519 | 2600 |
| (BSc) Nurses | 2,944 | 7 | 4,070 | 9 | 812 | 343 |
| Registered Nurses | 50,419 | 114 | 57,037 | 126 | 4,481 | 3,142 |
| Enrolled Nurses | 42,369 | 96 | 42,947 | 95 | 314 | 86 |
| Public Health Officers | 10,110 | 23 | 12,564 | 28 | 1,071 | 3,360 |
| Public Health Technicians | 5,969 | 14 | 6,752 | 15 | _ | _ |
| Laboratory Technologists | 1,230 | _ | 3,346 | 7 | 839 | 340 |
| Laboratory Technicians | 363 | _ | 554 | 1 | 201 | _ |
| Nutritionists & Dieticians | 1,506 | 3 | 2,107 | 5 | 500 | 1,167.00 |
| Nutrition & Dietetic Technologists | 1,597 | 4 | 2,300 | 5 | 400 | 883 |
| Nutrition & Dietetic Technicians | 264 | 0.6 | 570 | 1 | 167 | 300 |
| **Total** | **153,802** | **346** | **172,706** | **382** | **11,879** | **16,740** |

Source: Kenya Medical Practitioners & Dentists Board, Pharmacy and Poisons Board, Clinical Officers Council, Nursing Council of Kenya, Kenya Medical Laboratory Technicians and Technologists Board, Kenya Nutritionists and Dieticians Institute

* Provisional

[1] Cummulative number of health personnel

3.34. Details on the number of undergraduate and postgraduate medical students by sex from 2012/13 to 2016/17 academic years are shown in Table 3.22. The total number of undergraduate and postgraduate medical students is expected to increase from 10,865 in 2015/16 to 14,286 in 2016/17 academic year. The numbers of students undertaking Dental Surgery, Nursing, Environmental Health and Medicine and Surgery are expected to rise by 60.0, 32.7, 48.5 and 16.7 per cent from 2015/16 to 2016/17 academic year, respectively. The number of medical postgraduate students grew by 40.0 per cent from 1,702 in 2015/16 to 2,382 in 2016/17.

**Table 3.22: Undergraduate Medical Students by Course and Sex; and the number of Postgraduate Students 2012/13-2016/17**

Number

| Undergraduate | 2012/13 | | 2013/14 | | 2014/15 | | 2015/16 | | 2016/17* | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Medical Degree** | **Male** | **Female** | **Male** | **Female** | **Male** | **Female** | **Male** | **Female** | **Male** | **Female** |
| Medicine & Surgery | 1,649 | 1,521 | 1,784 | 1,673 | 1,706 | 1,573 | 2,068 | 1,425 | 2,394 | 1,683 |
| Nursing | 781 | 1,368 | 1,042 | 1,531 | 1,197 | 2,781 | 1,041 | 1,841 | 1,414 | 2,411 |
| Dental Surgery | 138 | 130 | 147 | 144 | 201 | 168 | 157 | 163 | 204 | 208 |
| Environmental Health | 409 | 671 | 570 | 473 | 571 | 675 | 532 | 539 | 789 | 801 |
| Pharmacy | 207 | 259 | 389 | 265 | 550 | 419 | 544 | 454 | 822 | 690 |
| Biochemistry | 186 | 194 | 275 | 186 | 140 | 77 | 260 | 139 | 292 | 196 |
| **Sub-Total** | **3,370** | **4,143** | **4,207** | **4,272** | **4,365** | **5,693** | **4,602** | **4,561** | **5,915** | **5,989** |
| Postgraduate students | 335 | 283 | 662 | 461 | 706 | 724 | 1,032 | 670 | 1,427 | 955 |
| **Total** | **3,705** | **4,426** | **4,869** | **4,733** | **5,071** | **6,417** | **5,634** | **5,231** | **7,342** | **6,944** |
| **Grand Total** | **8,131** | | **9,602** | | **11,488** | | **10,865** | | **14,286** | |

Source: Universities - University of Nairobi, Egerton, Jomo Kenyatta University of Agriculture & Technology, Kabarak , Kenya Methodist, Kenyatta University, Aga Khan University , Masinde Muliro, Moi, Mt. Kenya, Baraton

* Provisional

3.35. Table 3.23 shows the number of middle level medical students registered at the Kenya Medical Training College from 2011/12 to 2015/16 academic years. Overall, enrolment increased by 10.5 per cent from 8,565 in 2014/15 to 9,464 in 2015/16. Diploma in Community Health Nursing continued to attract the highest number with 3,000 medical students in 2015/16 academic year followed by Clinical Medicine and Surgery with 1,520 medical students in the same period. More students are undertaking Diploma courses followed by Certificate and Higher Diploma, respectively.

## Table 3.23: Middle Level Medical Trainees in Public Medical Training Colleges, 2011/12 –2015/16

Number

| Level of Training | 2011/12 | 2012/13 | 2013/14 | 2014/15+ | 2015/16* |
|---|---|---|---|---|---|
| **Certificate in:** | | | | | |
| Community Nursing | 184 | 278 | 279 | 280 | 330 |
| Medical Engineering Technology | 76 | 84 | 94 | 80 | 60 |
| Health Records & Information Technology | 722 | 781 | 528 | 712 | 830 |
| Nutrition | 196 | 180 | 318 | 317 | 320 |
| Certificate in Orthopaedic Plaster | .. | .. | 30 | 60 | 60 |
| **Sub-Total** | **1,178** | **1,323** | **1,249** | **1,449** | **1,600** |
| **Diploma in:** | | | | | |
| Community Health Nursing | 1,029 | 2,662 | 2,708 | 2,745 | 3,000 |
| Community Nutrition | 72 | 138 | 187 | 317 | 320 |
| Environmental Health Sciences | 464 | 589 | 568 | 520 | 560 |
| Medical Laboratory Sciences | 429 | 411 | 459 | 459 | 462 |
| Clinical Medicine & Surgery | 1,134 | 1,156 | 1,125 | 1,140 | 1,520 |
| Medical Engineering Technology | 55 | 75 | 118 | 77 | 83 |
| Community Oral Health | 40 | 41 | 47 | 42 | 47 |
| Dental Technology | 39 | 39 | 36 | 34 | 41 |
| Health Records and Information technology | 225 | 255 | 381 | 381 | 401 |
| Occupational Therapy | 42 | 44 | 44 | 50 | 84 |
| Orthopaedic Technology | 32 | 35 | 25 | 25 | 25 |
| Pharmacy | 406 | 448 | 434 | 444 | 442 |
| Physiotherapy | 117 | 143 | 109 | 169 | 167 |
| Medical Imaging Sciences | 115 | 165 | 143 | 152 | 147 |
| Optical Technology | 25 | 22 | 28 | 29 | 20 |
| Health Promotion | - | - | - | 30 | 60 |
| Registered Nursing-Mental Health &Psychiatry | - | 50 | 93 | 150 | 150 |
| Neurophysiology | 14 | 16 | - | - | - |
| **Sub Total** | **4,238** | **6,289** | **6,505** | **6,764** | **7,529** |
| **Higher Diploma in:** | | | | | |
| Pharmacy | 21 | 5 | - | | - |
| Environmental Health Sciences[1] | 18 | 6 | 4 | 3 | 4 |
| Medical Laboratory Sciences[2] | 81 | 15 | 18 | 13 | 11 |
| Nursing[3] | 48 | 52 | 163 | 138 | 123 |
| Clinical Medicine and Surgery[4] | 60 | 83 | 112 | 124 | 120 |
| Medical Engineering | 49 | 27 | - | - | - |
| Ultra Sound Image Pattern Analysis | 45 | 21 | 36 | 39 | 37 |
| Community Health & HIV/AIDS Care | 25 | 58 | 33 | 12 | 15 |
| Health Education & Promotion | - | 18 | 17 | 11 | 14 |
| Medical Education | 20 | 17 | 11 | 12 | 11 |
| **Sub-Total** | **367** | **302** | **394** | **352** | **335** |
| **Total** | **5,783** | **7,914** | **8,148** | **8,565** | **9,464** |

Source: Kenya Medical Training College, Ministry of Health

* Provisional

+ Revised

[1] Includes food science and inspection, epidemiology, solid waste and occupational health

[2] Includes clinical chemistry, haematology, histology, parastology, virology, microbiology, bacterialogy and blood transfusion sciences

[3] Includes Psychiatry Nursing, Community Health Nursing, intensive care, ophthalmic and PeriOperative nursing

[4] Includes paediatrics, orthopaedics, anesthesia, lungs & skin, ent & audiology, reproductive health and opthalmology & cataract surgery

3.36. Full immunization refers to children below one year who have received one dose of BCG, three doses each of Oral Polio Vaccine (OPV), Pentavalent, Pneumococcal Vaccine and one dose of Measles Vaccine. The Full Immunization Coverage of Children under one year old by County for the years 2013 to 2016 is provided in Table 3.24. The number of fully immunized children marginally declined from 1,113,188 in 2015 to 1,103,608 in 2016. However, the full immunization coverage increased from 73.0 per cent in 2015 to 76.0 per cent in 2016. During this period, only 16 out of the 47 counties realized a slight increase in immunization coverage. Only Kiambu County recorded full immunization coverage of over 100 per cent with 45 counties recording over 50 per cent full immunization coverage. Mandera County registered the lowest coverage at 40 per cent followed by West Pokot County at 45.0 per cent.

## Table 3.24: Full Immunization Coverage (FIC), Rate of Under-One Year Old Children[1] by County 2013-2016

| County | 2013 | | 2014 | | 2015 | | 2016* | |
|---|---|---|---|---|---|---|---|---|
| | Number | % | Number | % | Number | % | Number | % |
| Mombasa | 26,761 | 79.7 | 26,200 | 72.8 | 31,662 | 86.9 | 30,047 | 82.0 |
| Kwale | 23,438 | 85.2 | 24,185 | 66.5 | 28,033 | 98.2 | 23,840 | 79.0 |
| Kilifi | 37,051 | 80.9 | 36,522 | 96.0 | 38,844 | 81.3 | 36,866 | 74.0 |
| Tana River | 6,553 | 57.1 | 6,501 | 56.1 | 6,340 | 60.1 | 6,722 | 54.0 |
| Lamu | 2,990 | 83.2 | 3,462 | 86.5 | 3,504 | 90.3 | 3,013 | 77.0 |
| Taita Taveta | 6,886 | 77.6 | 8,003 | 62.6 | 7,617 | 82.1 | 7,091 | 73.0 |
| Garissa | 11,768 | 129.7 | 15,157 | 61.9 | 14,555 | 61.5 | 15,852 | 71.0 |
| Wajir | 10,706 | 139.6 | 12,352 | 47.8 | 14,154 | 55.2 | 13,510 | 67.0 |
| Mandera | 7,813 | 69.9 | 10,212 | 20.4 | 11,137 | 26.9 | 12,848 | 40.0 |
| Marsabit | 7,671 | 92.7 | 9,425 | 71.7 | 9,384 | 71.9 | 8,869 | 73.0 |
| Isiolo | 4,255 | 89.6 | 4,136 | 61.3 | 4,240 | 65.7 | 3,797 | 67.0 |
| Meru | 24,105 | 59.3 | 28,522 | 57.9 | 27,860 | 64.6 | 26,719 | 65.0 |
| Tharaka Nithi | 8,748 | 82.8 | 7,357 | 47.7 | 7,031 | 60.2 | 6,557 | 61.0 |
| Embu | 13,193 | 96.1 | 11,878 | 73.3 | 12,303 | 84.3 | 11,698 | 84.0 |
| Kitui | 24,480 | 72.2 | 28,282 | 69.6 | 25,160 | 74.0 | 23,388 | 68.0 |
| Machakos | 25,828 | 83.8 | 27,266 | 77.7 | 27,216 | 78.7 | 27,133 | 87.0 |
| Makueni | 20,361 | 79.7 | 23,603 | 81.0 | 21,983 | 84.0 | 22,025 | 85.0 |
| Nyandarua | 12,919 | 69.5 | 15,030 | 85.5 | 15,129 | 85.7 | 14,237 | 79.0 |
| Nyeri | 13,780 | 77.2 | 15,212 | 75.8 | 15,031 | 100.7 | 14,137 | 81.0 |
| Kirinyaga | 11,169 | 80.0 | 11,166 | 85.2 | 11,662 | 87.6 | 11,699 | 86.0 |
| Muranga | 14,476 | 56.1 | 21,316 | 85.6 | 20,553 | 85.2 | 19,057 | 76.0 |
| Kiambu | 34,402 | 67.6 | 45,881 | 92.3 | 48,728 | 100.7 | 51,064 | 102.0 |
| Turkana | 15,248 | 66.5 | 20,390 | 75.0 | 18,862 | 64.1 | 23,467 | 77.0 |
| West Pokot | 11,812 | 48.4 | 14,819 | 63.3 | 13,738 | 65.6 | 11,802 | 45.0 |
| Samburu | 5,313 | 52.9 | 5,797 | 61.3 | 5,531 | 57.7 | 5,491 | 51.0 |
| Trans Nzoia | 18,880 | 55.0 | 22,188 | 59.8 | 23,348 | 57.7 | 23,910 | 64.0 |
| Uasin Gishu | 24,653 | 73.8 | 26,780 | 73.6 | 27,980 | 71.9 | 27,572 | 76.0 |
| Elgeyo Marakwet | 10,310 | 65.9 | 12,280 | 75.7 | 12,006 | 72.9 | 11,092 | 66.0 |
| Nandi | 20,009 | 70.6 | 22,971 | 67.5 | 21,417 | 60.4 | 18,260 | 60.0 |
| Baringo | 14,258 | 64.8 | 15,793 | 58.7 | 14,526 | 58.8 | 14,852 | 63.0 |
| Laikipia | 11,755 | 84.3 | 11,453 | 61.9 | 12,944 | 68.9 | 12,512 | 83.0 |
| Nakuru | 46,781 | 79.2 | 54,150 | 89.3 | 53,867 | 88.0 | 51,418 | 80.0 |
| Narok | 24,394 | 57.0 | 26,216 | 80.0 | 24,405 | 62.6 | 26,107 | 57.0 |
| Kajiado | 16,352 | 58.4 | 22,999 | 69.6 | 22,941 | 74.6 | 26,918 | 88.0 |
| Kericho | 14,727 | 52.5 | 20,908 | 63.6 | 19,166 | 59.1 | 18,075 | 61.0 |
| Bomet | 17,144 | 58.3 | 19,785 | 53.8 | 19,372 | 60.9 | 19,231 | 61.0 |
| Kakamega | 56,899 | 85.9 | 59,438 | 79.4 | 54,651 | 78.7 | 53,736 | 81.0 |
| Vihiga | 18,439 | 95.6 | 17,701 | 84.6 | 17,339 | 79.3 | 16,359 | 85.0 |
| Bungoma | 40,314 | 60.5 | 46,262 | 76.0 | 44,131 | 71.3 | 39,143 | 70.0 |
| Busia | 23,046 | 117.1 | 27,593 | 82.6 | 22,732 | 73.1 | 20,998 | 70.0 |
| Kisumu | 27,079 | 74.2 | 29,981 | 75.8 | 30,178 | 78.0 | 31,865 | 81.0 |
| Siaya | 24,423 | 76.6 | 26,870 | 76.5 | 25,838 | 78.7 | 26,045 | 76.0 |
| Homabay | 31,377 | 80.5 | 30,786 | 67.2 | 28,540 | 66.4 | 30,927 | 74.0 |
| Migori | 33,142 | 80.9 | 33,624 | 75.8 | 34,976 | 76.9 | 35,549 | 80.0 |
| Kisii | 31,422 | 73.7 | 34,341 | 81.5 | 32,567 | 65.4 | 31,069 | 68.0 |
| Nyamira | 20,032 | 97.1 | 20,690 | 98.0 | 20,040 | 89.5 | 20,446 | 92.0 |
| Nairobi City | 96,196 | 75.1 | 113,328 | 72.5 | 109,967 | 77.2 | 116,637 | 88.0 |
| **Kenya** | **1,003,358** | **76** | **1,128,811** | **74.0** | **1,113,188** | **73.3** | **1,103,608** | **76.0** |

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

3.37. The health facility based incidence of diseases for the period 2012 to 2016 is shown in Table 3.25. The cases of diseases morbidity increased by 10.7 per cent to 50.8 million in 2016. Diseases of the respiratory system and malaria, which accounted for 55.4 per cent of the total disease causing morbidity, remained the two leading diseases in 2016. The number of diseases of the respiratory reported increased by 8.7 per cent from 18.3 million in 2015 to 19.9 million in 2016. Similarly, there was an increase of 7.8 per cent in the reported number of malaria cases from 7.7 million in 2015 to 8.3 million in 2016.

**Table 3.25: Facility Based Incidence of Diseases in Kenya, 2012 -2 016**

| | 2012 | | 2013 | | 2014 | | 2015 | | 2016* | |
|---|---|---|---|---|---|---|---|---|---|---|
| **DISEASE** | **Number** | **%** | **Number** | **%** | **Number** | **%** | **Number** | **%** | **Number** | **%** |
| Malaria | 9,445,107 | 24.0 | 8,808,471 | 20.2 | 9,660,992 | 20.5 | 7,663,625 | 16.7 | 8,265,823 | 16.2 |
| Disease of the Respiratory System | 12,215,993 | 31.0 | 14,823,864 | 34.0 | 17,998,237 | 38.3 | 18,264,778 | 39.8 | 19,878,330 | 39.0 |
| Diseases of the Skin (Incl. Ulcers) | 3,051,026 | 7.7 | 3,648,361 | 8.4 | 4,556,925 | 9.7 | 4,755,915 | 10.4 | 4,400,542 | 8.6 |
| Diarrhoea | 2,081,487 | 5.3 | 2,226,107 | 5.1 | 3,013,256 | 6.4 | 3,115,168 | 6.8 | 2,883,039 | 5.7 |
| Intestinal Worms | 357,844 | 0.9 | 349,632 | 0.8 | 357,319 | 0.8 | 326,297 | 0.7 | 762,237 | 1.5 |
| Pneumonia | 1,135,046 | 2.9 | 1,282,996 | 2.9 | 1,509,851 | 3.2 | 1,508,212 | 3.3 | 1,612,579 | 3.2 |
| Accidents (incl. fractures, burns etc) | 846,287 | 2.1 | 927,861 | 2.1 | 1,079,953 | 2.3 | 1,154,067 | 2.5 | 1,303,640 | 2.6 |
| Rheumatism, Joint pains etc | 845,397 | 2.1 | 1,081,245 | 2.5 | 1,352,350 | 2.9 | 1,474,433 | 3.2 | 1,567,576 | 3.1 |
| Urinary Tract Infections | 912,646 | 2.3 | 1,091,371 | 2.5 | 1,361,275 | 2.9 | 1,541,276 | 3.4 | 1,688,865 | 3.3 |
| Eye Infection | 717,983 | 1.8 | 778,073 | 1.8 | 1,002,778 | 2.1 | 988,183 | 2.2 | 1,003,159 | 2.0 |
| All Other Diseases | 7,781,869 | 19.8 | 8,618,536 | 19.8 | 5,145,714 | 10.9 | 5,112,489 | 11.1 | 7,409,579 | 14.5 |
| **TOTAL** | **39,390,685** | **100.0** | **43,636,517** | **100.0** | **47,038,650** | **100.0** | **45,904,443** | **100.0** | **50,775,369** | **100.0** |

Source: Ministry of Health, Health Management Information System

* Provisional

3.38. **National Social Security Fund (NSSF):** The National Social Security Fund (NSSF) was established as a mandatory national scheme whose main objective is to provide basic financial security benefits to Kenyans in both formal and informal sectors upon retirement. In 2016, the number of registered employers went up by 26.7 per cent from 111.1 thousand in 2015 to 140.8 thousand in 2016 as shown in Table 3.26. This may be attributed to the measures taken to ensure that new employers are registered by both the Registrar of Companies and the Fund at the time of registration. Similarly the number of employees increased by 9.5 per cent to 4,804.3 thousand. Annual contributions increased by 9.6 per cent to KSh 12.9 billion in 2016 while annual benefits rose marginally in the same period.

**Table 3.26: National Social Security Fund, 2012 - 2016**

| Details | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Registered Employers '000 | 92.1 | 92.1 | 93.3 | 111.1 | 140.8 |
| Registered Employees '000 | | | | | |
| Male | 2,954.7 | 2,955.0 | 2,975.4 | 3,234.0 | 3,491.5 |
| Female | 1,001.2 | 1,001.3 | 1,005.1 | 1,154.7 | 1,312.8 |
| Total | 3,955.9 | 3,956.3 | 3,980.5 | 4,388.7 | 4,804.3 |
| Annual contribution KSh (Million) | 6,571.1 | 6,571.6 | 6,587.9 | 11,749.0 | 12,875.0 |
| Annual benefits paid KSh (Million) | 2,765.3 | 2,844.6 | 2,881.3 | 3,091.0 | 3,121.0 |

Source: National Social Security Fund

* Provisional

3.39. **Adult Education:** Details of adult education enrolment by sex and county from 2014 to 2016 are shown in Table 3.27. Overall enrolment in adult education has continued to exhibit a declining trend since 2014 with 271,769 adult students enrolled in 2016, reflecting a 11.3 per cent decline from the previous year. More female adult learners continued to be registered compared to male adult learners. Only ten counties registered an increase in adult education enrolment with Kakamega, Turkana and Kajiado counties recording the highest increase in the number of adults enrolled in 2016. However, Tharaka Nithi, Murang'a and Taita Taveta counties registered the largest decrease in adult education enrolment of 68.4, 63.3 and 54.3 per cent, respectively, in the same period.

## Table 3.27: Adult Education Enrolment by Sex and County, 2014 to 2016

| County | 2014 | | | 2015 | | | 2016* | | |
|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Baringo | 1,533 | 2,844 | 4,377 | 2,860 | 4,963 | 7,823 | 1,798 | 3,210 | 5,008 |
| Bomet | 823 | 2,269 | 3,092 | 1,771 | 4,392 | 6,163 | 927 | 2,551 | 3,478 |
| Bungoma | 3,875 | 5,269 | 9,144 | 3,189 | 5,187 | 8,376 | 3,049 | 4,643 | 7,692 |
| Busia | 1,572 | 3,841 | 5,413 | 1,606 | 3,772 | 5,378 | 1,504 | 3,810 | 5,314 |
| Elgeyo Marakwet | 2,201 | 2,905 | 5,106 | 1,568 | 2,857 | 4,425 | 2,143 | 2,518 | 4,661 |
| Embu | 2,802 | 9,882 | 12,684 | 964 | 2,646 | 3,610 | 1,179 | 4,003 | 5,182 |
| Garissa | 4,885 | 3,871 | 8,756 | 3,313 | 3,369 | 6,682 | 4,669 | 3,478 | 8,147 |
| Homa Bay | 2,863 | 7,546 | 10,409 | 3,126 | 7,893 | 11,019 | 2,935 | 7,770 | 10,705 |
| Isiolo | 342 | 1,253 | 1,595 | 978 | 2,095 | 3,073 | 473 | 1,342 | 1,815 |
| Kajiado | - | - | - | 1,624 | 2,505 | 4,129 | 2,680 | 3,972 | 6,652 |
| Kakamega | 2,062 | 5,028 | 7,090 | 1,260 | 2,372 | 3,632 | 2,057 | 4,510 | 6,567 |
| Kericho | 1,812 | 4,263 | 6,075 | 2,466 | 4,863 | 7,329 | 2,138 | 5,161 | 7,299 |
| Kiambu | 913 | 2,717 | 3,630 | 2,216 | 4,155 | 6,371 | 1,596 | 3,509 | 5,105 |
| Kilifi | 1,131 | 6,770 | 7,901 | 1,971 | 8,960 | 10,931 | 1,491 | 8,207 | 9,698 |
| Kirinyaga | 570 | 962 | 1,532 | 1,312 | 2,346 | 3,658 | 845 | 2,497 | 3,342 |
| Kisii | 1,713 | 4,754 | 6,467 | 3,925 | 7,598 | 11,523 | 2,298 | 5,278 | 7,576 |
| Kisumu | 2,340 | 6,124 | 8,464 | 2,884 | 6,116 | 9,000 | 2,098 | 4,541 | 6,639 |
| Kitui | 10,764 | 2,691 | 13,455 | 2,239 | 9,192 | 11,431 | 2,039 | 9,710 | 11,749 |
| Kwale | 1,255 | 4,356 | 5,611 | 1,482 | 4,844 | 6,326 | 1,157 | 4,029 | 5,186 |
| Laikipia | 1,191 | 3,002 | 4,193 | 1,378 | 2,822 | 4,200 | 1,036 | 2,665 | 3,701 |
| Lamu | 719 | 1,398 | 2,117 | 1,115 | 1,950 | 3,065 | 831 | 1,533 | 2,364 |
| Machakos | 1,106 | 5,673 | 6,779 | 1,558 | 5,842 | 7,400 | 946 | 5,726 | 6,672 |
| Makueni | 1,460 | 9,831 | 11,291 | 1,665 | 7,083 | 8,748 | 1,641 | 9,135 | 10,776 |
| Mandera | 1,652 | 1,943 | 3,595 | 2,336 | 2,831 | 5,167 | 2,062 | 2,696 | 4,758 |
| Marsabit | 309 | 566 | 875 | 1,002 | 1,726 | 2,728 | 425 | 1,341 | 1,766 |
| Meru | 14,824 | 25,318 | 40,142 | 3,156 | 8,424 | 11,580 | 3,875 | 11,388 | 15,263 |
| Migori | 2,602 | 6,098 | 8,700 | 2,393 | 5,086 | 7,479 | 1,955 | 4,089 | 6,044 |
| Mombasa | 1,236 | 1,457 | 2,693 | 1,303 | 2,246 | 3,549 | 498 | 1,265 | 1,763 |
| Murang'a | 3,040 | 3,783 | 6,823 | 2,244 | 7,775 | 10,019 | 802 | 2,872 | 3,674 |
| Nairobi | 5,960 | 6,905 | 12,865 | 7,364 | 9,205 | 16,569 | 5,697 | 8,276 | 13,973 |
| Nakuru | 4,319 | 4,654 | 8,973 | 9,137 | 5,945 | 15,082 | 7,290 | 4,109 | 11,399 |
| Nandi | 2,781 | 4,817 | 7,598 | 2,239 | 4,146 | 6,385 | 1,316 | 4,107 | 5,423 |
| Narok | 1,079 | 1,805 | 2,884 | 1,881 | 2,657 | 4,538 | 1,457 | 2,018 | 3,475 |
| Nyamira | 3,723 | 6,781 | 10,504 | 2,664 | 5,599 | 8,263 | 2,905 | 5,314 | 8,219 |
| Nyandarua | 902 | 2,940 | 3,842 | 1,458 | 3,865 | 5,323 | 1,154 | 3,661 | 4,815 |
| Nyeri | 1,229 | 3,690 | 4,919 | 1,231 | 4,183 | 5,414 | 852 | 3,348 | 4,200 |
| Samburu | 648 | 1,275 | 1,923 | 1,365 | 2,189 | 3,554 | 1,522 | 2,490 | 4,012 |
| Siaya | 612 | 2,760 | 3,372 | 853 | 1,935 | 2,788 | 536 | 1,839 | 2,375 |
| Taita- Taveta | 708 | 1,443 | 2,151 | 1,142 | 2,621 | 3,763 | 661 | 1,060 | 1,721 |
| Tana River | 1,689 | 4,653 | 6,342 | 1,727 | 4,477 | 6,204 | 1,206 | 3,771 | 4,977 |
| Tharaka Nithi | 4,110 | 10,686 | 14,796 | 1,623 | 4,861 | 6,484 | 446 | 1,606 | 2,052 |
| Trans Nzoia | 4,110 | 10,686 | 14,796 | 1,446 | 2,040 | 3,486 | 960 | 2,255 | 3,215 |
| Turkana | 1,336 | 2,130 | 3,466 | 1,688 | 2,279 | 3,967 | 2,890 | 3,992 | 6,882 |
| Uasin Gishu | 2,550 | 4,428 | 6,978 | 2,087 | 3,897 | 5,984 | 1,451 | 2,827 | 4,278 |
| Vihiga | 2,473 | 6,714 | 9,187 | 1,602 | 4,032 | 5,634 | 1,442 | 5,228 | 6,670 |
| Wajir | 1,160 | 1,228 | 2,388 | 1,684 | 1,825 | 3,509 | 1,379 | 1,326 | 2,705 |
| West Pokot | 2,568 | 2,779 | 5,347 | 1,981 | 2,486 | 4,467 | 1,264 | 1,518 | 2,782 |
| **TOTAL** | **113,552** | **216,788** | **330,340** | **102,076** | **204,152** | **306,228** | **85,575** | **186,194** | **271,769** |

Source: Directorate of Adult Education, Ministry of Education

*Provisional

3.40. Details of adults who passed proficiency and private candidates who were registered for KCPE by sex and county are shown in Table 3.28. The number of adult learners who passed proficiency tests and the private candidates who were registered for KCPE were 21,172 and 7,552, respectively, in 2016. The number of adults who passed proficiency test rose by 4.0 per cent from 20,352 in 2015 to 21,172 in 2016. Similarly, the number of private candidates who registered for KCPE went up by 1.4 per cent from 7,451 in 2015 to 7,552 in 2016. Makueni County recorded had highest number of adult learners enrolled for proficiency followed by Kajiado, Kakamega and Garissa counties in 2016. Kisii County had the highest number of private candidates who registered for KCPE in 2016 followed by Nairobi, Kiambu and Nandi. Marsabit did not register any private candidate for proficiency tests and KCPE in the same period. More female candidates passed the proficiency test compared to male candidates. On the other hand, more male private candidates registered for KCPE compared to female candidates.

## Table 3.28: Adults who passed Proficiency Test and Private Candidates who were Registered for KCPE by Sex and County, 2015-2016

| County | 2015 | | | | 2016* | | | |
|---|---|---|---|---|---|---|---|---|
| | PTP | | KCPE | | PTP | | KCPE | |
| | Male | Female | Male | Female | Male | Female | Male | Female |
| Baringo | 2 | 12 | 12 | 10 | 14 | 13 | 9 | 9 |
| Bomet | 71 | 143 | 9 | 7 | 47 | 139 | 9 | 7 |
| Bungoma | 112 | 331 | 68 | 65 | 149 | 382 | 83 | 48 |
| Busia | 97 | 293 | 21 | 14 | 69 | 174 | 54 | 37 |
| Elgeyo Marakwet | 91 | 171 | 20 | 12 | 102 | 186 | 14 | 24 |
| Embu | 293 | 572 | 139 | 98 | 99 | 429 | 80 | 51 |
| Garissa | 932 | 745 | 195 | 25 | 718 | 533 | 132 | 21 |
| Homa Bay | 589 | 1,426 | 149 | 117 | 383 | 797 | 131 | 103 |
| Isiolo | 32 | 102 | 24 | 16 | 24 | 76 | 24 | 16 |
| Kajiado | 90 | 151 | 98 | 166 | 474 | 1,503 | 103 | 111 |
| Kakamega | 411 | 813 | 112 | 104 | 572 | 1,042 | 175 | 164 |
| Kericho | 72 | 213 | 64 | 51 | 107 | 290 | 108 | 77 |
| Kiambu | 76 | 244 | 166 | 169 | 88 | 297 | 269 | 256 |
| Kilifi | 43 | 259 | 51 | 53 | 29 | 191 | 128 | 71 |
| Kirinyaga | 106 | 160 | 98 | 85 | 48 | 148 | 192 | 129 |
| Kisii | 142 | 402 | 229 | 315 | 141 | 343 | 434 | 360 |
| Kisumu | 226 | 611 | 246 | 232 | 66 | 611 | 32 | 49 |
| Kitui | 184 | 968 | 14 | 8 | 37 | 23 | 37 | 23 |
| Kwale | 34 | 88 | 5 | 16 | 38 | 139 | 23 | 16 |
| Laikipia | 58 | 125 | 50 | 6 | 35 | 96 | 35 | 12 |
| Lamu | 112 | 371 | 40 | 37 | 71 | 211 | 10 | 20 |
| Machakos | 149 | 661 | 67 | 58 | 136 | 674 | 34 | 47 |
| Makueni | 63 | 445 | 8 | 16 | 414 | 2,121 | 17 | 6 |
| Mandera | 190 | 225 | 74 | 16 | 273 | 187 | 68 | 14 |
| Marsabit | - | - | 83 | 89 | - | - | - | - |
| Meru | 98 | 140 | 208 | 133 | 402 | 655 | 208 | 133 |
| Migori | 40 | 36 | 49 | 47 | 36 | 22 | 49 | 41 |
| Mombasa | 32 | 57 | 116 | 113 | 28 | 61 | 129 | 74 |
| Murang'a | 162 | 824 | 29 | 42 | 193 | 58 | 15 | 41 |
| Nairobi | 206 | 364 | 293 | 352 | 187 | 245 | 401 | 317 |
| Nakuru | 187 | 245 | 113 | 141 | 411 | 502 | 149 | 47 |
| Nandi | 178 | 283 | 180 | 417 | 73 | 182 | 214 | 282 |
| Narok | 154 | 155 | 44 | 40 | 149 | 148 | 44 | 40 |
| Nyamira | 109 | 230 | 28 | 44 | 81 | 214 | 81 | 71 |
| Nyandarua | 43 | 259 | 48 | 34 | 29 | 191 | 69 | 52 |
| Nyeri | 119 | 345 | 44 | 32 | 59 | 234 | 57 | 26 |
| Samburu | 21 | 35 | 14 | 8 | 39 | 97 | 37 | 23 |
| Siaya | 98 | 256 | 40 | 28 | 67 | 202 | 41 | 31 |
| T/ Taveta | 61 | 104 | 29 | 31 | 98 | 143 | 13 | 15 |
| Tana River | 86 | 159 | 47 | 34 | 69 | 240 | 56 | 92 |
| Tharaka Nithi | 82 | 315 | 72 | 39 | 65 | 245 | 45 | 21 |
| Transnzoia | 61 | 36 | 68 | 44 | 44 | 77 | 86 | 72 |
| Turkana | 56 | 84 | 116 | 84 | 68 | 55 | 150 | 99 |
| Uasin Gishu | 97 | 79 | 137 | 86 | 66 | 70 | 95 | 77 |
| Vihiga | 82 | 319 | 59 | 33 | 69 | 143 | 57 | 40 |
| Wajir | 129 | 120 | 41 | 9 | 189 | 124 | 28 | 4 |
| West Pokot | 35 | 65 | 28 | 30 | 39 | 64 | 28 | 30 |
| **TOTAL** | **6,311** | **14,041** | **3,845** | **3,606** | **6,595** | **14,577** | **4,253** | **3,299** |

Source: Directorate of Adult Education, Ministry of Education

*Provisional

PTP- Profiency Test Pass

3.41. **Gender and Development:** The Government is determined to strengthen equity and gender equality by establishing a clear vision in delivery of its services. Table 3.29 presents the number of registered women groups by membership, contribution and source of loans through Uwezo and Women Enterprise Funds. The number of registered women groups increased by 1.5 per cent from 154,425 in 2015 to 156,792 in 2016. The total membership rose by 1.9 per cent to 6.3 million in 2016 while group contributions rose by 1.2 per cent from KSh 625.0 million in 2015 to KSh 632.4 million in 2016.

3.42. **The Uwezo Fund:** The Fund is an initiative aimed at enabling women, youth and persons with disability access finance to promote business and enterprises at the constituency level, thereby enhancing economic growth towards the realization of Vision 2030 and Sustainable Development Goals (SDGs). The funds disbursed through the Uwezo Fund are expected to increase by 5.9 per cent from KSh 5.1 billion in 2015/16 to KSh 5.4 billion in 2016/17. Similarly, the number of beneficiaries is expected to increase by 4.1 per cent from 865,045 in 2015/16 to 900,516 in 2016/17 as shown in Table 3.29.

3.43. **Women Enterprise Fund:** Women Enterprise Fund provides accessible and affordable credit to support women to start and expand business for wealth and employment creation. It also provides business support services such as capacity building, marketing, promotion of linkages and infrastructure support. Government loans disbursed through the Women Enterprise Fund are projected to decrease by 27.8 per cent from KSh 2.3 billion in 2015/16 to KSh 1.8 billion in 2016/17. Similarly, the number of beneficiaries is expected to decline from 178,375 in 2015/16 to 119,690 in 2016/17.

**Table 3.29: Women Groups Registration, Contributions and Source of Loans[1], 2012/13 - 2016/17[+]**

| Financial Year | Women Groups | | | Uwezo Fund | | Women Enterprise Fund | |
|---|---|---|---|---|---|---|---|
| | Number | Membership | Group contributions (KSh Million) | Number of Beneficiaries | Uwezo Fund disbursed (KSh Million) | Number of Beneficiaries | Women Enterprise Fund (KSh Million) |
| 2012/13..... | 145,856 | 5,734,543 | 568.7 | - | - | 176860 | 859.45 |
| 2013/14..... | 148,190 | 5,872,172 | 585.2 | - | - | 159248 | 1055.55 |
| 2014/15..... | 150,857 | 6,024,848 | 603.3 | 491,352 | 4,240.40 | 176,615 | 1,604.84 |
| 2015/16..... | 154,425 | 6,177,492 | 625.0 | 865,045 | 5,115.10 | 178,375 | 2,285.55 |
| 2016/17**..... | 156,792 | 6,297,320 | 632.4 | 900,516 | 5,373.90 | 119,690 | 1,825.64 |

Source: Ministry of Public Service, Youth and Gender Affairs , Uwezo Oversight Board and Women Enterprise Fund

** Estimates

[1] Loans are given at zero per cent interest rate

[+] Revised

3.44. **Women in Decision Making:** Improvement of the status of gender equality and empowerment of women is one of the Government's primary goals. Table 3.30 presents the participation of women in key decision-making positions from 2015 to 2016. The representation of women in the National Assembly and Senate remained at 19.8 and 26.9 per cent of total Members of Parliament and Senators in 2016, respectively. The proportion of women cabinet secretaries and principal secretaries remained at 25.5 per cent and 36.6 per cent in 2016, respectively. The number of Magistrates, Practicing Lawyer, High Court Judges, County Commissioners, and Members of County Assembly met the constitutional threshold of one-third gender rule.

**Table 3.30: Participation in Key Decision Making Positions by Sex, 2015-2016**

| Categories | 2015 | | | | 2016* | | | |
|---|---|---|---|---|---|---|---|---|
| | Number | | | | Number | | | |
| | Female | Male | Total | (%)Female | Female | Male | Total | (%)Female |
| Cabinet Secretaries | 5 | 15 | 20 | **25.5** | 5 | 15 | 20 | **25.5** |
| National Assembly | 69 | 280 | 349 | **19.8** | 69 | 280 | 349 | **19.8** |
| Principal Secretaries | 15 | 26 | 41 | **36.6** | 15 | 26 | 41 | **36.6** |
| Diplomatic Corps | 17 | 47 | 64 | **26.6** | 18 | 46 | 64 | **28.1** |
| Senators | 18 | 49 | 67 | **26.9** | 18 | 49 | 67 | **26.9** |
| Governors | 0 | 47 | 47 | **0.0** | 0 | 47 | 47 | **0.0** |
| Deputy Governors | 9 | 38 | 47 | **19.2** | 9 | 38 | 47 | **19.2** |
| County Commissioners | 18 | 29 | 47 | **38.3** | 18 | 29 | 47 | **38.3** |
| Sub County Commissioners | 35 | 260 | 295 | **11.9** | 40 | 255 | 295 | **13.6** |
| Deputy Secretaries | 62 | 142 | 204 | **30.4** | 66 | 149 | 215 | **30.7** |
| Supreme Court Judges | 2 | 5 | 7 | **28.6** | 2 | 5 | 7 | **28.6** |
| Court of Appeal Judges | 8 | 18 | 26 | **30.8** | 7 | 18 | 25 | **28.0** |
| High Court Judge | 37 | 60 | 97 | **38.1** | 37 | 59 | 96 | **38.5** |
| Magistrates | 216 | 235 | 451 | **47.9** | 216 | 222 | 438 | **49.3** |
| Kadhis | 0 | 35 | 35 | **0.0** | 0 | 45 | 45 | **0.0** |
| Chiefs | 114 | 2,476 | 2,590 | **4.4** | 126 | 2,464 | 2,590 | **4.9** |
| Assistant Chiefs | 482 | 5,404 | 5,886 | **8.2** | 489 | 5,397 | 5,886 | **8.3** |
| Practicing Lawyers | 2,708 | 4,305 | 7,013 | **38.6** | 2,738 | 4,347 | 7,085 | **38.7** |
| Members of the County Assembly | 761 | 1,463 | 2,224 | **34.2** | 761 | 1,463 | 2,224 | **34.2** |

Source Ministry of Interior and Co-ordination of National Government,National Assembly,Ministry of Foreign Affairs & International Trade, Judicial Service Commission and Office of the Attorney General

3.45. **Social Protection Fund:** The Social Protection Fund (SPF) was established to minimize vulnerability across gender lines, reduce excessive inequality and disparities between social strata and to mitigate any distinction and exclusion. The funds allocated towards older persons are anticipated to decrease by 8.8 per cent from KSh 8.0 billion in 2015/6 to KSh 7.3 billion in 2016/17. In line with this, direct cash disbursements are also expected to decrease by 10.0 per cent to KSh 6.7 billion in 2016/17. This is mainly due to the decrease in the number of beneficiary households from 310,223 in 2015/16 to 279,150 in 2016/17. During the period under review, funds allocated for the Orphans and Vulnerable Children (OVC) are expected to decrease by 18.6 per cent from KSh 9.7 billion in 2015/16 to KSh 7.9 billion in 2016/17. Consequently, direct cash disbursements are projected to decrease from KSh 8.439.6 million in 2015/16 to KSh 8,424.2 million in 2016/17. The number of beneficiary households decreased marginally from 351,650 in 2015/16 to 351,010 in 2016/17 as shown in Table 3.31.

**Table 3.31: Allocation and Disbursement of Funds for Social Protection by the National Government, 2012/13 – 2016/17**

| Financial Year | Social Protection Fund for Older Persons | | | Social Protection Fund for OVC | | |
|---|---|---|---|---|---|---|
| | No of beneficiaries | Allocation (KSh million) | Direct cash Disbursement (KSh million) | No of beneficiary households | Allocation (KSh million) | Direct cash Disbursement (KSh million) |
| 2012/13…… | 61,583.0 | 1,519.2 | 1,478.0 | 42,929.0 | 1,081.4 | 1,030.3 |
| 2013/14… ….. | 121,625.0 | 3,168.0 | 2,919.0 | 188,538.0 | 4,763.1 | 4,524.9 |
| 2014/15… … | 218,497.0 | 5,501.5 | 5,243.9 | 255,470.0 | 5,957.6 | 6,131.3 |
| 2015/16… … | 310,223.0 | 7,966.3 | 7,445.3 | 351,650.0 | 9,746.3 | 8,439.6 |
| 2016/17*… | 279,150.0 | 7,329.5 | 6,699.6 | 351,010.0 | 7,925.0 | 8,424.2 |

Source: Ministry of Labour and East African Community Affairs

** Estimates

# Employment, Earnings and Consumer Prices

04 Chapter

## Overview

In 2016, employment increased by 5.3 per cent to 16.0 million persons. Informal sector employment increased by 5.9 per cent to 13.3 million persons, and accounted for 83.1 per cent of total persons engaged during the review period. Employment in the modern sector grew by 3.3 per cent from 2,601.2 thousand persons in 2015 to 2,686.8 thousand persons in 2016; comprising of 2,554.3 thousand wage employees and 132.5 thousand self-employed and contributing family workers. Wage employment within the public sector increased slightly from 718.4 thousand persons in 2015 to 737.1 thousand persons in 2016.

4.2. Wage earnings increased from KSh 1,509.1 billion in 2015 to KSh 1,647.1 billion in 2016, representing a rise of 9.1 per cent. Annual average wage earnings grew by 5.9 per cent from KSh 608,991.7 in 2015 to KSh 644,837.9 in 2016. Real average earnings per employee per annum increased from KSh 379,528.7 in 2015 to KSh 379,852.7 in 2016. Annual inflation eased from 6.6 per cent in 2015 to 6.3 per cent in 2016.

## Employment

4.3. Total employment outside small scale farming and pastoralist activities stood at 16.0 million persons in 2016, up from 15.2 million recorded in 2015 as shown in Table 4.1. Employment in the modern sector increased from 2,601.2 thousand persons in 2015 to 2,686.8 thousand persons in 2016, an increase of 3.3 per cent. Employment in the informal sector stood at 13.3 million in the review period. The informal sector recorded an additional 747.3 thousand jobs, which constituted 89.7 per cent of all new jobs in 2016. The number of self-employed and unpaid family workers within the modern sector went up from 123.2 thousand persons in 2015 to 132.5 thousand persons in 2016.

**Table 4.1: Total Recorded Employment[1], 2012 - 2016**

'000

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Modern Sector | | | | | |
| Wage Employees | 2,155.8 | 2,283.1 | 2,370.2 | 2,478.0 | 2,554.3 |
| Self-employed and unpaid family workers | 76.9 | 83.8 | 103.0 | 123.2 | 132.5 |
| **Sub -Total** | **2,232.7** | **2,366.9** | **2,473.2** | **2,601.2** | **2,686.8** |
| Informal Sector[2] | 10,528.5 | 11,150.1 | 11,846.0 | 12,562.4 | 13,309.7 |
| **TOTAL** | **12,761.2** | **13,517.0** | **14,319.2** | **15,163.6** | **15,996.5** |

* Provisional

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

[2] Estimated

## Wage Employment in the Modern Sector

4.4. Analysis of modern sector wage employment by industry and sector for the period 2012 to 2016 is presented in Table 4.2. Wage employment in the modern sector grew by 3.1 per cent from 2,478.0 thousand persons in 2015 to 2,554.3 thousand persons in 2016.

4.5. **Private Sector:** During the review period, the share of the private sector employment increased marginally by 0.1 per cent to 71.1 per cent. Overall, the number of new jobs in the private sector increased by 57.6 thousand jobs in 2016 compared to 90.2 thousand created in 2015.

4.6. In 2016, the construction industry with a share of 8.5 per cent in wage employment recorded a growth of 10.6 per cent and contributed 14.8 thousand new jobs. The significant growth in the industry was attributed to continued government efforts in implementation of infrastructure and energy flagship projects under Vision 2030. Education and wholesale and retail trade sectors each registered 7.8 thousand new jobs. Manufacturing industry recorded 5.3 thousand new jobs, which represent 9.2 per cent of all new jobs created during the review period. Other industries that recorded growth in employment include the water supply, sewerage, waste management and remediation activities, which posted a growth of 14.3 per cent, and electricity, gas, steam and air conditioning supply, with a growth of 11.1 per cent. Financial and insurance activities recorded a decelerated growth of 3.7 per cent in 2016.

4.7. **Public Sector:** Wage employment in the public sector registered a 2.6 per cent growth compared to an increase of 2.5 per cent recorded in 2015. The low expansion of employment was attributed to a freeze in employment by the Government. Recruitment was limited to essential services in the health, education and security functions. Education and public administration and defense; compulsory social security accounted for 9.4 thousand and 9.3 thousand new jobs, respectively. Employment in water supply, sewerage, waste management and remediation activities recorded the highest growth in percentage terms of 9.9 per cent, while accommodation and food service activities registered a growth of 7.1 per cent in 2016. Human health and social work activities recorded a decline of 2.4 per cent compared to an increase of 5.1 per cent in 2015.

## Table 4.2: Wage Employment by Industry and Sector, 2012- 2016

'000

| | 2012 | 2013 | 2014 | 2015 | 2016* | % change |
|---|---|---|---|---|---|---|
| **PRIVATE SECTOR:** | | | | | | |
| Agriculture, forestry and fishing | 295.5 | 299.9 | 290.6 | 294.0 | 294.5 | 0.2 |
| Mining and quarrying | 8.3 | 8.7 | 12.2 | 13.8 | 14.6 | 5.8 |
| Manufacturing | 245.4 | 253.4 | 261.3 | 269.0 | 274.3 | 2.0 |
| Electricity, gas, steam and air conditioning supply | 1.1 | 1.1 | 0.9 | 0.9 | 1.0 | 11.1 |
| Water supply; sewerage, waste management and remediation activities | 1.3 | 1.4 | 1.4 | 1.4 | 1.6 | 14.3 |
| Construction | 98.7 | 111.6 | 125.4 | 140.2 | 155.0 | 10.6 |
| Wholesale and retail trade; repair of motor vehicles and motorcycles | 197.1 | 210.9 | 218.9 | 230.7 | 238.5 | 3.4 |
| Transportation and storage | 58.1 | 58.8 | 62.1 | 64.8 | 67.8 | 4.6 |
| Accommodation and food service activities | 67.6 | 72.1 | 71.7 | 74.7 | 75.9 | 1.6 |
| Information and communication | 83.9 | 90.6 | 97.3 | 103.8 | 108.7 | 4.7 |
| Financial and insurance activities | 51.3 | 56.3 | 58.1 | 62.7 | 65.0 | 3.7 |
| Real estate activities | 3.7 | 3.8 | 3.9 | 4.0 | 4.1 | 2.5 |
| Professional, scientific and technical activities | 56.9 | 59.4 | 60.7 | 62.6 | 64.8 | 3.5 |
| Administrative and support service activities | 4.5 | 4.8 | 4.9 | 5.2 | 5.4 | 3.8 |
| Public administration and defence; compulsory social security | - | - | - | - | - | - |
| Education | 106.9 | 142.5 | 166.8 | 189.1 | 196.9 | 4.1 |
| Human health and social work activities | 73.8 | 80.1 | 85.2 | 91.3 | 95.7 | 4.8 |
| Arts, entertainment and recreation | 4.0 | 4.3 | 4.3 | 4.5 | 4.6 | 2.2 |
| Other service activities | 28.2 | 29.2 | 30.5 | 31.7 | 33.2 | 4.7 |
| Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use | 106.3 | 109.8 | 112.1 | 114.1 | 114.4 | 0.3 |
| Activities of extraterritorial organizations and bodies | 1.0 | 1.1 | 1.1 | 1.1 | 1.2 | 9.1 |
| **TOTAL PRIVATE SECTOR** | 1,493.6 | 1,599.8 | 1,669.4 | 1,759.6 | 1,817.2 | 3.3 |
| **PUBLIC SECTOR:** | | | | | | |
| Agriculture, forestry and fishing | 42.2 | 42.6 | 42.7 | 42.9 | 42.2 | -1.7 |
| Mining and quarrying | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | 0.0 |
| Manufacturing | 25.6 | 26.0 | 26.1 | 26.5 | 26.6 | 0.4 |
| Electricity, gas, steam and air conditioning supply | 13.2 | 13.5 | 14.4 | 16.0 | 16.3 | 1.9 |
| Water supply; sewerage, waste management and remediation activities | 7.2 | 8.1 | 9.0 | 10.1 | 11.1 | 9.9 |
| Construction | 17.4 | 18.1 | 7.7 | 7.9 | 8.0 | 1.3 |
| Wholesale and retail trade; repair of motor vehicles and motorcycles | 0.9 | 1.3 | 1.3 | 1.3 | 1.3 | 0.0 |
| Transportation and storage | 17.1 | 17.2 | 17.6 | 17.8 | 17.9 | 0.6 |
| Accommodation and food service activities | 1.3 | 1.4 | 1.4 | 1.4 | 1.5 | 7.1 |
| Information and communication | 1.8 | 1.8 | 1.8 | 1.9 | 1.9 | 0.0 |
| Financial and insurance activities | 10.3 | 9.0 | 9.4 | 10.6 | 10.6 | 0.0 |
| Real estate activities | - | - | - | - | - | - |
| Professional, scientific and technical activities | 5.8 | 5.8 | 5.9 | 5.9 | 5.9 | 0.0 |
| Administrative and support service activities | - | - | - | - | - | - |
| Public administration and defence; compulsory social security | 207.4 | 222.4 | 227.0 | 222.0 | 231.3 | 4.2 |
| Education | 277.9 | 280.8 | 302.4 | 318.3 | 327.7 | 3.0 |
| Human health and social work activities | 30.9 | 32.2 | 31.1 | 32.7 | 31.9 | -2.4 |
| Arts, entertainment and recreation | 2.4 | 2.4 | 2.4 | 2.5 | 2.4 | -4.0 |
| 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** | 662.1 | 683.3 | 700.8 | 718.4 | 737.1 | 2.6 |
| **TOTAL WAGE EMPLOYMENT** | 2,155.8 | 2,283.1 | 2,370.2 | 2,478.0 | 2,554.3 | 3.1 |

* Provisional

4.8. Figure 4.1 shows percentage changes in wage employment from 2013 to 2016.

**Figure 4.1: Percentage Changes in Wage Employment, 2013 - 2016**




4.9. Table 4.3 presents information on wage employment in the public sector by type of institution. Teachers' Service Commission (TSC), the largest employer in the public sector, registered a 2.4 per cent growth in 2016. Employment in county governments registered an increase of 7.5 per cent in the review period to stand at 118.9 thousand persons. Employment in corporations controlled by the Government and Parastatal bodies went up by 0.2 per cent and 0.3 per cent, respectively in 2016. During the year under review, employment in the Ministries and other extra-budgetary institutions registered an increase of 1.6 per cent compared to a decline of 1.8 per cent recorded in 2015.

**Table 4.3: Wage Employment in the Public Sector, 2012 - 2016**

'000

| | 2012 | 2013 | 2014 | 2015 | 2016* | Annual Percentage Change 2016/2015 |
|---|---|---|---|---|---|---|
| Ministries and other exra-budgetary institutions[1] | 222.6 | 179.0 | 180.9 | 177.7 | 180.6 | 1.6 |
| Teachers Service Commission | 267.6 | 272.5 | 281.7 | 290.7 | 297.8 | 2.4 |
| Parastatal Bodies[2] | 90.6 | 92.5 | 93.5 | 94.2 | 94.5 | 0.2 |
| Corporations controlled by the Government[3] | 43.6 | 44.5 | 45.0 | 45.3 | 45.4 | 0.3 |
| County governments[4] | 37.7 | 94.7 | 99.6 | 110.5 | 118.9 | 7.5 |
| **TOTAL** | **662.1** | **683.3** | **700.8** | **718.4** | **737.1** | 2.6 |

* 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.

[4] 2012 figures refers to the former Local Authorities

4.10. The analysis of wage employment by industry and sex is presented in Table 4.4. The share of females in wage employment declined slightly from 34.6 per cent in 2015 to 34.4 per cent in 2016. Comparison across the industries shows that education absorbed 28.3 per cent of females engaged. There were more males than females engaged in education, manufacturing and agriculture and forestry industries. The Construction industry engaged an extra 11.3 thousand males in 2016. Casual employment registered a 7.9 per cent growth with the proportion of casuals to total employees rising from 21.8 per cent in 2015 to 22.8 per cent in 2016

**Table 4.4: Wage Employment by Industry and Sex, 2015 and 2016**

`000

| INDUSTRY | Male | | Female | | Total | |
|---|---|---|---|---|---|---|
| | 2015 | 2016* | 2015 | 2016* | 2015 | 2016* |
| Agriculture, forestry and fishing | 222.6 | 225.1 | 114.4 | 111.6 | 337.0 | 336.7 |
| Mining and quarrying | 12.2 | 12.7 | 2.2 | 2.5 | 14.4 | 15.2 |
| Manufacturing | 246.1 | 252.1 | 49.4 | 48.7 | 295.5 | 300.8 |
| Electricity, gas, steam and air conditioning supply | 12.6 | 12.8 | 4.3 | 4.5 | 16.9 | 17.3 |
| Water supply; sewerage, waste management and remediation activities | 9.2 | 9.9 | 2.4 | 2.8 | 11.6 | 12.7 |
| Construction | 103.6 | 114.9 | 44.4 | 48.1 | 148.0 | 163.0 |
| Wholesale and retail trade; repair of motor vehicles and motorcycles | 179.3 | 185.7 | 52.7 | 54.2 | 232.0 | 239.9 |
| Transportation and storage | 62.5 | 64.8 | 20.1 | 20.8 | 82.6 | 85.6 |
| Accommodation and food service activities | 53.7 | 54.6 | 22.4 | 22.8 | 76.1 | 77.4 |
| Information and communication | 69.9 | 72.9 | 35.7 | 37.7 | 105.6 | 110.6 |
| Financial and insurance activities | 46.3 | 47.5 | 27.0 | 28.2 | 73.3 | 75.7 |
| Real estate activities | 3.1 | 3.1 | 0.9 | 1.0 | 4.0 | 4.1 |
| Professional, scientific and technical activities | 49.7 | 51.4 | 18.9 | 19.3 | 68.6 | 70.7 |
| Administrative and support service activities | 4.7 | 4.9 | 0.5 | 0.5 | 5.2 | 5.4 |
| Public administration and defence; compulsory social security | 142.5 | 148.3 | 79.5 | 83.0 | 222.0 | 231.3 |
| Education | 267.9 | 275.6 | 239.5 | 249.0 | 507.4 | 524.6 |
| Human health and social work activities | 59.9 | 61.3 | 64.1 | 66.3 | 124.0 | 127.6 |
| Arts, entertainment and recreation | 4.9 | 4.8 | 2.0 | 2.2 | 6.9 | 7.0 |
| Other service activities | 21.3 | 22.9 | 10.4 | 10.3 | 31.7 | 33.2 |
| Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use | 48.4 | 48.6 | 65.7 | 65.8 | 114.1 | 114.4 |
| Activities of extraterritorial organizations and bodies | 0.8 | 0.9 | 0.3 | 0.3 | 1.1 | 1.2 |
| **TOTAL** | 1,621.2 | 1,674.8 | 856.8 | 879.6 | 2,478.0 | 2,554.4 |
| Total of which Casual Employees | 375.3 | 406.3 | 164.9 | 176.5 | 540.2 | 582.8 |

*Provisional

## Wage Earnings in the Modern Sector

4.11. The concept of earnings, as applied in this section, relates to gross remuneration in cash and in kind paid to employees. It also includes remuneration for time not worked such as annual vacation and other types of paid leave or holidays. Earnings exclude employers' contributions in respect of their employees paid to social security and pension schemes and the benefits received by employees under these schemes. They also exclude severance and termination pay.

4.12. Table 4.5 presents wage payments by industry in the modern sector for the period 2012 to 2016. Nominal wage earnings rose from KSh 1,509.1 billion in 2015 to KSh 1,647.1 billion in 2016, an increase of 9.1 per cent. Private sector wage earnings went up by 9.2 per cent from KSh 1,047.3 billion in 2015 to KSh 1,143.6 billion in 2016. Public wage earnings registered a 9.0 per cent growth in 2016 compared to 11.7 per cent registered in 2015 and accounted for 30.6 per cent of the total wage payments.

## Table 4.5: Wage Payments[1] by Industry and Sector, 2012 - 2016

KSh Million

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **PRIVATE SECTOR:** | | | | | |
| Agriculture, forestry and fishing | 53,822.1 | 65,576.7 | 67,038.5 | 74,769.2 | 80,709.7 |
| Mining and quarrying | 2,045.5 | 2,587.9 | 4,196.5 | 5,412.9 | 6,081.7 |
| Manufacturing | 66,360.9 | 81,131.6 | 91,390.3 | 105,013.8 | 114,079.8 |
| Electricity, gas, steam and air conditioning supply | 1,041.4 | 1,256.2 | 1,151.2 | 1,255.4 | 1,401.0 |
| Water supply; sewerage, waste management and remediation activities | 167.0 | 196.6 | 246.0 | 289.4 | 343.3 |
| Construction | 40,594.9 | 52,893.3 | 68,809.2 | 87,022.4 | 97,846.9 |
| Wholesale and retail trade; repair of motor vehicles and motorcycles | 83,667.5 | 103,613.3 | 113,726.5 | 130,920.7 | 147,356.5 |
| Transportation and storage | 47,686.0 | 57,024.4 | 65,458.0 | 76,319.4 | 81,540.8 |
| Accommodation and food service activities | 21,488.0 | 25,185.1 | 25,933.9 | 28,955.8 | 30,100.1 |
| Information and communication | 53,804.0 | 65,920.7 | 72,710.6 | 83,234.7 | 95,049.4 |
| Financial and insurance activities | 64,563.4 | 82,242.8 | 87,451.4 | 101,893.5 | 109,094.0 |
| Real estate activities | 728.0 | 870.2 | 926.7 | 1,040.8 | 1,088.1 |
| Professional, scientific and technical activities | 39,023.4 | 48,444.5 | 52,317.9 | 58,897.7 | 64,547.4 |
| Administrative and support service activities | 4,383.8 | 5,712.1 | 6,056.6 | 7,057.5 | 7,585.5 |
| Public administration and defence; compulsory social security | - | - | - | - | - |
| Education | 74,530.1 | 116,483.5 | 138,368.5 | 167,352.3 | 176,528.2 |
| Human health and social work activities | 40,130.0 | 49,486.4 | 55,701.6 | 65,323.5 | 73,170.6 |
| Arts, entertainment and recreation | 1,767.2 | 2,194.7 | 2,290.4 | 2,575.8 | 2,786.4 |
| Other service activities | 13,801.1 | 16,903.3 | 19,993.6 | 23,446.0 | 25,982.3 |
| Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use | 16,166.1 | 19,464.2 | 20,853.2 | 23,219.8 | 24,687.6 |
| Activities of extraterritorial organizations and bodies | 2,398.4 | 2,804.2 | 2,973.8 | 3,309.8 | 3,642.2 |
| **TOTAL PRIVATE SECTOR** | **628,168.8** | **799,991.7** | **897,594.4** | **1,047,310.4** | **1,143,621.5** |
| **PUBLIC SECTOR:** | | | | | |
| Agriculture, forestry and fishing | 13,268.2 | 14,810.1 | 15,704.8 | 16,926.7 | 17,573.0 |
| Mining and quarrying | 197.3 | 224.8 | 223.9 | 237.2 | 250.0 |
| Manufacturing | 17,819.9 | 19,570.6 | 20,840.0 | 22,331.9 | 23,470.9 |
| Electricity, gas, steam and air conditioning supply | 15,080.1 | 16,570.2 | 18,115.4 | 21,088.0 | 22,020.5 |
| Water supply; sewerage, waste management and remediation activities | 3,663.0 | 4,754.9 | 5,939.8 | 6,375.2 | 7,165.7 |
| Construction | 3,757.0 | 4,344.9 | 4,733.6 | 5,257.6 | 5,670.0 |
| Wholesale and retail trade; repair of motor vehicles and motorcycles | 748.9 | 931.3 | 1,065.0 | 1,436.1 | 1,589.7 |
| Transportation and storage | 19,927.8 | 22,381.6 | 24,304.8 | 26,645.6 | 28,406.2 |
| Accommodation and food service activities | 1,113.2 | 1,342.0 | 1,599.9 | 1,844.0 | 2,133.8 |
| Information and communication | 1,064.0 | 1,174.9 | 1,276.5 | 1,363.7 | 1,424.0 |
| Financial and insurance activities | 12,353.4 | 13,996.6 | 15,158.1 | 18,097.5 | 18,543.4 |
| Real estate activities | - | - | - | - | - |
| Professional, scientific and technical activities | 2,946.1 | 3,274.3 | 3,482.5 | 3,732.9 | 3,886.1 |
| Administrative and support service activities | - | - | - | - | - |
| Public administration and defence; compulsory social security | 83,730.8 | 102,526.6 | 109,243.1 | 116,046.6 | 127,510.5 |
| Education | 119,428.6 | 139,401.5 | 158,762.0 | 182,027.0 | 203,367.0 |
| Human health and social work activities | 24,547.5 | 28,068.5 | 31,270.9 | 36,506.1 | 38,640.1 |
| Arts, entertainment and recreation | 1,502.2 | 1,571.5 | 1,723.4 | 1,827.2 | 1,850.1 |
| 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** | **321,148.0** | **374,944.3** | **413,443.7** | **461,743.3** | **503,501.0** |
| **TOTAL PUBLIC AND PRIVATE** | **949,316.8** | **1,174,935.9** | **1,311,038.1** | **1,509,053.7** | **1,647,122.5** |

* Provisional

[1] Annualised June wages

4.13. A summary of wage payments in the public sector by type of employer is presented in Table 4.6. Wage payments in ministries and other extra-budgetary institutions increased by 5.7 per cent from KSh 90,275.2 million in 2015 to KSh 95,402.6 million in 2016, a slower growth compared to 6.2 per cent recorded in 2015. Teachers Service Commission (TSC) wage earnings rose by 8.1 per cent to KSh 173,721.1 million in 2016. Parastatal bodies and government controlled corporations each had an increase of 7.2 per cent. County governments had the highest increase of 17.6 per cent in earnings. The share of the county governments wage earnings to the total public sector earnings stood at 19.1 per cent in 2016.

**Table 4.6: Total Wage Payments in the Public Sector[1], 2012 - 2016**

KSh Million

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Ministries and other extra-budgetary institutions[1] | 88,728.8 | 79,009.4 | 84,981.0 | 90,275.2 | 95,402.6 |
| Teachers Service Commission | 115,276.7 | 130,427.4 | 145,407.0 | 160,720.4 | 173,721.1 |
| Parastatal Bodies[2] | 63,971.4 | 66,217.9 | 74,013.5 | 78,704.7 | 84,350.7 |
| Majority Control by the Government[3] | 40,686.8 | 42,115.6 | 47,073.7 | 50,057.4 | 53,648.3 |
| County governments[4] | 12,484.5 | 57,174.0 | 61,968.3 | 81,985.6 | 96,378.3 |
| **TOTAL PUBLIC SECTOR** | **321,148.0** | **374,944.3** | **413,443.7** | **461,743.3** | **503,501.1** |

* 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.

[4] 2012 figures refer to the former Local Authorities

4.14. Annual average earnings for the period 2012-2016 are presented in Table 4.7. Overall, annual average wage earnings grew by 5.9 per cent to KSh 644,837.9 in 2016 compared to an increase of 10.1 per cent recorded in 2015. The average annual earnings in the private sector increased by 5.7 per cent compared to 6.3 per cent in the public sector in the review period. Finance and insurance activities recorded the highest annual average earnings, while water supply, sewerage and waste management activities recorded the lowest annual average earnings.

4.15. Table 4.8 presents percentage change in wage employment and average earnings between June 2011 and June 2016 and between June 2015 and June 2016. Total wage employment grew by 22.6 per cent between 2011 and 2016. Private sector wage employment increased by 26.1 per cent compared to the public sector which grew by 14.6 per cent. All industries in the private sector recorded growths except electricity, gas, steam and air conditioning supply which recorded a drop of 9.1 per cent. Employment in education industry in the private sector recorded the highest increase over the period.

4.16. Table 4.9 presents real average earnings per employee by industry. Real average earnings increased slightly by 0.1 per cent in 2016, compared to 2.9 per cent recorded in the previous year. The public sector recorded an increase of 0.5 per cent in real average wage earnings whereas private sector earnings declined by 0.1 per cent.

## Table 4.7: Average Wage Earnings per Employee[1], 2012 - 2016

KSh

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **PRIVATE SECTOR:** | | | | | |
| Agriculture, forestry and fishing | 182,148.4 | 218,637.7 | 230,717.7 | 254,274.7 | 274,049.3 |
| Mining and quarrying | 245,938.1 | 297,797.2 | 343,893.9 | 392,039.5 | 417,498.1 |
| Manufacturing | 270,630.0 | 320,187.1 | 349,733.7 | 390,406.1 | 415,959.4 |
| Electricity, gas, steam and air conditioning supply | 957,190.0 | 1,125,666.0 | 1,247,238.0 | 1,399,604.0 | 1,463,985.8 |
| Water supply; sewerage, waste management and remediation activities | 126,042.0 | 142,540.0 | 176,322.0 | 201,136.0 | 210,354.0 |
| Construction | 411,200.3 | 473,758.8 | 548,910.1 | 620,879.3 | 631,213.1 |
| Wholesale and retail trade; repair of motor vehicles and motorcycles | 424,598.2 | 491,409.9 | 519,429.6 | 567,591.9 | 617,753.6 |
| Transportation and storage | 821,081.5 | 969,506.0 | 1,053,344.1 | 1,177,969.1 | 1,203,429.8 |
| Accommodation and food service activities | 317,897.6 | 349,259.4 | 361,473.9 | 387,737.5 | 396,554.6 |
| Information and communication | 640,989.8 | 727,472.8 | 747,113.9 | 802,169.8 | 874,105.5 |
| Financial and insurance activities | 1,257,786.3 | 1,461,808.8 | 1,504,281.5 | 1,624,448.0 | 1,677,517.7 |
| Real estate activities | 196,717.0 | 228,154.6 | 238,649.9 | 260,652.5 | 265,659.8 |
| Professional, scientific and technical activities | 685,631.1 | 816,100.0 | 861,867.2 | 940,331.7 | 996,639.9 |
| Administrative and support service activities | 980,710.6 | 1,181,397.3 | 1,236,542.6 | 1,363,245.9 | 1,393,880.0 |
| Public administration and defence; compulsory social security | - | - | - | - | - |
| Education | 696,882.1 | 817,809.1 | 830,085.0 | 885,101.5 | 896,491.7 |
| Human health and social work activities | 544,017.3 | 617,576.4 | 654,012.7 | 715,536.5 | 764,256.0 |
| Arts, entertainment and recreation | 437,107.1 | 513,856.2 | 530,300.4 | 575,076.5 | 601,034.2 |
| Other service activities | 491,653.2 | 577,929.2 | 655,765.5 | 739,900.7 | 783,612.9 |
| Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use | 152,874.1 | 177,267.8 | 186,011.9 | 203,473.4 | 215,885.3 |
| Activities of extraterritorial organizations and bodies | 2,299,566.0 | 2,613,378.0 | 2,683,940.0 | 2,883,096.0 | 2,992,746.0 |
| **TOTAL PRIVATE SECTOR** | **425,142.6** | **500,065.8** | **537,670.4** | **595,211.6** | **629,323.6** |
| **PUBLIC SECTOR:** | | | | | |
| Agriculture, forestry and fishing | 314,367.0 | 347,891.6 | 367,655.6 | 394,286.8 | 416,046.4 |
| Mining and quarrying | 288,412.0 | 323,896.0 | 346,104.0 | 373,538.0 | 397,390.0 |
| Manufacturing | 696,606.4 | 752,483.8 | 797,183.7 | 843,573.8 | 883,030.1 |
| Electricity, gas, steam and air conditioning supply | 1,145,472.0 | 1,231,708.0 | 1,261,782.0 | 1,315,696.0 | 1,346,904.0 |
| Water supply; sewerage, waste management and remediation activities | 505,386.0 | 590,152.0 | 658,438.0 | 629,840.0 | 647,306.0 |
| Construction | 517,850.0 | 577,088.0 | 617,720.0 | 668,740.0 | 712,758.0 |
| Wholesale and retail trade; repair of motor vehicles and motorcycles | 813,112.3 | 910,344.7 | 1,018,154.2 | 1,082,241.8 | 1,197,027.5 |
| Transportation and storage | 1,168,579.8 | 1,298,010.1 | 1,382,681.1 | 1,500,059.7 | 1,590,938.7 |
| Accommodation and food service activities | 839,516.0 | 991,838.0 | 1,126,668.0 | 1,293,140.0 | 1,462,532.0 |
| Information and communication | 595,433.3 | 645,169.5 | 693,358.3 | 728,877.8 | 763,540.6 |
| Financial and insurance activities | 1,433,106.7 | 1,552,072.0 | 1,604,205.8 | 1,709,888.3 | 1,742,797.0 |
| Real estate activities | - | - | - | - | - |
| Professional, scientific and technical activities | 447,526.0 | 560,096.4 | 590,358.0 | 628,540.2 | 659,894.4 |
| Administrative and support service activities | - | - | - | - | - |
| Public administration and defence; compulsory social security | 402,229.2 | 461,100.8 | 481,382.8 | 522,748.8 | 551,325.4 |
| Education | 412,570.8 | 475,306.4 | 524,732.9 | 571,890.4 | 620,596.5 |
| Human health and social work activities | 806,449.3 | 915,027.2 | 1,005,817.6 | 1,116,394.3 | 1,212,277.7 |
| Arts, entertainment and recreation | 621,776.0 | 665,322.0 | 715,992.0 | 745,206.0 | 774,082.0 |
| 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** | **485,016.0** | **548,731.4** | **589,984.8** | **642,743.1** | **683,086.3** |
| **TOTAL PRIVATE AND PUBLIC SECTOR** | **443,322.1** | **514,630.7** | **553,137.7** | **608,991.7** | **644,837.9** |
| **MEMORANDUM ITEMS IN PUBLIC SECTOR:** | | | | | |
| Ministries and other extra-budgetary institutions | 398,601.8 | 441,289.9 | 469,692.7 | 508,131.9 | 528,344.4 |
| Teachers Service Commission | 430,779.8 | 478,625.5 | 516,195.1 | 552,843.3 | 583,393.3 |
| Parastatal Bodies[2] | 705,717.6 | 715,826.2 | 791,393.2 | 835,786.7 | 893,064.1 |
| Majority Control by the Government[3] | 932,898.0 | 946,260.7 | 1,046,153.8 | 1,104,838.2 | 1,180,554.0 |
| County governments[4] | 331,342.1 | 603,521.2 | 621,978.5 | 741,669.5 | 810,875.9 |
| **TOTAL PUBLIC SECTOR** | **485,016.0** | **548,731.4** | **589,984.8** | **642,743.1** | **683,086.3** |

* Provisional.

[1] Annualised June earnings

[2] 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.

[4] 2012 figures refers to former Local Authorities

## Table 4.8: Rate of Change in Wage Employment and Average Earnings[1], 2016/2011 and 2016/2015

| | EMPLOYMENT | | AVERAGE EARNINGS | |
|---|---|---|---|---|
| | 2016/2011* | 2016/2015* | 2016/2011* | 2016/2015* |
| **PRIVATE SECTOR:** | | | | |
| Agriculture, forestry and fishing | 1.9 | 0.2 | 58.6 | 7.8 |
| Mining and quarrying | 82.5 | 5.8 | 82.0 | 6.5 |
| Manufacturing | 11.9 | 2.0 | 63.7 | 6.5 |
| Electricity, gas, steam and air conditioning supply | -9.1 | 11.1 | 59.0 | 4.6 |
| Water supply; sewerage, waste management and remediation activities | 23.1 | 14.3 | 66.3 | 4.6 |
| Construction | 74.5 | 10.6 | 56.3 | 1.7 |
| Wholesale and retail trade; repair of motor vehicles and motorcycles | 25.8 | 3.4 | 48.3 | 8.8 |
| Transportation and storage | 20.9 | 4.6 | 55.8 | 2.2 |
| Accommodation and food service activities | 18.2 | 1.6 | 21.1 | 2.3 |
| Information and communication | 37.9 | 4.7 | 36.8 | 9.0 |
| Financial and insurance activities | 34.0 | 3.7 | 35.9 | 3.3 |
| Real estate activities | 13.9 | 2.5 | 38.5 | 1.9 |
| Professional, scientific and technical activities | 16.5 | 3.5 | 53.1 | 6.0 |
| Administrative and support service activities | 28.6 | 3.8 | 51.3 | 2.2 |
| Public administration and defence; compulsory social security | - | - | - | - |
| Education | 95.1 | 4.1 | 33.4 | 1.3 |
| Human health and social work activities | 38.9 | 4.8 | 41.0 | 6.8 |
| Arts, entertainment and recreation | 17.9 | 2.2 | 42.8 | 4.5 |
| Other service activities | 21.6 | 4.7 | 65.6 | 5.9 |
| Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use | 9.2 | 0.3 | 44.7 | 6.1 |
| Activities of extraterritorial organizations and bodies | 20.0 | 9.1 | 29.3 | 3.8 |
| **TOTAL PRIVATE SECTOR** | **26.1** | **3.3** | **54.4** | **5.7** |
| **PUBLIC SECTOR:** | | | | |
| Agriculture, forestry and fishing | 1.8 | -1.7 | 68.9 | 5.5 |
| Mining and quarrying | -14.3 | 0.0 | 75.1 | 6.4 |
| Manufacturing | 6.4 | 0.4 | 57.4 | 4.7 |
| Electricity, gas, steam and air conditioning supply | 58.3 | 1.9 | 46.4 | 2.4 |
| Water supply; sewerage, waste management and remediation activities | 76.2 | 9.9 | 71.7 | 2.8 |
| Construction | -53.8 | 1.3 | 77.2 | 6.6 |
| Wholesale and retail trade; repair of motor vehicles and motorcycles | 62.5 | 0.0 | 19.0 | 10.6 |
| Transportation and storage | 6.5 | 0.6 | 77.7 | 6.1 |
| Accommodation and food service activities | 7.1 | 7.1 | 137.6 | 13.1 |
| Information and communication | 11.8 | 0.0 | 62.4 | 4.8 |
| Financial and insurance activities | 10.4 | 0.0 | 49.2 | 1.9 |
| Real estate activities | - | - | - | - |
| Professional, scientific and technical activities | 3.5 | 0.0 | 63.8 | 5.0 |
| Administrative and support service activities | - | - | - | - |
| Public administration and defence; compulsory social security | 12.3 | 4.2 | 9.8 | 5.5 |
| Education | 21.8 | 3.0 | 100.9 | 8.5 |
| Human health and social work activities | 9.8 | -2.6 | 97.1 | 8.6 |
| Arts, entertainment and recreation | 9.1 | -4.0 | 57.2 | 3.9 |
| 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** | **14.6** | **2.6** | **57.9** | **6.3** |
| **TOTAL PRIVATE AND PUBLIC SECTOR** | **22.6** | **3.1** | **55.3** | **5.9** |
| **MEMORANDUM ITEMS IN PUBLIC SECTOR:** | | | | |
| Ministries and other extra-budgetary institutions | -17.9 | 1.6 | 58.8 | 4.0 |
| Teachers Service Commission | 15.1 | 2.4 | 48.2 | 5.5 |
| Parastatal Bodies[2] | 9.8 | 0.3 | 37.3 | 6.9 |
| Majority Control by the Government[3] | 9.8 | 0.3 | 37.3 | 6.9 |
| County governments[4] | 218.9 | 7.5 | 159.9 | 9.3 |
| **TOTAL PUBLIC SECTOR** | **14.6** | **2.6** | **57.9** | **6.3** |

* Provisional.

[1] Annualised June earnings

[2] 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.

[4] 2012 figures refers to former Local Authorities

## Table 4.9: Estimated Real Average Wage Earnings per Employee[1], 2012 – 2016

KSh

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **'RIVATE SECTOR:** | | | | | |
| Agriculture, forestry and fishing | 136,891.9 | 156,628.5 | 153,904.1 | 158,466.1 | 161,433.4 |
| Mining and quarrying | 184,832.5 | 213,337.1 | 229,400.2 | 244,322.3 | 245,934.3 |
| Manufacturing | 203,389.4 | 229,376.8 | 233,295.8 | 243,304.3 | 245,027.9 |
| Electricity, gas, steam and air conditioning supply | 719,367.2 | 806,408.8 | 831,991.2 | 872,244.8 | 862,385.6 |
| Water supply; sewerage, waste management and remediation activities | 94,725.7 | 102,113.3 | 117,618.6 | 125,349.6 | 123,912.6 |
| Construction | 309,033.7 | 339,393.1 | 366,159.8 | 386,937.1 | 371,826.8 |
| Wholesale and retail trade; repair of motor vehicles and motorcycles | 319,102.8 | 352,038.0 | 346,494.3 | 353,728.0 | 363,898.2 |
| Transportation and storage | 617,076.1 | 694,538.3 | 702,651.0 | 734,120.1 | 708,900.7 |
| Accommodation and food service activities | 238,913.0 | 250,203.7 | 241,127.3 | 241,641.2 | 233,597.2 |
| Information and communication | 481,729.9 | 521,149.7 | 498,375.0 | 499,918.9 | 514,906.6 |
| Financial and insurance activities | 945,277.5 | 1,047,216.0 | 1,003,456.4 | 1,012,369.4 | 988,170.2 |
| Real estate activities | 147,840.8 | 163,446.2 | 159,195.5 | 162,440.8 | 156,491.4 |
| Professional, scientific and technical activities | 515,279.6 | 584,640.7 | 574,923.1 | 586,022.5 | 587,087.6 |
| Administrative and support service activities | 737,043.9 | 846,333.8 | 824,856.6 | 849,586.1 | 821,088.6 |
| Public administration and defence; compulsory social security | - | - | - | - | - |
| Education | 523,735.2 | 585,865.1 | 553,722.2 | 551,602.6 | 528,093.6 |
| Human health and social work activities | 408,851.1 | 442,421.7 | 436,270.2 | 445,928.3 | 450,197.9 |
| Arts, entertainment and recreation | 328,503.8 | 368,118.2 | 353,745.8 | 358,392.4 | 354,049.4 |
| Other service activities | 369,497.4 | 414,019.1 | 437,439.5 | 461,112.2 | 461,600.4 |
| Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use | 114,891.1 | 126,991.8 | 124,082.4 | 126,806.3 | 127,170.9 |
| Activities of extraterritorial organizations and bodies | 1,728,217.3 | 1,872,181.4 | 1,790,367.6 | 1,796,769.3 | 1,762,927.7 |
| **TOTAL PRIVATE SECTOR** | **319,511.9** | **358,239.0** | **358,662.1** | **370,940.8** | **370,713.7** |
| **'UBLIC SECTOR:** | | | | | |
| Agriculture, forestry and fishing | 236,259.6 | 249,223.9 | 245,250.9 | 245,722.8 | 245,079.2 |
| Mining and quarrying | 216,753.3 | 232,033.8 | 230,874.5 | 232,792.0 | 234,089.3 |
| Manufacturing | 523,528.0 | 539,067.1 | 531,774.9 | 525,722.2 | 520,163.8 |
| Electricity, gas, steam and air conditioning supply | 860,868.8 | 882,375.5 | 841,693.0 | 819,952.6 | 793,416.6 |
| Water supply; sewerage, waste management and remediation activities | 379,818.1 | 422,775.3 | 439,222.2 | 392,521.5 | 381,306.6 |
| Construction | 389,185.3 | 413,416.4 | 412,060.6 | 416,764.3 | 419,862.2 |
| Wholesale and retail trade; repair of motor vehicles and motorcycles | 611,087.0 | 652,156.1 | 679,177.0 | 674,462.0 | 705,129.3 |
| Transportation and storage | 878,235.2 | 929,873.3 | 922,340.8 | 934,849.6 | 937,169.4 |
| Accommodation and food service activities | 630,930.4 | 710,536.6 | 751,562.9 | 805,895.6 | 861,529.2 |
| Information and communication | 447,492.3 | 462,188.9 | 462,516.4 | 454,242.7 | 449,776.5 |
| Financial and insurance activities | 1,077,038.0 | 1,111,879.1 | 1,070,112.6 | 1,065,616.5 | 1,026,624.1 |
| Real estate activities | - | - | - | - | - |
| Professional, scientific and technical activities | 336,334.0 | 401,243.9 | 393,808.3 | 391,711.5 | 388,722.0 |
| Administrative and support service activities | - | - | - | - | - |
| Public administration and defence; compulsory social security | 302,291.6 | 330,325.1 | 321,114.5 | 325,781.4 | 324,767.6 |
| Education | 310,063.7 | 340,501.8 | 350,032.0 | 356,406.8 | 365,572.9 |
| Human health and social work activities | 606,079.4 | 655,510.6 | 670,947.6 | 695,746.2 | 714,112.7 |
| Arts, entertainment and recreation | 467,289.9 | 476,625.8 | 477,614.6 | 464,418.5 | 455,986.1 |
| 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** | **364,509.2** | **393,102.2** | **393,559.3** | **400,562.8** | **402,383.6** |
| **TOTAL PRIVATE AND PUBLIC SECTOR** | **333,174.6** | **368,673.0** | **368,979.9** | **379,528.7** | **379,852.7** |
| **MEMORANDUM ITEMS IN PUBLIC SECTOR:** | | | | | |
| Ministries and other exra-budgetary institutions | 299,565.5 | 316,132.9 | 313,316.5 | 316,672.0 | 311,230.2 |
| Teachers Service Commission | 323,748.5 | 342,879.5 | 344,336.7 | 344,536.5 | 343,657.7 |
| Parastatal Bodies[2] | 530,375.5 | 512,806.2 | 527,912.2 | 520,869.2 | 526,074.5 |
| Majority Control by the Government[3] | 701,110.8 | 677,885.7 | 697,854.6 | 688,544.3 | 695,425.3 |
| County governments[4] | 249,017.1 | 432,352.7 | 414,901.3 | 462,214.6 | 477,660.2 |
| **TOTAL PUBLIC SECTOR** | **364,509.2** | **393,102.2** | **393,559.3** | **400,562.8** | **402,383.6** |

* Provisional.

[1] Average earnings adjusted for the rise in consumer prices(Base year 2009). Annualised June earnings deflated by June CPI

[2] 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.

[4]

**Table 4.10: Changes in Wage Employment, Prices and Real Earnings, 2012 – 2016**

Per cent

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Wage employment | 3.4 | 6.0 | 3.8 | 4.5 | 3.1 |
| Average earnings at current prices | 6.8 | 16.1 | 7.5 | 10.1 | 5.9 |
| Consumer prices (Inflation rates)[1] | 10.0 | 4.9 | 7.4 | 7.0 | 5.8 |
| Real average earnings | -3.0 | 10.7 | 0.1 | 2.9 | 0.1 |

* Provisional

[1] June inflation

4.17. Wage employment registered a decelerated growth from 4.5 per cent in 2015 to 3.1 per cent in 2016. Inflation decreased from 7.0 per cent in June 2015 to 5.8 per cent in June 2016, as a result, real average earnings grew marginally by 0.1 per cent.

## Employment in the Informal Sector

4.18. The distribution of employment in the informal sector by activity is presented in Table 4.11. Employment in the informal sector grew by 5.9 per cent from 12,562.5 thousand persons in 2015 to 13,309.7 thousand persons in 2016. Wholesale and retail trade, hotels and restaurants industries continued to absorb the highest number of employees, accounting for 59.7 per cent of total employment. The manufacturing industry had a share of 20.4 per cent in informal sector employment.

**Table 4.11: Number of Persons Engaged in the Informal Sector by Activity+, 2012 - 2016**

'000

| Activity | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Manufacturing | 2,040.5 | 2,233.7 | 2,364.9 | 2,545.3 | 2,710.2 |
| Construction | 282.0 | 292.2 | 307.3 | 320.6 | 337.1 |
| Wholesale and Retail Trade, Hotels and Restaurants | 6,394.4 | 6,693.4 | 7,120.4 | 7,510.9 | 7,946.7 |
| Transport and Communications[2] | 327.1 | 345.3 | 369.5 | 392.6 | 417.2 |
| Community, Social and Personal Services | 1,027.5 | 1,084.2 | 1,152.1 | 1,219.5 | 1,293.4 |
| Others | 457.0 | 501.3 | 531.8 | 573.5 | 605.1 |
| **TOTAL** | **10,528.5** | **11,150.1** | **11,846.0** | **12,562.5** | **13,309.7** |
| Urban | 3,405.5 | 3,973.7 | 4,208.1 | 4,458.0 | 4,709.9 |
| Rural | 7,123.0 | 7,176.4 | 7,637.9 | 8,104.5 | 8,599.8 |

* Provisional

[1] Estimated

[2] Includes mainly support services to transport activity

## Minimum Wages and Collective Bargaining Agreements

4.19. Table 4.12 presents gazetted monthly minimum wages for the agricultural industry for the last five years. In 2016, the government did not raise the minimum wage. In real terms, the KSh 7,284 average minimum wage in 2015 reduced to KSh 6,852 in 2016 due to inflation.

**Table 4.12: Gazetted Monthly Basic Minimum Wages for Agricultural Industry, 2012 – 2016**

KSh

| Type of Employee | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| Unskilled employees | 4,258 | 4,854 | 4,854 | 5,437 | 5,437 |
| Stockman, Herdsman and Watchman | 4,917 | 5,606 | 5,606 | 6,279 | 6,279 |
| **SKILLED AND SEMI-SKILLED EMPLOYEES:** | | | | | |
| House servant or cook | 4,861 | 5,542 | 5,542 | 6,207 | 6,207 |
| Farm foreman | 7,681 | 8,757 | 8,757 | 9,808 | 9,808 |
| Farm clerk | 7,681 | 8,757 | 8,757 | 9,808 | 9,808 |
| Section foreman | 4,973 | 5,669 | 5,669 | 6,350 | 6,350 |
| Farm artisan | 5,089 | 5,802 | 5,802 | 6,498 | 6,498 |
| Tractor driver | 5,397 | 6,153 | 6,153 | 6,891 | 6,891 |
| Combine harvester driver | 5,945 | 6,778 | 6,778 | 7,592 | 7,592 |
| Lorry driver or car driver | 6,239 | 7,113 | 7,113 | 7,967 | 7,967 |
| **AVERAGE** | **5,704** | **6,503** | **6,503** | **7,284** | **7,284** |

Source: Kenya Gazette Suppliment No. 91

4.20. The average monthly basic minimum wages in urban areas in 2016 remained at the same levels as in 2015 as shown in Table 4.13.

**Table 4.13: Gazetted Monthly Basic Minimum Wages in Urban Areas, 2015 - 2016**

KSh

| Occupation | Nairobi , Mombasa & Kisumu Cities | | All former municipalities and Mavoko, Ruiru and Limuru Town councils | | All other towns | |
|---|---|---|---|---|---|---|
| | 2015 | 2016 | 2015 | 2016 | 2015 | 2016 |
| General labourer | 10,955 | 10,955 | 10,107 | 10,107 | 5,844 | 5,844 |
| Miner, stone cutter, turnboy, waiter, cook | 11,831 | 11,831 | 10,497 | 10,497 | 6,753 | 6,753 |
| Night watchman | 12,221 | 12,221 | 11,330 | 11,330 | 6,970 | 6,970 |
| Machine attendant | 12,416 | 12,416 | 11,554 | 11,554 | 9,365 | 9,365 |
| Machinist | 14,174 | 14,174 | 13,259 | 13,259 | 10,841 | 10,841 |
| Plywood machine operator | 14,786 | 14,786 | 13,646 | 13,646 | 11,280 | 11,280 |
| Pattern designer | 16,872 | 16,872 | 15,425 | 15,425 | 13,153 | 13,153 |
| Tailor, Driver (medium vehicle) | 18,595 | 18,595 | 17,091 | 17,091 | 15,239 | 15,239 |
| Dyer, Crawler, Tractor driver, Salesman | 20,529 | 20,529 | 19,154 | 19,154 | 17,287 | 17,287 |
| Saw doctor, Caretaker (building) | 22,718 | 22,718 | 21,213 | 21,213 | 19,762 | 19,762 |
| Cashier, Driver (heavy commercial) | 24,720 | 24,720 | 23,262 | 23,262 | 21,811 | 21,811 |
| Artisan (Ungraded) | 14,786 | 14,786 | 13,646 | 13,646 | 11,280 | 11,280 |
| Artisan Grade III | 18,595 | 18,595 | 17,091 | 17,091 | 15,210 | 15,210 |
| Artisan Grade II | 20,084 | 20,084 | 19,154 | 19,154 | 17,287 | 17,287 |
| Artisan Grade I | 24,720 | 24,720 | 23,262 | 23,262 | 21,811 | 21,811 |
| **AVERAGE** | **17,200** | **17,200** | **15,980** | **15,980** | **13,593** | **13,593** |

Source: Kenya Gazette Suppliment No. 91

[1] Excluding Housing Allowance

4.21. Table 4.14 shows the number of collective bargaining agreements registered by the Employment and Labour Relations Court in 2015 and 2016. Total agreements registered in 2016 were 298 compared to 230 in 2015. The number of collective agreements registered by the court ranged from 51 in community and social services sector to one in both basic metals and other manufacturing industries. Various industries registered increases in the number of agreements with manufacture of electronics and electrical products recording an additional 13 agreements registered in 2016 from the 19 registered in 2015. Mining and quarrying, food beverage and tobacco, electricity and water, building and construction, finance, insurance, real estate and business services recorded declines in registered agreements. Community and social services had the largest number of workers covered in the registered agreements. Average monthly basic wage awarded for all industries was KSh 37,103 in 2016 compared to KSh 38,521 in 2015. Average monthly housing allowance offered for all industries improved from KSh 4,960 in 2015 to KSh 5,254 in 2016.

**Table 4.14: Collective Bargaining Agreements Registered by the Employment and Labour Relations Court, 2015 -2016**

| | No. of Agreements | | No. of Unionisable Employees Covered by the Agreements | | Average Monthly Basic Wage (KSh) | | Average Monthly Housing Allowance | |
|---|---|---|---|---|---|---|---|---|
| | 2015 | 2016* | 2015 | 2016* | 2015 | 2016* | 2015 | 2016* |
| Agriculture, Forestry, Hunting & Fishing | 17 | 20 | 5,122 | 7,107 | 31,371 | 17,114 | 2,022 | 2,895 |
| Mining & Quarrying | 3 | 2 | 598 | 451 | 28,335 | 24,351 | 5,205 | 7,432 |
| **Manufacturing of :** | | | | | | | | |
| Food, Beverage & Tobacco | 37 | 32 | 4,260 | 4,093 | 38,346 | 31,653 | 4,869 | 4,404 |
| Textile, Wearing Apparels & Leather Industry | 15 | 27 | 2,820 | 8,949 | 14,923 | 14,807 | 2,373 | 2,772 |
| Wood & Wood Industry including Furniture | 1 | 4 | 20 | 2,542 | 20,425 | 21,223 | 3,000 | 3,497 |
| Paper & Paper Products, Printing & Publishing | 6 | 17 | 811 | 1,834 | 22,674 | 34,850 | 3,150 | 3,938 |
| Chemical, Petroleum Rubber & Plastic Product | 13 | 19 | 1,390 | 854 | 21,568 | 36,034 | 3,290 | 5,476 |
| Glass, Ceramic & Cement | 1 | 6 | 68 | 1,180 | 13,158 | 28,156 | 3,500 | 6,679 |
| Basic Metal Industries | 1 | 1 | 15 | 11 | 27,459 | 7,692 | 5,000 | 1,300 |
| Electronics & Electrical Products | 19 | 32 | 1,874 | 1,446 | 20,402 | 28,283 | 3,187 | 4,177 |
| Other Manufacturing industries | 1 | 1 | 12 | 155 | 87,763 | 95,380 | 5,939 | 11,564 |
| Electricity and Water | 13 | 10 | 12,151 | 1,080 | 81,490 | 31,650 | 9,200 | 7,446 |
| Building & Construction | 7 | 4 | 5,055 | 1,421 | 17,207 | 14,732 | 5,360 | 3,054 |
| Wholesale & Retail Trade, Restaurant & Hotels | 21 | 28 | 2,820 | 5,379 | 17,630 | 29,972 | 3,614 | 5,730 |
| Transport and Communication | 18 | 30 | 7,588 | 10,466 | 49,930 | 44,923 | 7,011 | 6,178 |
| Finance, Insurance, Real Estate & Business Services | 17 | 14 | 22,700 | 20,903 | 128,143 | 136,258 | 10,488 | 9,029 |
| Community & Social Services | 40 | 51 | 3,127 | 599,176 | 34,038 | 33,666 | 7,114 | 3,751 |
| **Total/Average** | **230** | **298** | **70,431** | **667,047** | **38,521** | **37,103** | **4,960** | **5,254** |

Source: Ministry of East Africa Community, Labour and Social Protection

* Provisional

**Consumer Price Index**

4.22. Annual inflation decelerated from 6.6 per cent in 2015 to 6.3 per cent in 2016. The easing of inflation was largely due to reduced costs of petroleum products and tight monetary policies.

4.23. Table 4.15a shows changes in Consumer Price Indices (CPI) in the broad Classification of Individual Consumption by Purpose (COICOP) divisions between 2012 and 2016. Food and non-alcoholic beverages index which has largest share in the CPI basket, increased by 10.1 per cent to 207.19 in 2016. Alcoholic drinks, tobacco and narcotics index recorded the highest inflation of 13.2 per cent mainly as a result of increased excise tax which pushed up the prices of beer and cigarettes beginning December 2015 and throughout 2016. Despite lower costs of petrol and diesel, the transport index increased by 0.2 per cent to 160.94 points in 2016, mainly due to a marginal increase in public transport fares. Housing, water, electricity, gas and other fuels index went up by 1.6 per cent, driven by increase in costs of house rents as well as wood fuels.

**Table 4.15a: Consumer Price Indices and Inflation by Divisions, 2012 -2016**

February 2009=100

| Broad Item Group | % Share | Annual Average Index | | | | | % Change |
|---|---|---|---|---|---|---|---|
| | | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Food & Non-Alcoholic Beverages | 36.03 | 144.92 | 155.44 | 168.97 | 188.22 | 207.19 | 10.1 |
| Alcoholic Beverages, Tobacco & Narcotics | 2.06 | 132.99 | 141.02 | 148.03 | 153.42 | 173.69 | 13.2 |
| Clothing & Footwear | 7.43 | 123.22 | 129.65 | 135.85 | 142.19 | 148.20 | 4.2 |
| Housing, Water, Electricity, Gas and other Fuels | 18.30 | 127.99 | 133.82 | 141.31 | 145.81 | 148.21 | 1.6 |
| Furnishings, Household Equipment and Routine Household Maintenance | 6.16 | 124.39 | 129.72 | 136.27 | 142.34 | 147.98 | 4.0 |
| Health | 3.13 | 120.49 | 125.68 | 133.39 | 139.82 | 145.50 | 4.1 |
| Transport | 8.67 | 140.64 | 147.38 | 161.36 | 160.61 | 160.94 | 0.2 |
| Communication | 3.82 | 79.54 | 78.35 | 77.10 | 77.83 | 79.40 | 2.0 |
| Recreation & Culture | 2.25 | 120.51 | 127.90 | 140.95 | 145.27 | 151.45 | 4.2 |
| Education | 3.14 | 112.92 | 118.80 | 125.21 | 130.26 | 135.68 | 4.2 |
| Restaurant & Hotels | 4.49 | 139.91 | 149.90 | 159.82 | 168.08 | 177.34 | 5.5 |
| Miscellaneous Goods & Services | 4.52 | 121.75 | 127.37 | 133.02 | 139.41 | 145.18 | 4.1 |
| **Weighted average of all Items** | **100.00** | **132.53** | **140.11** | **149.74** | **159.60** | **169.68** | **6.3** |

4.24. Table 4.15b presents a breakdown of the food and non-alcoholic beverages division into the constituent classes. Inflation of fruits and vegetables increased by 22.9 and 25.0 per cent, respectively. Milk, cheese and eggs recorded a decline during the same period. Meat; fish and sea foods index increased by 2.2 per cent and 6.6 per cent, respectively during the year under review.

**Table 4.15b: CPI and Inflation for Food and Non-Alcoholic Beverages, 2012- 2016**

February 2009=100

| Food and non-alcoholic beverages | % Share | 2012 | 2013 | 2014 | 2015 | 2016 | % Change |
|---|---|---|---|---|---|---|---|
| Bread and cereals | 10.52 | 132.56 | 136.08 | 143.53 | 147.88 | 152.54 | 3.2 |
| Meat | 5.68 | 143.06 | 152.64 | 164.29 | 174.24 | 178.05 | 2.2 |
| Fish and Sea foods | 1.32 | 145.94 | 163.26 | 181.65 | 198.31 | 211.31 | 6.6 |
| Milk, Cheese and Eggs | 4.96 | 143.42 | 158.78 | 169.52 | 181.47 | 180.99 | -0.3 |
| Oils and fats | 1.69 | 168.81 | 163.69 | 163.27 | 161.90 | 163.83 | 1.2 |
| Fruits | 2.38 | 152.21 | 176.68 | 197.84 | 233.28 | 286.75 | 22.9 |
| Vegetables | 5.68 | 157.38 | 180.46 | 221.60 | 297.19 | 371.46 | 25.0 |
| Sugar, jam, honey, chocolate and confectionery | 2.33 | 164.50 | 165.24 | 153.37 | 152.29 | 164.27 | 7.9 |
| Food products n.e.c. | 0.11 | 119.29 | 127.48 | 135.99 | 144.70 | 147.62 | 2.0 |
| Coffee, tea and cocoa | 0.38 | 121.50 | 121.20 | 122.03 | 125.10 | 130.19 | 4.1 |
| Mineral waters, soft drinks, fruit and vegetable juices | 1.00 | 133.28 | 136.26 | 141.04 | 143.97 | 153.86 | 6.9 |

4.25. Table 4.16 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 6.8 per cent, while Nairobi upper income and the rest of urban areas recorded 4.6 and 6.4 per cent respectively, in 2016.

**Table 4.16: Annual Inflation, 2012-2016**

Per cent

| Income Group | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| Nairobi Lower Income Inflation | 9.5 | 5.9 | 5.8 | 6.9 | 6.8 |
| Nairobi Middle Income Inflation | 7.8 | 4.5 | 4.7 | 4.3 | 4.1 |
| Nairobi Upper Income Inflation | 5.8 | 3.4 | 6.0 | 2.6 | 4.6 |
| Nairobi Inflation | 9.0 | 5.5 | 5.6 | 6.1 | 6.1 |
| Rest of Urban Towns Inflation | 9.7 | 5.9 | 7.8 | 6.9 | 6.4 |
| **Overall Inflation** | **9.4** | **5.7** | **6.9** | **6.6** | **6.3** |

**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

4.26. Table 4.17 shows that the annual average CPI for Nairobi lower income group rose from 161.98 in 2015 to 173.03 in 2016. The highest index of 178.10 was recorded in December, while the lowest of 167.36 was recorded in February 2016.

4.27. Tables 4.18, 4.19, 4.20, 4.21 and 4.22 present a five year series of CPI for the Nairobi middle and upper income groups, overall Nairobi, rest of urban areas and the aggregated national indices.

**Table 4.17: Consumer Price Indices for Nairobi Lower Income Group, 2012-2016**

February 2009=100

| Month | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| January | 134.21 | 138.55 | 148.47 | 155.65 | 167.60 |
| February | 134.38 | 139.72 | 148.75 | 156.51 | 167.38 |
| March | 136.85 | 141.17 | 149.36 | 158.81 | 169.19 |
| April | 137.61 | 142.91 | 150.57 | 161.85 | 170.86 |
| May | 138.00 | 142.84 | 151.51 | 162.09 | 171.89 |
| June | 136.21 | 142.68 | 151.39 | 162.47 | 174.08 |
| July | 134.44 | 142.94 | 151.71 | 162.74 | 174.51 |
| August | 133.18 | 142.82 | 153.51 | 162.78 | 174.40 |
| September | 133.61 | 146.54 | 153.64 | 163.13 | 174.60 |
| October | 134.13 | 146.18 | 153.18 | 164.26 | 176.05 |
| November | 135.14 | 146.29 | 152.88 | 166.02 | 177.67 |
| December | 136.49 | 146.93 | 154.08 | 167.48 | 178.10 |
| **Annual average** | **135.35** | **143.30** | **151.59** | **161.98** | **173.03** |

**Table 4.18: Consumer Price Indices, Nairobi Middle Income Group, 2012- 2016**

February 2009=100

| Month | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| January | 121.65 | 125.13 | 131.93 | 136.19 | 144.24 |
| February | 121.37 | 125.79 | 131.99 | 136.25 | 143.39 |
| March | 122.53 | 126.89 | 132.79 | 137.09 | 143.78 |
| April | 123.49 | 127.57 | 133.22 | 137.74 | 143.97 |
| May | 123.66 | 127.08 | 133.91 | 138.95 | 144.59 |
| June | 123.31 | 126.80 | 134.48 | 140.70 | 145.59 |
| July | 121.96 | 127.56 | 135.45 | 141.17 | 146.18 |
| August | 122.03 | 127.61 | 135.76 | 141.66 | 146.76 |
| September | 122.40 | 131.11 | 135.48 | 142.04 | 147.19 |
| October | 123.12 | 130.91 | 135.33 | 141.93 | 147.22 |
| November | 123.36 | 130.66 | 134.97 | 141.75 | 147.61 |
| December | 123.51 | 130.88 | 135.60 | 145.22 | 148.37 |
| **Annual average** | **122.70** | **128.16** | **134.24** | **140.06** | **145.74** |

**Table 4.19: Consumer Price Indices, Nairobi Upper Income Group, 2012-2016**

February 2009=100

| Month | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| January | 123.72 | 126.64 | 134.11 | 136.86 | 144.30 |
| February | 123.63 | 126.91 | 134.32 | 136.66 | 144.19 |
| March | 124.12 | 127.77 | 134.63 | 137.07 | 144.21 |
| April | 124.90 | 127.88 | 135.10 | 137.67 | 145.61 |
| May | 124.98 | 127.25 | 136.39 | 138.96 | 145.93 |
| June | 124.83 | 126.93 | 136.83 | 139.25 | 146.21 |
| July | 124.26 | 127.09 | 137.30 | 141.35 | 146.94 |
| August | 124.74 | 127.72 | 139.94 | 143.53 | 148.33 |
| September | 124.87 | 132.57 | 139.46 | 143.35 | 148.71 |
| October | 125.72 | 132.47 | 138.22 | 143.05 | 148.68 |
| November | 125.51 | 132.40 | 138.03 | 142.70 | 149.23 |
| December | 125.46 | 132.51 | 136.74 | 143.34 | 149.68 |
| **Annual average** | **124.73** | **129.01** | **136.76** | **140.32** | **146.84** |

## Table 4.20: Consumer Price Indices, Overall Nairobi, 2012-2016

February 2009=100

| Month | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| January | 130.78 | 134.86 | 143.94 | 150.24 | 168.36 |
| February | 130.84 | 135.88 | 144.16 | 150.87 | 168.11 |
| March | 132.91 | 137.22 | 144.81 | 152.75 | 168.58 |
| April | 133.73 | 138.64 | 145.80 | 155.12 | 169.62 |
| May | 134.05 | 138.45 | 146.69 | 155.63 | 170.55 |
| June | 132.67 | 138.26 | 146.76 | 156.34 | 172.29 |
| July | 131.04 | 138.63 | 147.25 | 156.72 | 173.78 |
| August | 130.17 | 138.58 | 148.72 | 156.96 | 173.92 |
| September | 130.58 | 142.29 | 148.72 | 157.30 | 174.74 |
| October | 131.16 | 141.98 | 148.31 | 158.07 | 175.82 |
| November | 131.94 | 142.00 | 148.00 | 159.29 | 177.01 |
| December | 132.94 | 142.51 | 148.97 | 161.20 | 178.91 |
| **Annual average** | **131.90** | **139.11** | **146.84** | **155.87** | **172.64** |

## Table 4.21: Consumer Price Indices, the Rest of Urban Areas, 2012-2016

February 2009=100

| Month | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| January | 130.84 | 136.15 | 146.42 | 155.67 | 168.36 |
| February | 130.71 | 137.08 | 147.21 | 156.42 | 168.11 |
| March | 132.23 | 138.48 | 147.87 | 158.04 | 168.58 |
| April | 133.74 | 139.72 | 149.88 | 161.20 | 169.62 |
| May | 134.12 | 140.27 | 151.81 | 163.03 | 170.55 |
| June | 133.33 | 140.53 | 152.12 | 163.34 | 172.29 |
| July | 132.54 | 140.73 | 152.95 | 163.26 | 173.78 |
| August | 132.45 | 141.49 | 154.33 | 163.66 | 171.68 |
| September | 132.81 | 143.19 | 154.71 | 164.15 | 174.74 |
| October | 133.38 | 143.28 | 154.45 | 164.98 | 175.82 |
| November | 134.31 | 143.94 | 154.55 | 165.55 | 177.01 |
| December | 135.17 | 144.79 | 154.99 | 167.18 | 178.91 |
| **Annual average** | **132.97** | **140.81** | **151.77** | **162.21** | **172.45** |

## Table 4.22: Consumer Price Indices Kenya, 2012-2016

February 2009=100

| Month | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| January | 130.82 | 135.62 | 145.40 | 153.43 | 165.37 |
| February | 130.76 | 136.59 | 145.95 | 154.14 | 165.06 |
| March | 132.51 | 137.96 | 146.61 | 155.86 | 165.92 |
| April | 133.74 | 139.28 | 148.20 | 158.70 | 167.07 |
| May | 134.09 | 139.52 | 149.70 | 159.98 | 167.99 |
| June | 133.06 | 139.59 | 149.91 | 160.46 | 169.76 |
| July | 131.92 | 139.87 | 150.60 | 160.57 | 170.84 |
| August | 131.51 | 140.29 | 152.02 | 160.90 | 170.97 |
| September | 131.89 | 142.82 | 152.24 | 161.33 | 171.56 |
| October | 132.46 | 142.75 | 151.92 | 162.13 | 172.62 |
| November | 133.33 | 143.14 | 151.85 | 162.97 | 173.85 |
| December | 134.25 | 143.85 | 152.51 | 164.72 | 175.18 |
| **Annual average** | **132.53** | **140.11** | **149.74** | **159.60** | **169.68** |

05 Chapter

# Money, Banking and Finance

## Overview

In 2016, the monetary policy adopted aimed at supporting a non-inflationary credit expansion to key sectors of the economy and continued anchoring inflation expectations, while promoting stability in the foreign exchange market. The Banking Act was amended to introduce capping of interest rates on credit facilities. The amendment was aimed at protecting borrowers from high interest rates, thus making loans affordable. The Act sets the maximum lending rate at no more than 4 per cent above the base rate set and published by the Central Bank of Kenya (CBK), and the minimum interest rate granted on a deposit held in interest earning account to at least 70 per cent of the Central Bank Rate (CBR). Consequently, following the implementation of the amended Act in mid-September 2016, the Monetary Policy Committee (MPC) suspended the Kenya Bankers Reference Rate (KBRR), previously used as the base rate for pricing of loans by commercial banks.

5.2. In the review period, the CBR, was revised downwards twice, to 10.50 per cent in June and 10.00 per cent in December. During the first half of 2016, however, the base rate remained at 11.50 per cent. The monetary policy decisions were intended to support growth in the economy and to contain inflationary pressures amid fears of drought. The 91 day Treasury bill rate dropped from 9.81 per cent in December 2015 to 7.25 per cent in June 2016 and rose to 8.44 per cent in December 2016. The overall inflation stood at 6.35 per cent in December 2016 compared with 8.01 per cent in December 2015.

5.3. The annual growth rates of broad money supply (M3) and domestic credit were consistent with the developments in the financial sector and policy stance in 2016. In the review period, growth in M3 slowed down from 14.1 per cent in December 2015 to 3.6 per cent in December 2016. Similarly, overall domestic credit growth decelerated from 20.8 per cent in 2015 to 6.4 per cent in the same period, with credit to private sector expanding by 4.3 per cent in 2016 compared to 18.0 per cent in 2015. Despite volatility in global financial markets partly due to uncertainty with respect to Brexit and political developments in the US, the foreign exchange market was relatively stable in 2016.

5.4. Interest rates on savings deposits increased to 6.37 per cent by December 2016 compared to 1.56 per cent in December 2015. On the other hand, commercial banks' average lending interest rates charged on loans and advances declined to 13.69 per cent as at December 2016 from 18.30 per cent in December 2015, owing to the capping of the interest rates in mid-September 2016. These downward adjustments in interest rates narrowed the interest spread significantly to 6.36 per cent in December 2016.

5.5. In the equities market, the Nairobi Securities Exchange NSE 20-Share index increased to 3,982 points in the first quarter of 2016 but declined through to the fourth quarter to 3,186 points in December 2016. In the pensions sub-sector, the retirement benefit assets grew from KSh 800 billion in June 2015 to KSh 830 billion in June 2016.

**Selected Monetary Indicators**

5.6. Table 5.1 shows selected monetary indicators for the period 2012 to 2016. The net foreign assets (NFA) held by the banking system increased slightly by 0.8 per cent from KSh 491.5 billion in December 2015 to KSh 495.5 billion in December 2016. Total domestic credit by the banking system grew by 6.4 per cent in December 2016 compared to a growth of 20.8 per cent in December 2015. This was as a result of increased credit to the private sector that rose to KSh 2,381.2 billion as at December 2016 compared to KSh 2,269.9 billion as at December 2015. Credit to the National Government increased by 12.9 per cent from KSh 524.0 billion in 2015 to KSh 591.7 billion in 2016. Broad money supply (M3) grew by 3.6 per cent in 2016 to KSh 2,753.5 billion compared to an expansion of 14.1 per cent in December 2015. The commercial banks liquidity ratio rose from 43.7 per cent in December 2015 to 45.8 per cent in December 2016. The advances to deposits ratio rose from 87.0 per cent to 88.6 per cent over the same period.

**Table 5.1: Monetary Indicators+, 2012 - 2016**

KSh Million

| As at end of: | | Net Foreign Assets (KSh Million) | Domestic Credit (KSh million) | | | Broad Money Supply[1] (M3) (KSh Million) | Commercial Bank Liquidity | Advances/ Deposits Ratio |
|---|---|---|---|---|---|---|---|---|
| | | | Private and other public bodies | National Government | Total | | | |
| 2012 | Dec .... | 325,992 | 1,333,688 | 368,823 | 1,702,510 | 1,727,686 | 46.8 | 79.3 |
| 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 | Mar .... | 472,263 | 2,279,681 | 543,617 | 2,823,298 | 2,662,198 | 44.4 | 86.8 |
| | Jun ..... | 562,991 | 2,295,313 | 559,342 | 2,854,655 | 2,755,924 | 46.0 | 85.9 |
| | Sep ..... | 592,136 | 2,334,335 | 524,155 | 2,858,490 | 2,761,842 | 47.4 | 85.7 |
| | Dec .... | 495,511 | 2,381,152 | 591,722 | 2,972,874 | 2,753,528 | 45.8 | 88.6 |

Source: Central Bank of Kenya

[1] See Table 5.2 and 5.3 for details

[2] Commercial Banks' liquid assets as per cent of deposit liabilities

[+] Revised

5.7. Table 5.2 presents various money supply aggregates for the period 2012 to 2016. In 2016, money supply (M1) grew by 27.9 per cent mainly due to significant expansion of demand deposits. Quasi money deposits held by commercial banks and other deposit taking institutions decreased by 14.6 per cent in December 2016 resulting from a decline in savings deposit. Broad money supply (M2) and broad money supply (M3) grew by 4.8 per cent and 3.6 per cent, respectively. The overall liquidity grew by 9.1 per cent to KSh 3,697.7 billion in 2016.

**Table 5.2: Money and Quasi Money Supply, 2012 - 2016**

KSh Million

| | | Money (M1) | Quasi-Money+ | M2 | M3 | L |
|---|---|---|---|---|---|---|
| **2012** | Dec | 710,884 | 758,516 | 1,469,400 | 1,727,686 | 2,130,550 |
| **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** | Jan | 1,044,550 | 1,157,536 | 2,202,086 | 2,613,710 | 3,350,907 |
| | Feb | 1,039,668 | 1,191,524 | 2,231,192 | 2,627,421 | 3,380,256 |
| | Mar | 1,076,765 | 1,185,922 | 2,262,687 | 2,662,625 | 3,430,136 |
| | Apr | 1,101,052 | 1,184,961 | 2,286,013 | 2,691,693 | 3,470,661 |
| | May | 1,113,811 | 1,184,657 | 2,298,468 | 2,708,753 | 3,514,698 |
| | Jun | 1,133,709 | 1,199,399 | 2,333,108 | 2,755,924 | 3,592,051 |
| | Jul | 1,107,635 | 1,189,223 | 2,296,858 | 2,712,966 | 3,568,303 |
| | Aug | 1,112,409 | 1,191,979 | 2,304,388 | 2,738,962 | 3,604,443 |
| | Sep | 1,236,724 | 1,084,104 | 2,320,827 | 2,761,842 | 3,634,623 |
| | Oct | 1,272,055 | 1,060,051 | 2,332,106 | 2,750,424 | 3,652,530 |
| | Nov | 1,285,795 | 1,044,763 | 2,330,558 | 2,767,141 | 3,696,541 |
| | Dec | 1,308,928 | 1,033,696 | 2,342,624 | 2,753,528 | 3,697,716 |

Source: Central Bank of Kenya.
+ Revised

**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) Broad Money,**M2,** comprise of M1 and Quasi money.

(d) Broad Money,**M3** , comprises M2 and foreign currency holdings by residents.

(e) Overall Liquidity, **L** , comprises M3 and Treasury Bill holdings by the non-bank public.

## Consolidated Accounts of the Banking System

5.8. Table 5.3 presents assets and liabilities of the banking system. Total liabilities and assets of the banking system increased by 5.6 per cent from KSh 3,285.4 billion in December 2015 to KSh 3,468.4 billion in December 2016. The growth is attributed to increases in domestic credit to the other public bodies and private sector. On the liabilities side, demand deposits increased by 32.0 per cent to KSh 1,099.0 billion in 2016 compared to an increase of 9.1 per cent in 2015. Foreign currency deposits declined by 2.9 per cent in December 2016 compared to an increase of 21.6 per cent in December 2015. The decline in foreign currency deposits and quasi money deposits led to a marginal expansion in broad money supply (M3) to KSh 2,753.5 billion in December 2016 from KSh 2,658.2 billion in December 2015. The increase in demand deposits vis-à-vis decline in quasi money deposits partly reflect the recent reclassification of time deposits into demand deposits by commercial banks following the implementation of interest rate capping in mid-September 2016. The general decline in deposits is partly due to a portfolio reallocation by non-bank public towards investment in government securities.

## Table 5.3: Consolidated Accounts of the Banking System+, 2012 - 2016

KSh Million

| | 2012 | 2013 | 2014 | 2015 | 2016* | | | |
|---|---|---|---|---|---|---|---|---|
| **LIABILITIES-** | **December** | **December** | **December** | **December** | **March** | **June** | **September** | **December** |
| **1. Money (M1):** | | | | | | | | |
| 1.1 Demand Deposits ..... | 562,991 | 663,709 | 762,935 | 832,421 | 893,137 | 945,533 | 1,049,763 | 1,099,036 |
| 1.2 Currency outside banks .... | 147,893 | 163,359 | 173,505 | 191,251 | 183,628 | 188,176 | 186,961 | 209,891 |
| **Sub-Total .....** | **710,884** | **827,069** | **936,440** | **1,023,672** | **1,076,765** | **1,133,709** | **1,236,724** | **1,308,928** |
| **2. Quasi-Money(MS):** | | | | | | | | |
| 2.1 Call + 7 days Notice Deposi | 73,708 | 81,889 | 101,141 | 117,048 | 128,085 | 128,987 | 134,169 | 159,796 |
| 2.2 Savings Deposits ..... | 205,703 | 230,358 | 286,860 | 333,265 | 200,937 | 208,447 | 116,890 | 103,936 |
| 2.3 Time Deposits ..... | 479,104 | 532,279 | 657,419 | 760,812 | 856,900 | 861,965 | 833,045 | 769,964 |
| **Sub-Total (quasi-money banks) .** | **758,515** | **844,526** | **1,045,421** | **1,211,125** | **1,185,495** | **1,199,399** | **1,084,104** | **1,033,696** |
| **Broad Money Supply(M2)** | **1,469,400** | **1,671,595** | **1,981,860** | **2,234,797** | **2,262,260** | **2,333,108** | **2,320,827** | **2,342,624** |
| 3. Foreign Currency Deposits ..... | 258,287 | 324,647 | 348,119 | 423,369 | 399,938 | 422,815 | 441,014 | 410,904 |
| **Broad Money Supply(M3)** | **1,727,686** | **1,996,241** | **2,329,979** | **2,658,166** | **2,662,198** | **2,755,924** | **2,761,842** | **2,753,528** |
| 5. Treasury Bill Holdings ..... | 402,864 | 526,985 | 619,078 | 732,652 | 767,509 | 836,128 | 872,781 | 944,187 |
| **Overall Liquidity(L)** | **2,130,550** | **2,523,227** | **2,949,057** | **3,390,818** | **3,429,707** | **3,592,051** | **3,634,623** | **3,697,716** |
| 6. Other Items Net(OIN) ..... | 300,817 | 369,572 | 461,854 | 627,219 | 633,364 | 661,722 | 688,784 | 714,856 |
| **TOTAL (M3+OIN) .....** | **2,028,502** | **2,365,813** | **2,791,833** | **3,285,385** | **3,295,562** | **3,417,645** | **3,450,625** | **3,468,385** |
| **ASSETS-** | | | | | | | | |
| 7. Net Foreign Assets ..... | 325,992 | 387,292 | 479,654 | 491,461 | 472,263 | 562,991 | 592,136 | 495,511 |
| 8. Domestic Credit:..... | | | | | | | | |
| 8.1 National Govt. (Net) ..... | 368,823 | 397,164 | 379,316 | 524,026 | 543,617 | 559,342 | 524,155 | 591,722 |
| 8.2 Other Public Bodies ..... | 49,814 | 39,620 | 48,402 | 65,093 | 63,646 | 55,880 | 67,466 | 81,450 |
| 8.3 Private Sector ..... | 1,283,873 | 1,541,738 | 1,884,460 | 2,204,805 | 2,216,035 | 2,239,433 | 2,266,868 | 2,299,702 |
| **Sub-Total** | **1,702,510** | **1,978,522** | **2,312,178** | **2,793,924** | **2,823,298** | **2,854,655** | **2,858,490** | **2,972,874** |
| **TOTAL (M3+OIN)** | **2,028,502** | **2,365,813** | **2,791,833** | **3,285,385** | **3,295,562** | **3,417,645** | **3,450,625** | **3,468,385** |

Source: Central Bank of Kenya.

* Provisional

+Revised

**Notes:**

(a) Broad Money, **M2**, comprise of M1 plus Quasi money

(b) Broad Money, **M3**, comprises M2 and foreign currency deposits holdings by residents.

(c) Overall Liquidity, **L**, comprises M3 and Treasury Bill holdings by the non-bank public.

(d) Other Items Net Includes SDR allocated by IMF.

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

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

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

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

**Sources of Change in M3 and Real Values of Selected Financial Aggregates**

5.9. Table 5.4 presents the changes in money supply and their sources for the period 2012 to 2016. 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. Broad money (M3) increased by KSh 95.4 billion in December 2016 compared to KSh 328.2 billion recorded in December 2015. This increase is the lowest over the last five years and is mainly attributed to the drop in the quasi-money by KSh 177.4 billion in 2016. Similarly, foreign currency deposits contracted by KSh 12.5 billion in 2016 from an increase of KSh 75.3 billion in 2015. The main sources of the growth in broad money (M3) were increases of KSh 94.6 billion in credit advanced to the private sector and KSh 17.0 billion credit to other public sector.

**Table 5.4: Changes in Money Supply and the Sources[+], 2012 - 2016**

KSh Million

| | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| **MONEY SUPPLY CHANGES** | | | | | |
| 1 Currency plus demand deposits (M1) | 88,153 | 116,185 | 109,371 | 87,232 | 285,256 |
| 2 Quasi-money | 127,288 | 86,010 | 200,895 | 165,704 | -177,429 |
| 3 Foreign Currency Deposits | -1,906 | 66,360 | 23,472 | 75,250 | -12,465 |
| 4 Broad Money supply (M3) | 213,534 | 268,556 | 333,738 | 328,187 | 95,363 |
| **SOURCES OF CHANGES** | | | | | |
| 5 Net foreign assets | 29,027 | 61,299 | 92,363 | 11,806 | 3,704 |
| 6 All Domestic Credit | | | | | |
| (a) to National Government (net) | 40,388 | 28,341 | -17,848 | 144,721 | 12,238 |
| (b) to other public sector | 19,005 | -10,195 | 8,782 | 1,441 | 16,978 |
| (c) to private sector | 110,736 | 257,865 | 342,722 | 335,584 | 94,624 |
| 7 Other Items (Net) | 14,378 | -68,755 | -92,282 | -165,366 | -32,182 |
| 8 Total sources of change (5+6+7) | 213,534 | 268,556 | 333,738 | 328,187 | 95,363 |

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

[+] Revised

**Trends in the Real Values of Selected Financial Aggregates**

5.10. Table 5.5 presents trends in real values of selected financial aggregates from 2012 to 2016. In real terms, commercial bank credit to private sector grew by 4.8 per cent while overall liquidity grew by 2.5 per cent. Commercial banks real deposit liabilities declined marginally by 2.1 per cent from KSh 1,615.61 billion in 2015 to KSh 1,582.2 billion in 2016. Real broad money supply M3 growth contracted by 2.6 per cent while total real liabilities of the banking system contracted by 0.7 per cent. The share of commercial banks real deposit liabilities to the total real liabilities dropped to 79.9 per cent in 2016 compared to 81.0 per cent in 2015.

**Table 5.5: Trends in the Real Values of Selected Financial Aggregates[1], 2012 - 2016**

KSh Million

| | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| 1 Money Supply (M3) | 1,286,917 | 1,387,724 | 1,527,755 | 1,613,748 | 1,571,828 |
| 2 Overall Liquidity (L) | 1,587,002 | 1,754,068 | 1,933,681 | 2,058,534 | 2,110,809 |
| 3 Commercial bank credit to private sector | 785,703 | 870,489 | 961,296 | 1,046,064 | 1,096,483 |
| 4 Total commercial bank credit | 1,301,747 | 1,422,428 | 1,198,016 | 1,699,530 | 1,681,139 |
| 5 Commercial Banks' Deposit Liabilities[+] | 1,301,652 | 1,369,640 | 1,525,925 | 1,615,554 | 1,582,207 |
| 6 Total liabilities of banking system | 1,510,989 | 1,644,639 | 1,830,590 | 1,994,527 | 1,979,898 |
| **Memorandum item:** | | | | | |
| 7 Line 5 as per cent of line 6 | 86.1 | 83.3 | 83.4 | 81.0 | 79.9 |

[+] Revised

[1]Trends in the real values of selected financial aggregates was deflated by December Consumer Price Indices

**Nominal and Real Interest Rates**

5.11. Nominal interest rates for 2012 to 2016 are presented in Table 5.6. In the review period, interest rates were generally low. Interest rates on savings deposits rose to 6.37 per cent in December 2016 compared to 1.56 per cent in December 2015. The commercial banks' average lending interest rates charged on loans and advances declined to 13.69 per cent as at December 2016 from 18.30 per cent in December 2015, following the implementation of the interest rate capping law in mid-September 2016. These downward adjustments in interest rates narrowed the interest spread to 6.36 per cent in December 2016.

5.12. In 2016, the CBR was revised downwards twice to 10.50 per cent and 10.00 per cent, in June and December 2016, respectively. The 91 day Treasury bills rate dropped to 7.25 per cent in June 2016 from 9.81 per cent in December 2015, and rose to 8.44 per cent in December 2016.

**Table 5.6: Nominal Principal Interest Rates, 2012 - 2016**

Per cent

| | 2012 | 2013 | 2014 | 2015 | 2016 | |
|---|---|---|---|---|---|---|
| | December | December | December | December | June | December |
| **CENTRAL BANK OF KENYA** | | | | | | |
| 91 day Treasury Bills Rate | 8.30 | 9.52 | 8.58 | 9.81 | 7.25 | 8.44 |
| Central Bank Rate | 11.00 | 8.50 | 8.50 | 11.50 | 10.50 | 10.00 |
| Repo rate | 6.85 | .. | 5.39 | 9.23 | 9.50 | .. |
| Inter-bank rate | 5.84 | 8.98 | 6.91 | 7.27 | 4.87 | 5.92 |
| **COMMERCIAL BANKS[1]** | | | | | | |
| Average deposits | 6.80 | 6.65 | 6.81 | 8.02 | 6.78 | 7.33 |
| Savings deposits | 1.60 | 1.58 | 1.85 | 1.56 | 1.60 | 6.37 |
| Loan and Advances (maximum) | 18.15 | 16.99 | 15.99 | 18.30 | 18.18 | 13.69 |
| Overdraft | 17.79 | 16.51 | 15.86 | 18.48 | 18.09 | 13.49 |
| Loans-Deposits Spread | 11.35 | 10.34 | 9.18 | 10.28 | 11.40 | 6.36 |

Source: Central Bank of Kenya.

[1]Weighted average commercial bank interest rates

.. There were no repos in period

5.13. Table 5.7 shows trends in selected real interest rates for 2012 to 2016. Average real interest rates for the 91-day Treasury bills rose to 2.09 per cent in 2016. There was mixed performance in interest rates during the review period. Real interest rates for commercial bank average savings deposit rate was 0.98 per cent while the inter-bank rates were marginally low at negative 0.43 per cent. The real interest rate for loans and advances by commercial banks dipped slightly to 7.34 per cent in 2016 from the 10.29 per cent recorded in 2015.

**Table 5.7: Trends in Selected Real Principal Interest Rates[+], 2012 - 2016**

Percentage

| | Year | Nominal Interest | Inflation Rate | Real Interest[1] |
|---|---|---|---|---|
| Average Interest Rate for 91-day Treasury Bills | 2012 | 8.30 | 3.20 | 5.10 |
| | 2013 | 9.52 | 7.15 | 2.37 |
| | 2014 | 8.58 | 6.02 | 2.56 |
| | 2015 | 9.81 | 8.01 | 1.80 |
| | 2016 | 8.44 | 6.35 | 2.09 |
| Commercial bank savings deposits (average) | 2012 | 1.60 | 3.20 | -1.60 |
| | 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 |
| Commercial bank loans and advances (maximum) | 2012 | 18.15 | 3.20 | 14.95 |
| | 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 |
| Inter-Bank Rate | 2012 | 5.84 | 3.20 | 2.64 |
| | 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 |

Note: Trends in selected real Principal interest rates are as at December

[+] Revised

[1] Real Interest Rate equals Nominal Rate minus Inflation Rate

5.14. Table 5.8 presents the balance sheet of the CBK. The total assets and liabilities of the Central Bank contracted by 2.1 per cent to KSh 866.5 billion in December 2016 from a growth of 12.6 per cent in December 2015. The decline was mainly due to reductions in foreign exchange assets and direct advances to the Government that declined by 1.7 per cent and 33.8 per cent, respectively. Other assets, including Treasury Bills and Bonds, declined by 46.9 per cent to KSh 37.9 billion in 2016. On the liabilities side, total deposits grew by 2.6 per cent to KSh 515.7 billion, while currency in circulation increased by 9.0 per cent to KSh 262.7 billion in 2016. Other liabilities of the CBK dropped significantly by 39.1 per cent to KSh 83.1 billion in 2016.

**Table 5.8: Central Bank of Kenya Assets and Liabilities, 2012 - 2016**

**KSh Million**

| | | | | | 2016 | | | |
|---|---|---|---|---|---|---|---|---|
| | 2012 | 2013 | 2014 | 2015 | March | June | September | December |
| **ASSETS** | | | | | | | | |
| 1. Foreign Exchange:- | | | | | | | | |
| 1.1 Balances with External Banks | 395,312 | 462,378 | 608,203 | 585,544 | 611,867 | 661,733 | 645,423 | 580,215 |
| 1.2 Treasury Bills | 70,305 | 77,496 | 81,195 | 133,828 | 135,306 | 133,609 | 131,755 | 131,717 |
| 1.3 Other Investments | 22,970 | 29,413 | 32,641 | 44,204 | 38,958 | 33,849 | 43,363 | 36,166 |
| 1.4 Special Drawing Rights | 676 | 2,682 | 1,241 | 1,551 | 2,028 | 1,999 | 4,103 | 3,813 |
| **TOTAL** | **489,264** | **571,969** | **723,279** | **765,127** | **788,160** | **831,188** | **824,645** | **751,911** |
| 2. Advances & Disc. to Banks | 2,288 | 13,788 | 3,676 | 16,858 | 21,443 | 38,662 | 45,463 | 46,713 |
| 3. Direct Advances & Overdraft to Kenya Government | 25,373 | 34,187 | 30,929 | 45,233 | 46,521 | 44,283 | 3,372 | 29,956 |
| 4. Other Assets including Treasury Bills & Bonds | 31,792 | 40,703 | 28,325 | 71,277 | 33,284 | 34,939 | 31,364 | 37,914 |
| **TOTAL ASSETS** | **548,717** | **650,670** | **786,209** | **885,202** | **889,408** | **949,072** | **904,843** | **866,494** |
| **LIABILITIES :** | | | | | | | | |
| 1. Capital | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 |
| 2. Currency- | | | | | | | | |
| 2.1 Notes | 181,946 | 203,988 | 215,272 | 233,703 | 224,525 | 227,192 | 224,936 | 254,784 |
| 2.2 Coins | 5,797 | 6,008 | 6,658 | 7,228 | 7,443 | 7,559 | 7,749 | 7,951 |
| **TOTAL CURRENCY** | **187,737** | **209,990** | **221,930** | **240,931** | **231,968** | **234,751** | **232,685** | **262,734** |
| 3. Deposits | | | | | | | | |
| 3.1 Kenya Government | 46,296 | 115,542 | 179,963 | 177,905 | 160,564 | 235,363 | 217,632 | 181,804 |
| 3.2 Kenyan Banks[1] | 105,887 | 110,773 | 158,111 | 151,499 | 169,924 | 155,435 | 160,143 | 148,411 |
| 3.3 External Banks | 123,919 | 139,694 | 133,819 | 143,741 | 147,385 | 136,608 | 137,460 | 130,329 |
| 3.4 Other | 14,446 | 30,948 | 26,729 | 29,634 | 54,138 | 66,676 | 71,920 | 55,129 |
| **TOTAL Deposits** | **290,548** | **396,957** | **498,622** | **502,778** | **532,011** | **594,082** | **587,155** | **515,673** |
| 4. Other Liabilities | 65,432 | 38,723 | 60,658 | 136,493 | 120,421 | 115,239 | 80,002 | 83,087 |
| **TOTAL LIABILITIES** | **548,717** | **650,670** | **786,209** | **885,202** | **889,408** | **949,072** | **904,843** | **866,494** |

**Source: Central Bank of Kenya**

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

5.15. Table 5.9a presents credit advanced by commercial banks to various sectors for 2012 to 2016. Overall, commercial banks' credit grew by 4.9 per cent to KSh 3,015.9 billion in December 2016 from KSh 2,873.8 billion in December 2015. The most notable change in absolute terms in credit to the private sector was in real estate. In the public sector, commercial banks advanced more credit to the National Government amounting to KSh 593.6 billion, a 1.7 per cent increase above the December 2015 level. Credit to the County governments increased in 2016 to KSh 4.6 billion from KSh 1.1 billion advanced in 2015.

**Table 5.9a: Commercial Banks' Bills, Loans and Advances[1], 2012 - 2016**

KSh Million

| | 2012 Dec | 2013 Dec | 2014 Dec | 2015 Dec | 2016 Dec |
|---|---|---|---|---|---|
| **PUBLIC SECTOR:** | | | | | |
| National Government (net)[2] | 413,496 | 464,475 | 518,729 | 583,727 | 593,635 |
| County Government (net)[3] | 2,888 | -228 | 278 | 1,149 | 4,598 |
| Enterprises, Parastatal bodies and other Public entities | 46,926 | 39,847 | 48,125 | 45,173 | 76,852 |
| **TOTAL PUBLIC SECTOR** | **463,311** | **504,095** | **567,131** | **630,049** | **675,085** |
| **PRIVATE ENTERPRISES:** | | | | | |
| Agriculture | 57,479 | 58,656 | 75,001 | 85,925 | 90,184 |
| Mining and Quarrying | 25,048 | 27,804 | 23,421 | 20,776 | 16,802 |
| Manufacturing | 169,262 | 181,687 | 237,422 | 290,069 | 276,407 |
| Building and Construction | 69,183 | 70,770 | 80,406 | 106,307 | 104,826 |
| Transport, Storage and Communication | 75,776 | 89,488 | 130,304 | 171,643 | 204,618 |
| Wholesale and retail trade, hotels and restaurants | 211,172 | 253,198 | 306,927 | 378,043 | 379,612 |
| Real Estate | 161,940 | 198,337 | 262,691 | 282,586 | 337,352 |
| Financial Institutions | 32,689 | 29,924 | 50,384 | 61,042 | 84,866 |
| Other Business | 169,047 | 231,631 | 306,165 | 402,179 | 359,648 |
| **TOTAL PRIVATE ENTERPRISES** | **971,597** | **1,141,496** | **1,472,721** | **1,798,569** | **1,854,315** |
| Community and Personal Services (including Non-Profit Making Institutions) | 174,900 | 226,200 | 316,187 | 360,292 | 380,818 |
| Other Activities (nec) | 146,630 | 183,594 | 108,696 | 84,890 | 105,651 |
| **TOTAL BILLS, LOANS AND ADVANCES** | **1,756,438** | **2,055,385** | **2,464,736** | **2,873,800** | **3,015,869** |

Source: Central Bank of Kenya

[1] Commercial Banks' bills,loans and advances excludes portfolio investment by private enterprises and bank deposits placed with non-bank financial institutions.

[2] Data on Credit to National Government includes investments in Government Securities

[3] Data for 2012 refers to Local Authorities

5.16. The sectoral shares of commercial banks credit are shown in Table 5.9b. The share of loans and advances to the public sector rose to 22.4 per cent in December 2016 from 21.9 per cent in December 2015. The share of credit to public enterprises, parastatal bodies and other public entities rose from 1.6 per cent in 2015 to 2.5 per cent in 2016. Sectors with notable reduction in shares of loans and advances in 2016 include manufacturing and wholesale and retail trade and other businesses.

**Table 5.9b: Commercial Banks' Bills, Loans and Advances Sector Shares[1] 2012 - 2016**

Percentage

| | 2012 Dec | 2013 Dec | 2014 Dec | 2015 Dec | 2016 Dec |
|---|---|---|---|---|---|
| **PUBLIC SECTOR** | | | | | |
| National Government [1] | 23.5 | 22.6 | 21.0 | 20.3 | 19.7 |
| County Government[2] | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 |
| Enterprises, Parastatal bodies and other Public entities | 2.7 | 1.9 | 2.0 | 1.6 | 2.5 |
| **TOTAL PUBLIC SECTOR** | **26.4** | **24.5** | **23.0** | **21.9** | **22.4** |
| **PRIVATE ENTERPRISES** | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Agriculture | 3.3 | 2.9 | 3.0 | 3.0 | 3.0 |
| Mining and Quarrying | 1.4 | 1.4 | 1.0 | 0.7 | 0.6 |
| Manufacturing | 9.6 | 8.8 | 9.6 | 10.1 | 9.2 |
| Building and Construction | 3.9 | 3.4 | 3.3 | 3.7 | 3.5 |
| Transport, Storage and Communication | 4.3 | 4.4 | 5.3 | 6.0 | 6.8 |
| Wholesale and retail trade, hotels and restaurants | 12.0 | 12.3 | 12.5 | 13.2 | 12.6 |
| Real Estate | 9.2 | 9.6 | 10.7 | 9.8 | 11.2 |
| Financial Institutions | 1.9 | 1.5 | 2.0 | 2.1 | 2.8 |
| Other Business | 9.6 | 11.3 | 12.4 | 14.0 | 11.9 |
| **TOTAL PRIVATE ENTERPRISES** | **55.3** | **55.5** | **59.8** | **62.6** | **61.5** |
| Community and Personal Services (including Non-Profit Making Institutions) | 10.0 | 11.0 | 12.8 | 12.5 | 12.6 |
| Other Activities (nec) | 8.3 | 8.9 | 4.4 | 3.0 | 3.5 |
| **TOTAL BILLS, LOANS AND ADVANCES** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** |

Source: Central Bank of Kenya

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

[1] Data on Credit to National Government includes investments in Government Securities

[2] Data for 2012 refers to Local Authorities

5.17. The deposit liabilities and liquid assets of commercial banks for 2012 to 2016 are presented in Table 5.10. Deposit liabilities held by commercial banks grew by 4.2 per cent from KSh 2,661.1 billion in December 2015 to KSh 2,771.7 billion in December 2016. The increase in liquid assets slowed down in 2016, growing by 9.2 per cent compared to an increase of 10.7 per cent in 2015. The overall liquidity ratio rose to 45.8 per cent by December 2016 from 43.7 per cent recorded in 2015.

**Table 5.10: Commercial Banks' Deposit Liabilities and Liquid Assets+, 2012 - 2016**

| | Deposit Liabilities[1] (KSh Million) | Liquid Assets[2] (KSh Million) | Overall Liquidity Ratio (Per cent) |
|---|---|---|---|
| 2012 December ..... | 1,747,468 | 817,588 | 46.8 |
| 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 January ..... | 2,623,169 | 1,114,107 | 42.5 |
| February..... | 2,643,795 | 1,141,911 | 43.2 |
| March..... | 2,687,099 | 1,192,283 | 44.4 |
| April..... | 2,716,021 | 1,220,616 | 44.9 |
| May..... | 2,719,805 | 1,237,481 | 45.5 |
| June..... | 2,758,217 | 1,268,498 | 46.0 |
| July..... | 2,738,510 | 1,257,294 | 45.9 |
| August..... | 2,759,364 | 1,288,902 | 46.7 |
| September..... | 2,811,369 | 1,331,856 | 47.4 |
| October..... | 2,791,197 | 1,304,176 | 46.7 |
| November..... | 2,796,894 | 1,321,600 | 47.3 |
| December..... | 2,771,711 | 1,269,312 | 45.8 |

Source: Central Bank of Kenya.

+Revised

[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**

5.18. Table 5.11 highlights key performance indicators of the deposit taking savings and credit cooperatives (DTSs). The assets of the DTSs grew by 14.7 per cent from KSh 342.8 billion in 2015 to KSh 393.1 billion in 2016. Total deposits recorded a growth of 14.9 per cent to KSh 272.7 billion while loans and advances grew by 12.6 per cent to KSh 282.7 billion during the review period. Capital reserves increased by 32.9 per cent to KSh 67.6 billion in 2016.

**Table 5.11: Performance Indicators for Deposit Taking Savings and Credit Cooperatives (DTSs)**

| Indicator | KSh Million | | | Growth in 2016 |
|---|---|---|---|---|
| | 2014 | 2015 | 2016* | (per cent) |
| Assets ..... | 301,537 | 342,848 | 393,136 | 14.7 |
| Deposits ..... | 205,974 | 237,440 | 272,749 | 14.9 |
| Loans and Advances ..... | 228,524 | 251,080 | 282,733 | 12.6 |
| Capital Reserves ..... | 43,086 | 50,835 | 67,555 | 32.9 |

* provisional

Source: Sacco Society Regulatory Authority (SASRA)

**Capital markets**

5.19. Table 5.12 shows the performance of the stock market for 2012 to 2016. The NSE 20-Share index recorded 3,982 points during the first quarter of 2016 but declined through the fourth quarter to 3,186 points in December 2016, a drop of 21.1 per cent compared to December 2015. The total number of shares traded decreased from 6,812 million in 2015 to 5,809 million in 2016, resulting to a corresponding drop in equity turnover from KSh 209 billion in 2015 to KSh 147 billion in 2016. Total bond turnover increased by 42.0 per cent from KSh 305 billion in 2015 to KSh 433 billion in 2016. Market capitalization decreased by 4.5 per cent from KSh 2,054 billion in 2015 to KSh 1,962 billion in 2016. The total number of licensed/approved institutions in the capital market rose from 125 to 132 during the review period.

**Table 5.12: Gross Secondary Market Statistics, 2012 - 2016**

| | | | | | 2016 | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2012 | 2013 | 2014 | 2015 | 1st Qtr | 2nd Qtr | 3rd Qtr | 4th Qtr | Total |
| **Equities Market** | | | | | | | | | |
| Total No. of Shares Traded (million) | 5,464 | 7,576 | 8,233 | 6,812 | 1,299 | 1,411 | 1,998 | 1,101 | 5,809 |
| Total No. of Deals | 342,235 | 426,327 | 548,991 | 406,632 | 83,373 | 75,666 | 76,520 | 64,624 | 300,183 |
| Total Value of Shares Traded (KSh billion) | 86 | 156 | 216 | 209 | 37 | 37 | 48 | 25 | 147 |
| NSE 20 Share Index (Base Jan 1966=100) | 4,133 | 4,927 | 5,113 | 4,040 | 3,982 | 3,641 | 3,243 | 3,186 | |
| Market Capitalization (KSh billion) | 1,272 | 1,921 | 2,316 | 2,054 | 2,078 | 1,998 | 1,969 | 1,962 | |
| **Fixed Income Securities Market** | | | | | | | | | |
| Total bond Turnover (KSh billion) | 565 | 452 | 506 | 305 | 113 | 150 | 76 | 94 | 433 |
| **Capital Markets, Licensed/ approved Institutions** | | | | | | | | | |
| Securities Exchange (NSE) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Central Depositories (CDSC) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Investment Banks | 10 | 10 | 13 | 14 | 14 | 14 | 14 | 14 | 14 |
| Stockbrokers | 12 | 11 | 10 | 9 | 9 | 9 | 9 | 10 | 10 |
| Investment advisers | 18 | 16 | 17 | 17 | 16 | 13 | 13 | 13 | 13 |
| Fund Managers | 21 | 20 | 24 | 25 | 25 | 26 | 26 | 28 | 28 |
| Collective Investment Schemes | 16 | 16 | 19 | 20 | 23 | 23 | 23 | 23 | 22 |
| Authorized depositories/Custodians | 15 | 15 | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
| Credit Rating Agencies | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Venture Capital Companies | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| REIT Managers | | | 2 | 6 | 8 | 8 | 8 | 8 | 8 |
| REIT Trustees | | | | 3 | 3 | 3 | 3 | 3 | 3 |
| Employee Share Ownership Plans (ESOPS) | | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 11 |
| Authorized Real Estate Investment Trusts | | | | | 3 | 3 | 3 | 3 | 3 |
| **Total** | **96** | **103** | **115** | **125** | **132** | **130** | **130** | **133** | **132** |

Source: Capital Markets Authority

**Insurance**

5.20. Table 5.13 presents performance indicators for life insurance business for 2012 to 2016. Total liabilities in life insurance increased by 11.8 per cent to KSh 260.1 billion in 2016 from KSh 232.7 billion in 2015, while total assets grew by 13.5 per cent to KSh 305.4 billion in 2016. Gross premium income grew by 19.3 per cent to KSh 73.1 billion in 2016 compared to 8.4 per cent growth recorded in 2015. Net premium income registered an accelerated growth of 19.6 per cent in 2016 from an increase of 7.4 per cent in 2015, while benefits payment increased significantly by 30.9 per cent against an increase of 4.0 per cent in 2015. Notable growth in investments for life insurance business was recorded in 2016 increasing to KSh 271.9 billion from KSh 242.8 billion in 2015. Life reinsurance gross premium income grew by 14.7 per cent to KSh 2.4 billion while net premium income grew by 14.2 per cent to KSh 2.1 billion in 2016. Life re-insurance total liabilities grew by 10.7 per cent to KSh 4.3 billion while the total assets grew by 11.7 per cent to KSh 9.3 billion in 2016.

**Table 5.13: Performance indicators for life insurance business, 2012-2016**

KSh Million

| Indicator | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **Life Business** | | | | | |
| Gross Premium Income | 36,718 | 44,346 | 56,483 | 61,243 | 73,062 |
| Net Premium Income | 34,546 | 41,707 | 52,613 | 56,514 | 67,579 |
| Benefits Payment | 16,922 | 23,506 | 27,165 | 28,264 | 36,985 |
| Commissions | 3,074 | 3,659 | 4,380 | 5,078 | 5,598 |
| Management Expenses | 6,032 | 7,333 | 9,451 | 11,176 | 12,011 |
| Shareholders' Funds | 19,573 | 28,467 | 36,566 | 36,259 | 45,258 |
| Total Assets | 157,862 | 195,854 | 240,086 | 268,976 | 305,389 |
| Total Liabilities | 138,289 | 167,386 | 203,520 | 232,717 | 260,131 |
| Investments | 146,137 | 175,311 | 218,774 | 242,750 | 271,906 |
| **Reinsurance-Life** | | | | | |
| Gross Premium Income | 1,426 | 1,425 | 1,622 | 2,087 | 2,393 |
| Net Premium Income | 1,207 | 1,270 | 1,424 | 1,813 | 2,069 |
| Benefits Payment | 589 | 530 | 537 | 767 | 1,038 |
| Commissions | 268 | 347 | 443 | 533 | 606 |
| Management Expenses | 128 | 154 | 198 | 249 | 291 |
| Shareholders' Funds | 2,157 | 3,482 | 4,366 | 4,124 | 4,643 |
| Total Assets | 4,975 | 6,210 | 6,812 | 8,044 | 8,983 |
| Total Liabilities | 2,819 | 2,728 | 2,446 | 3,920 | 4,340 |
| Investments | 4,458 | 6,025 | 6,494 | 7,713 | 8,529 |

Source: Insurance Regulatory Authority

* Provisional

5.21. Table 5.14 presents performance indicators for general insurance business for 2012 to 2016. Total liabilities increased by 8.0 per cent to KSh 105.8 billion in 2016 from KSh 98.0 billion in 2015. Net earned premium income for the general insurance increased by 8.3 per cent to KSh 86.1 billion in 2016, against a 13.3 per cent increase registered in 2015. General business insurance investment growth slowed down from 10.2 per cent in 2015 to 2.3 per cent in 2016. Similarly, growth of claims incurred slowed down from 17.3 per cent to 9.3 per over the review period. Most general business reinsurance indicators declined in 2016 compared to modest expansions recorded in 2015. The net premium incomes and net earned premium incomes declined by 7.8 per cent and 1.0 per cent, respectively in 2016 compared to relative increases of 11.1 per cent and 14.4 per cent recorded for the indicators in 2015. Similarly, incurred claims reduced by 7.2 per cent compared to a rise of 14.6 per cent recorded in 2015. Re-insurance liabilities for general business insurance grew by 1.9 per cent while assets grew by 5.1 per cent in the review period.

**Table 5.14: Performance indicators for general insurance business, 2012 - 2016**

KSh Million

| Indicator | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **General Business** | | | | | |
| Gross Premium Income | 71,891 | 86,656 | 101,297 | 112,134 | 121,674 |
| Net Premium Income | 53,294 | 63,241 | 74,023 | 82,986 | 89,213 |
| Net Earned Premium Income (GB) | 50,312 | 58,508 | 70,208 | 79,578 | 86,148 |
| Claims Incurred | 29,433 | 33,442 | 41,895 | 49,131 | 53,701 |
| Commissions | 3,960 | 3,785 | 4,877 | 5,986 | 6,718 |
| Management Expenses | 13,520 | 17,034 | 20,967 | 24,531 | 26,120 |
| Shareholders' Funds | 39,293 | 50,290 | 61,582 | 65,984 | 67,018 |
| Total Assets | 116,609 | 128,968 | 146,174 | 163,977 | 172,809 |
| Total Liabilities | 77,317 | 78,678 | 84,593 | 97,992 | 105,792 |
| Investments | 67,013 | 81,929 | 100,827 | 111,067 | 113,637 |
| **Reinsurance-General business** | | | | | |
| Gross Premium Income | 8,978 | 11,021 | 14,752 | 16,357 | 15,267 |
| Net Premium Income | 8,679 | 10,629 | 14,160 | 15,728 | 14,498 |
| Net Earned Premium Income (GB) | 8,009 | 9,947 | 13,117 | 15,000 | 14,846 |
| Claims Incurred (GB) | 4,248 | 5,051 | 7,521 | 8,616 | 7,993 |
| Commissions | 2,442 | 2,920 | 3,833 | 4,186 | 4,167 |
| Management Expenses | 671 | 870 | 1,192 | 1,615 | 1,522 |
| Shareholders' Funds | 13,790 | 15,966 | 20,030 | 21,800 | 23,369 |
| Total Assets | 22,786 | 26,945 | 33,238 | 36,220 | 38,069 |
| Total Liabilities | 8,996 | 10,979 | 13,208 | 14,420 | 14,701 |
| Investments | 17,956 | 21,206 | 26,276 | 28,306 | 29,243 |

Source: Insurance Regulatory Authority

* Provisional

GB - General Business

## Policy and other key developments in the financial sector

### Banking

5.22. The Banking (Amendment) Act, 2016 commenced on 14th September 2016. It introduced the maximum interest rate chargeable for a credit facility in Kenya at no more than four per cent, the base rate set and published by CBK. Further, the Act introduced the minimum interest rate granted on a deposit held in interest earning accounts in Kenya to at least 70 per cent of the base rate. Through the Finance Act 2016, the Banking Act was amended to enhance credit information sharing with other institutions offering credit such as SACCOs, Cooperatives and public utility companies. The Banking Act was also amended to increase the monetary penalties for institutions and credit reference bureaus that violate the Banking Act or the Prudential Guidelines from KSh 5.0 million to KSh 20.0 million.

### Capital Markets

5.24. During the review period, the Capital Markets Authority (CMA) approved the Nairobi Securities Exchange (NSE) listing and trading rules for the Exchange Traded Funds (ETF). CMA also approved a project plan on the derivatives market in Kenya which will help stake holders to hedge against risks and diversify their products. An Islamic Finance Project Management Office was established to help manage Islamic Finance and Introduce Islamic Capital Market products and services.

### Pensions

5.25. In 2016, there were 20 fund managers, 29 administrators and 11 custodians registered by the Retirement Benefits Authority to offer services to registered pension schemes. The retirement benefit assets grew from KSh 800 billion in June 2015 to KSh 830 billion in June 2016. The assets and membership of the Individual Retirement Benefits Schemes grew during

the period. Membership increased by 12.5 per cent from 147,154 in June 2015 to 165,480 in June 2016. Similarly, assets increased from KSh 26.4 billion in June 2015 to KSh 31.3 billion in June 2016.

5.26. The Government introduced perpetual licensing of service providers where service providers would not be required to apply for annual licenses. Amendments were made in the Occupational Retirement Benefits Schemes and the Individual Retirement Benefits Schemes regulations to ensure protection of the trustees against victimization or discrimination while performing their duties. The Post-retirement medical scheme was also amended to allow for additional voluntary contributions to a medical fund to be accessed at retirement. This would ensure that a member could transfer a portion of the member's benefits to medical-cover provider where the member has been unable to build a post-retirement medical fund from additional contributions. Investment guidelines were amended to explicitly include Real Estate Investment Trusts (REITs), exchange traded derivatives and the separation of listed and un-listed corporate bonds and commercial paper approved by the Capital Markets Authority.

# Public Finance

06 Chapter

## Overview

The 2016/17 fiscal policy gives priority to expenditures of strategic importance to the Government's economic transformation agenda and the Second Medium Term Plan of the Vision 2030. The spending programmes aim at gradual reduction of the fiscal deficit, with a focus on improving revenue collection and enhancing public investments in infrastructure development and social spending. Overall, to improve the effectiveness and efficacy of public spending, the fiscal framework designs the development budget based on individual projects; and institutes expenditure rationalisation on slow and delayed projects, and limits adoption of new projects to those critical in addressing emerging challenges of strategic importance.

6.2. **Overall Fiscal Results:** During the review period, the National Government budget is estimated at KSh 2,496.1 billion compared to KSh 2,047.4 billion spent in 2015/16. The recurrent expenditure is estimated at KSh 1,449.6 billion, while the development expenditure is estimated at KSh 1,046.5 billion. The budget on current transfers to county governments is estimated at KSh 284.8 billion while KSh 467.5 billion is budgeted for servicing of the public debt. In the review period, total revenue inclusive of grants is estimated to grow by 24.1 per cent to KSh 1,566.5 billion. During this period, total ordinary revenue is estimated to grow by 22.6 per cent to KSh1,515.0 billion. Total tax revenue, is estimated to grow by 17.7 per cent to KSh 1,338.3 billion in 2016/17, and is expected to account for 88.3 per cent of the total revenue. In June 2016, the total stock of public debt amounted to KSh 3,203.3 billion, with domestic debt accounting for 43.9 per cent of this stock. County governments have budgeted to spend KSh 360.0 billion in 2016/17 against an estimated revenue of KSh 361.5 billion.

## National Government

6.3. Table 6.1 details the statement of operations for the National Government for the period 2012/13 to 2016/17. Total revenue inclusive of grants is estimated to grow by 24.1 per cent to KSh 1,566.5 billion, while total expense is estimated to grow by 23.6 per cent to KSh 1,968.0 billion in 2016/17. Expenditure on net acquisition of non-financial assets is expected to grow by 52.5 per cent to KSh 265.6 billion in 2016/17, compared to a significant decline recorded in 2015/16. Gross operating balance is expected to worsen from KSh 329.2 billion in 2015/16 to stand at KSh 401.5 billion in 2016/17. The net borrowing balance improved in 2015/16 to KSh 503.3 billion due to the significant decrease in acquisition of non-financial assets, and is estimated at KSh 667.1 billion in 2016/17.

**Table 6.1: Statement of National Government Operations, 2012/13 - 2016/17**

KSh Million

| | 2012/13 | 2013/14 | 2014/15 | 2015/16* | 2016/17+ |
|---|---|---|---|---|---|
| 1. Revenue[1] | 896,496.50 | 1,001,374.83 | 1,140,407.47 | 1,262,720.32 | 1,566,459.34 |
| 2. Expense (2.1+2.2) | 929,091.54 | 1,173,854.87 | 1,363,664.25 | 1,591,959.31 | 1,967,997.50 |
| 2.1 Current Expenditure | 802,472.96 | 1,004,233.89 | 1,178,256.45 | 1,372,253.58 | 1,553,664.83 |
| 2.2 Capital Transfers | 126,618.57 | 169,620.98 | 185,407.80 | 219,705.73 | 414,332.67 |
| **3. Gross Operating Balance(G.O.B) (1-2)** | **-32,595.04** | **-172,480.04** | **-223,256.78** | **-329,239.00** | **-401,538.16** |
| 4. Acquisition of Non-Financial Assets(net)[2] | 137,193.72 | 135,008.60 | 312,101.47 | 174,078.54 | 265,555.70 |
| **5. Net lending/Borrowing** (3-4) | **-169,788.76** | **-307,488.64** | **-535,358.25** | **-503,317.54** | **-667,093.87** |
| **FINANCING (6-7)** | **-246,534.17** | **-354,083.37** | **-552,127.81** | **-482,422.88** | **-483,569.20** |
| 6. Net Acquisition of financial assets (6.1) | 32,542.29 | -21,189.02 | 55,045.81 | 180,977.17 | 22,749.90 |
| 6.1. Domestic | 32,542.29 | -21,189.02 | 55,045.81 | 180,977.17 | 22,749.90 |
| 7. Net Incurrence of liabilities (7.1+7.2) | 279,076.46 | 332,894.35 | 607,173.62 | 663,400.05 | 506,319.10 |
| 7.1. Domestic | 169,776.28 | 165,338.55 | 127,892.59 | 358,414.55 | 80,026.86 |
| 7.2. Foreign | 109,300.18 | 167,555.79 | 479,281.03 | 304,985.50 | 426,292.24 |
| **MEMORANDUM ITEMS:** | | | | | |
| 8. Public debt redemption | 162,745.13 | 213,953.00 | 232,950.71 | 222,896.68 | 216,743.99 |
| 8.1. External | 34,336.70 | 85,253.00 | 82,949.81 | 35,633.36 | 44,639.76 |
| 8.2. Internal | 128,408.43 | 128,700.00 | 150,000.90 | 187,263.32 | 172,104.23 |

* Provisional

+Revised estimates

[1] includes grants

[2]Acquisition of non financial assets(net) equals acquisition of non financial assets minus gross disposal of non financial assets

6.4. Table 6.2 presents key fiscal ratios for the period 2012/13 to 2016/17. Gross Operating Balance as a percentage of both gross revenue and acquisition of non-financial assets is estimated to improve in the review period. Net borrowing position as a percentage of revenue and total expenditure is estimated to register a marginal increase in 2016/17. In the review period, total external loans and grants to acquisition of non-financial assets ratio is estimated to decrease on account of variations in foreign financing of the development budget. The Net Borrowing to GDP ratio is estimated to worsen in the review period.

**Table 6.2: Analysis of Key Fiscal Ratios, 2012/13 - 2016/17**

| | | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 |
|---|---|---|---|---|---|---|
| 1 | Gross operating balance as a % of Revenue | -3.64 | -17.22 | -19.58 | -26.07 | -25.63 |
| 2 | Gross operating balance as a % of Acquisition of Non financial assets (net) | -23.76 | -127.75 | -71.53 | -189.13 | -151.21 |
| 3 | Ratio of Acquisition of Non financial assets (net) to Current Expenditure | 17.10 | 13.44 | 26.49 | 12.69 | 17.09 |
| 4 | Net lending/Borrowing as % of Revenue | -18.94 | -30.71 | -46.94 | -39.86 | -42.59 |
| 5 | Net lending/Borrowing as % of Total Expenditure | -13.71 | -20.10 | -27.78 | -24.82 | -26.97 |
| 6 | External Grants and Loans as % of Acquisition of Non financial assets (net) | 94.97 | 117.89 | 104.03 | 192.20 | 179.91 |
| 7 | Net Short-Term Borrowing as % of Acquisition of nonfinancial assets (net) | 85.98 | -0.64 | 4.10 | 143.50 | 2.44 |
| 8 | Revenue as % of GDP at Current Market Prices | 18.07 | 19.70 | 19.63 | 18.82 | 23.35 |
| 9 | Total Government Expenditure as % of GDP at Current Market Prices | 27.60 | 30.30 | 33.58 | 30.51 | 37.20 |
| 10 | Net lending/Borrowing as % of GDP at Current Market Prices | -5.63 | -6.30 | -9.22 | -7.50 | -9.94 |

6.5. Table 6.3 presents comparison between budget estimates and actual out-turns of revenue and expenditure for the National Government for 2013/14 to 2015/16, and revised budget estimates for 2016/17. Actual revenue collected in 2015/16 accounted for 93.2 per cent of the targeted revenue. Over the same period, absorption of recurrent expenditure remained high while the development expenditure reached 75.8 per cent of the printed estimates. Similarly, the proportion of external financing amounted to 74.6 per cent of the budgeted amount in this period.

**Table 6.3: Comparison of National Government Budget Estimates with Actual Out-turns, 2013/14 - 2016/17**

KSh Million

| | 2013/14 | | | 2014/15 | | |
|---|---|---|---|---|---|---|
| | Budget | Actual | Difference | Budget | Actual | Difference |
| Total Ordinary Revenue | 1,006,862.03 | 974,417.72 | -32,444.30 | 1,166,372.80 | 1,112,289.98 | -54,082.82 |
| Recurrent Expenditure[1] | 1,043,902.38 | 1,021,922.89 | -21,979.49 | 1,069,204.86 | 1,147,969.00 | 78,764.14 |
| Recurrent Balance | -37,040.35 | -40,929.74 | -3,889.39 | 97,167.94 | -35,679.02 | -132,846.96 |
| Development Expenditure | 635,177.67 | 511,070.16 | -124,107.51 | 855,681.01 | 802,740.06 | -52,940.95 |
| External Financing (Net)[2] | 184,949.00 | 194,512.90 | -9,563.90 | 448,581.01 | 507,398.52 | -58,817.51 |
| Balance for Domestic Financing (Net) | -487,269.02 | -357,487.00 | 110,654.22 | -309,932.06 | -331,020.56 | -138,723.52 |
| | 2015/16* | | | 2016/17+ | | |
| | Budget | Actual | Difference | Printed Budget | Revised Budget | Difference |
| Total Ordinary Revenue | 1,325,641.35 | 1,235,702.30 | -89,939.05 | 1,515,463.92 | 1,514,988.77 | -475.15 |
| Recurrent Expenditure[1] | 1,242,340.75 | 1,300,246.89 | 57,906.15 | 1,212,741.52 | 1,449,618.34 | 236,876.82 |
| Recurrent Balance | 83,300.60 | -64,544.60 | -147,845.20 | 302,722.40 | 65,370.42 | -237,351.98 |
| Development Expenditure | 985,646.89 | 747,104.86 | -238,542.03 | 729,812.19 | 1,046,489.60 | 316,677.41 |
| External Financing (Net)[2] | 448,621.00 | 334,582.19 | 114,038.81 | 382,669.67 | 477,762.82 | -95,093.15 |
| Balance for Domestic Financing (Net) | -453,725.29 | -477,067.27 | 204,735.65 | -44,420.12 | -503,356.35 | -649,122.54 |

Source: The National Treasury

* Provisional

+ Revised budget estimates

[1] Recurrent expenditure consists of current expenditure , Acquisition of Non financial assets (net) and Consolidated Fund Services from the Recurrent- Estimates

[2] Includes external grants

6.6. The gross receipts on recurrent account of the National Government for 2012/13 to 2016/17 are presented in the Table 6.4. Total ordinary revenue is estimated to grow by 22.6 per cent to KSh 1,515.0 billion in 2016/17 compared to a growth of 11.1 per cent in 2015/16. In the review period, total tax revenue is expected to grow by 17.7 per cent to KSh 1,338.3 billion, compared to 11.3 per cent growth in the previous period, and account for 88.3 per cent of the total ordinary revenue. In 2016/17, the income tax and Value Added Tax (VAT) categories are estimated to account for 49.5 per cent and 25.3 per cent of the total tax revenue, respectively. The income tax and VAT are expected to register 16.3 and 17.1 per cent growths, respectively, in the review period. Excise taxes category is expected to register a higher growth of 27.8 per cent in 2016/17 compared to a growth of 20.4 per cent in the previous period. The growth in tax revenue is expected to be supported by the Government's on-going reforms of various tax policies, revenue administration systems and the re-introduction of withholding VAT.

**Table 6.4: National Government Gross Receipts on Recurrent Account, 2012/13 - 2016/17**

KSh Million

| | 2012/13 | 2013/14 | 2014/15 | 2015/16* | 2016/17+ |
|---|---|---|---|---|---|
| **Taxes on income, profits and capital gains** | **373,086.04** | **449,590.07** | **509,159.84** | **569,811.18** | **662,854.07** |
| Income tax from individuals (P.A.Y.E)[1] | 199,847.16 | 249,872.80 | 279,795.65 | 286,166.16 | 343,772.88 |
| Income tax from corporations (other income tax) | 173,238.88 | 199,717.27 | 228,785.25 | 279,834.49 | 316,030.12 |
| Capital gains taxes | .. | .. | 578.95 | 3,810.54 | 3,051.08 |
| **Taxes on property** | **653.73** | **0.00** | **0.00** | **88.26** | **100.00** |
| Immovable property | 169.58 | 0.00 | 0.00 | 0.00 | 0.00 |
| Financial and capital transactions | 484.15 | 0.00 | 0.00 | 88.26 | 100.00 |
| **Value Added Tax (VAT)** | **184,916.31** | **232,630.32** | **259,685.20** | **289,213.47** | **338,680.18** |
| VAT on domestic goods and services | 90,713.83 | 107,737.35 | 127,904.57 | 160,389.01 | 191,149.88 |
| VAT on imported goods and services | 94,202.48 | 124,892.97 | 131,780.63 | 128,824.45 | 147,530.31 |
| **Taxes on other goods and services** | **114,821.86** | **125,363.91** | **140,243.32** | **162,593.81** | **205,016.46** |
| Excise taxes | 85,660.29 | 102,029.10 | 115,871.72 | 139,540.34 | 178,366.69 |
| Taxes on use of goods and on permission to use the goods or to perform services and activities | 2,458.44 | 4,910.49 | 4,650.51 | 5,780.10 | 7,751.18 |
| Taxes on goods and services collected as AIA | 26,703.12 | 18,424.32 | 19,721.08 | 17,273.37 | 18,898.59 |
| **Taxes on international trade transactions** | **81,812.59** | **94,232.51** | **101,040.90** | **104,433.27** | **119,643.24** |
| Custom duties | 57,649.68 | 67,554.64 | 74,047.72 | 79,187.93 | 90,397.91 |
| Other taxes on international trade and transactions | 24,162.91 | 26,677.87 | 26,993.18 | 25,245.33 | 29,245.33 |
| **Other taxes not elsewhere classified** | **8,537.81** | **9,986.89** | **11,467.76** | **10,423.54** | **11,990.10** |
| **TOTAL TAX REVENUE** | **763,828.34** | **911,803.70** | **1,021,597.03** | **1,136,563.52** | **1,338,284.06** |
| Social security contributions | 584.48 | 203.85 | 123.45 | 129.63 | 147.49 |
| Property income | 18,683.12 | 10,767.53 | 15,290.28 | 21,324.81 | 33,306.33 |
| Sale of goods and services | 11,735.49 | 2,678.84 | 6,158.28 | 6,022.75 | 6,576.57 |
| Fines penalties and forfeitures | 1,465.50 | 1,442.62 | 2,490.95 | 2,278.34 | 2,573.80 |
| Repayments from domestic lending and on-lending | 2,183.55 | 1,618.36 | 2,897.37 | 2,578.66 | 3,956.35 |
| Ministerial Appropriation in Aid | 67,781.00 | 35,707.06 | 56,705.93 | 62,398.11 | 125,018.74 |
| Other receipts not elsewhere classified | 9,245.38 | 10,195.77 | 7,026.70 | 4,406.48 | 5,125.43 |
| **TOTAL NON-TAX REVENUE** | **111,678.52** | **62,614.02** | **90,692.95** | **99,138.78** | **176,704.70** |
| **TOTAL ORDINARY REVENUE** | **875,506.86** | **974,417.72** | **1,112,289.98** | **1,235,702.30** | **1,514,988.77** |

Source: The National Treasury

* Provisional

+ Revised Estimates

[1]P.A.Y.E - Pay As You Earn

.. Data not available

6.7. Table 6.5 details the import duty levied on selected commodities for the period 2012 to 2016. In 2016, the import duty collected stood at KSh 79.5 billion, representing a growth of 11.7 per cent. Import duty collected from: food drinks and tobacco; transport equipment; machinery and metals categories, accounted for 66.3 per cent of the total duty collected. Import duty from metals, basic materials, textiles, machinery and, food drinks and tobacco, registered significant growths of 61.7, 40.2, 39.7, 34.4 and 14.7 per cent, respectively in 2016. On the other hand, import duty from transport equipment category decreased by 15.8 per cent during the same period.

**Table 6.5: Import Duty Collections for Selected Items, 2012 - 2016**

KSh Million

| END-USE CATEGORY | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Food, drinks and tobacco | 9,667.38 | 11,207.96 | 13,823.42 | 16,163.83 | 18,540.89 |
| Basic materials | 2,930.71 | 2,887.86 | 3,312.82 | 3,710.74 | 5,203.49 |
| Fuels | 1,201.96 | 1,017.90 | 1,338.13 | 1,413.23 | 1,195.70 |
| Chemicals | 2,685.71 | 2,779.13 | 3,508.57 | 3,970.02 | 3,862.54 |
| Textiles | 1,564.91 | 1,607.42 | 1,814.36 | 1,638.48 | 2,288.59 |
| Semi-manufactures[1] | 4,187.87 | 4,412.02 | 4,615.17 | 4,772.37 | 4,994.29 |
| Metals | 3,795.67 | 3,679.55 | 5,116.45 | 5,315.61 | 8,594.05 |
| Transport Equipment | 12,186.21 | 15,148.74 | 17,576.28 | 19,310.19 | 16,252.85 |
| Machinery | 6,850.25 | 6,428.76 | 7,123.38 | 6,934.12 | 9,319.10 |
| Miscellaneous commodities | 5,317.13 | 6,062.88 | 7,179.58 | 7,924.10 | 9,246.60 |
| **TOTAL** | **50,387.79** | **55,232.22** | **65,408.16** | **71,152.69** | **79,498.09** |

Source: Kenya Revenue Authority

* Provisional

[1] Excludes non-metallic mineral manufactures

6.8. Table 6.6 presents the excise revenue collected from selected commodities and services from 2012 to 2016. Total revenue registered a 28.2 per cent growth from KSh 62.7 billion in 2015 to KSh 80.4 billion in 2016. This increase is partly attributed to significant increases in the excise revenue from beer; wines and spirits; and financial transactions, which accounted for over 75.0 per cent of the growth. The airtime and financial transactions categories recorded substantial growths and amounted to KSh 15.5 billion and KSh 11.3 billion, respectively. Total excise revenue from beer and, wines and spirits categories stood at KSh 35.1 billion in 2016, which was a 36.8 per cent growth from KSh 25.7 billion realized in 2015.

**Table 6.6: Excise Revenue by Selected Commodities and Services, 2012 - 2016**

KSh Million

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Beer | 16,544.52 | 16,886.17 | 18,996.80 | 19,525.74 | 24,443.46 |
| Wines and Spirits | 2,413.40 | 3,036.86 | 4,638.32 | 6,148.36 | 10,681.38 |
| Mineral Water, Soft Drinks and Juices | 1,776.02 | 2,252.14 | 2,474.05 | 2,514.64 | 3,318.56 |
| Cigarettes | 9,527.65 | 10,199.78 | 10,281.88 | 12,230.19 | 12,440.94 |
| Airtime | - | - | - | 14,138.80 | 15,540.89 |
| Financial Transactions | - | - | - | 7,222.07 | 11,312.92 |
| Other commodities[1] | 1,788.44 | 787.01 | 2,719.59 | 902.15 | 2,642.24 |
| **TOTAL** | 32,050.03 | 33,161.96 | 36,881.95 | 62,681.94 | 80,380.39 |

Source: Kenya Revenue Authority

* Provisional

[1] Includes revenue from jewelry, cosmetics and locally assembled vehicles

.. Data not available

6.9. Details of financing of investment in non-financial assets are presented in Table 6.7. Gross financing is expected to decline to KSh 557.8 billion in 2016/17 from KSh 693.0 billion in 2015/16. External loan disbursements are estimated to grow by 39.8 per cent to KSh 426.3 billion in 2016/17, while external grants are estimated to grow significantly by over 70.0 per cent to KSh 51.5 billion over the same period. Total domestic borrowing, comprising long-term and short-term, more than doubled to KSh 358.4 billion in 2015/16, from KSh 127.9 billion in 2014/15. In the first eight months of 2016/17 financial year, the long-term and short-term domestic borrowing amounted to KSh 73.6 billion and KSh 6.4 billion, respectively.

**Table 6.7: National Government Financing of Non-Financial Assets, 2012/13 - 2016/17**

KSh Million

| | 2012/13 | 2013/14 | 2014/15 | 2015/16* | 2016/17+ |
|---|---|---|---|---|---|
| **EXPENDITURE:** | | | | | |
| Acquisition of Non financial Assets (Net) .. | 137,193.72 | 135,008.60 | 312,101.47 | 174,078.54 | 265,555.70 |
| **TOTAL** | **137,193.72** | **135,008.60** | **312,101.47** | **174,078.54** | **265,555.70** |
| **FINANCING:** | **300,066.10** | **359,851.45** | **635,291.11** | **692,996.73** | **557,789.68** |
| External Grants .. .. .. .. .. ... ... ... ... ... ... | 20,989.64 | 26,957.11 | 28,117.49 | 29,596.68 | 51,470.57 |
| LONG TERM BORROWING: | **161,118.79** | **333,764.46** | **594,392.31** | **413,598.42** | **499,847.03** |
| External Loans .. .. .. ... ... ... ... ... ... ... .. | 109,300.18 | 132,204.19 | 296,574.25 | 304,985.50 | 426,292.24 |
| International Sovereign Bond ... ... ... ... | 0.00 | 35,351.60 | 182,706.78 | 0.00 | 0.00 |
| Long-Term Domestic Borrowing (Net) ... | 51,818.61 | 166,208.66 | 115,111.28 | 108,612.91 | 73,554.78 |
| SHORT TERM BORROWING: | **117,957.67** | **-870.11** | **12,781.31** | **249,801.64** | **6,472.08** |
| Treasury Bills (Net) .. .. .. .. ... ... ... ... ... .. | 124,330.34 | 32,811.90 | 12,947.02 | 242,092.15 | 24,678.33 |
| Other Short-Term Borrowing (Net) ... ... . | -6,372.67 | -33,682.01 | -165.71 | 7,709.49 | -18,206.26 |
| CHANGE IN CASH BALANCES[1]: Increase=(-) ... .. | -162,872.38 | -224,842.85 | -323,189.64 | -518,918.19 | -292,233.97 |
| **TOTAL** | **137,193.72** | **135,008.60** | **312,101.47** | **174,078.54** | **265,555.70** |

**Source:** Central Bank of Kenya and The National Treasury

* Provisional.

\+ Revised estimates

[1] Balancing item

6.10. Table 6.8 presents the functional classification of National Government outlays for 2013/14 to 2016/17. The total estimated outlays for 2016/17 is estimated to grow by 21.9 per cent to KSh 2,496.1 billion compared to a 5.0 per cent growth recorded in 2015/16. In 2016/17, the development expenditure is estimated to rise by 40.1 per cent to KSh 1,046.5 billion, while the recurrent expenditure is estimated to grow by 11.5 per cent to KSh 1,449.6 billion. The development expenditure growth pattern is attributable to the continuing fiscal measures taken to reduce the growth of recurrent spending and give priority to the finalization of ongoing development projects. Expenditures on transport, fuel and energy, and public order and safety functions, are expected to account for 15.2, 3.8 and 5.9 per cent of the total outlays. This is mainly due to financing of: completion of the Standard Gauge Railway (SGR); construction and rehabilitation of roads and ports; enhanced electricity generation and connection; and modernization of the security sector.

6.11. Public debt transactions, transfers to county governments and general public services are expected to account for 18.7, 11.4 and 11.0 per cent of the total outlays in 2016/17. During the review period, the fiscal plan continues to re-orient expenditure outlays towards infrastructure development and social spending. In the same period, spending on education is estimated to grow by 9.2 per cent, and account for 13.7 per cent of the total outlays.

## Table 6.8: Classification of National Government Expenditure by Functions of Government (COFOG), 2013/14-2016/17

KSh Million

| | 2013/14 | | | 2014/15 | | | 2015/16* | | | 2016/17+ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Recurrent Account | Development Account | Total | Recurrent Account | Development Account | Total | Recurrent Account | Development Account | Total | Recurrent Account | Development Account | Total |
| **General public services** | 115,040.20 | 32,013.47 | **147,053.68** | 94,317.30 | 37,822.98 | **132,140.28** | 143,067.52 | 73,842.45 | **216,909.96** | 166,711.53 | 107,586.26 | **274,297.78** |
| **Public debt transactions** | 345,779.26 | 0.00 | **345,779.26** | 400,323.71 | 0.00 | **400,323.71** | 438,225.22 | 0.00 | **438,225.22** | 467,531.23 | 0.00 | **467,531.23** |
| **Transfers of general character betw. levels of govt.** | 0.00 | 210,000.00 | **210,000.00** | 0.00 | 229,263.65 | **229,263.65** | 0.00 | 264,038.64 | **264,038.64** | 0.00 | 284,784.60 | **284,784.60** |
| **Defense** | 93,756.73 | 0.00 | **93,756.73** | 97,922.50 | 0.00 | **97,922.50** | 140,588.80 | 0.00 | **140,588.80** | 129,038.93 | 0.00 | **129,038.93** |
| **Public order and safety** | 120,082.06 | 6,258.11 | **126,340.16** | 130,774.44 | 11,020.28 | **141,794.72** | 110,563.98 | 15,709.62 | **126,273.60** | 127,199.06 | 20,682.38 | **147,881.45** |
| **Economic affairs** | **54,434.36** | **193,866.16** | **248,300.52** | **59,226.58** | **385,137.49** | **444,364.07** | **63,523.49** | **305,979.93** | **369,503.41** | **96,871.87** | **489,511.65** | **586,383.52** |
| General economic, commercial & labour affairs | 9,534.68 | 21,425.30 | **30,959.98** | 5,960.57 | 25,625.29 | **31,585.87** | 12,068.92 | 50,016.94 | **62,085.86** | 14,966.29 | 8,434.91 | **23,401.20** |
| Agriculture, forestry, fishing, and hunting | 14,193.65 | 27,141.58 | **41,335.23** | 16,490.69 | 33,951.54 | **50,442.23** | 9,956.39 | 21,587.48 | **31,543.87** | 15,861.71 | 33,408.45 | **49,270.15** |
| Fuel and energy | 1,594.06 | 52,536.71 | **54,130.77** | 2,016.40 | 62,673.56 | **64,689.96** | 1,707.49 | 71,506.88 | **73,214.37** | 2,256.17 | 92,499.13 | **94,755.30** |
| Mining, manufacturing and construction | 473.82 | 542.89 | **1,016.71** | 747.72 | 1,097.12 | **1,844.84** | 688.50 | 531.89 | **1,220.39** | 1,173.23 | 980.13 | **2,153.37** |
| Transport | 20,965.06 | 84,500.73 | **105,465.79** | 26,326.48 | 253,691.54 | **280,018.03** | 35,423.80 | 146,140.05 | **181,563.85** | 56,121.98 | 324,268.71 | **380,390.69** |
| Communication | 2,204.82 | 5,287.48 | **7,492.30** | 2,436.71 | 5,389.04 | **7,825.75** | 2,126.28 | 12,317.40 | **14,443.68** | 4,084.20 | 26,328.32 | **30,412.52** |
| Other industries | 5,468.29 | 2,431.47 | **7,899.76** | 5,248.00 | 2,709.39 | **7,957.40** | 1,552.11 | 3,879.29 | **5,431.40** | 2,408.27 | 3,592.00 | **6,000.27** |
| **Environmental protection** | **2,627.94** | **18,326.67** | **20,954.60** | 10,228.61 | 7,005.85 | **17,234.46** | 13,622.27 | 4,482.70 | **18,104.97** | 15,357.35 | 3,846.87 | **19,204.22** |
| **Housing and community amenities** | 1,845.30 | 8,715.98 | **10,561.28** | 3,786.11 | 71,463.92 | **75,250.03** | 5,887.59 | 37,296.89 | **43,184.48** | 12,571.37 | 63,864.06 | **76,435.43** |
| **Health** | **21,574.67** | **16,622.62** | **38,197.29** | **28,307.73** | **21,473.95** | **49,781.69** | **19,504.30** | **15,150.34** | **34,654.64** | **34,144.02** | **35,083.23** | **69,227.25** |
| Outpatient services | 729.93 | 5,288.80 | **6,018.74** | 1,531.53 | 5,251.48 | **6,783.01** | 1,464.21 | 4,978.63 | **6,442.84** | 1,511.40 | 12,340.32 | **13,851.72** |
| Hospital services | 16,776.14 | 2,660.61 | **19,436.75** | 13,766.20 | 802.00 | **14,568.20** | 11,897.10 | 5,476.58 | **17,373.68** | 15,817.34 | 6,104.25 | **21,921.58** |
| Public health services | 1,163.04 | 8,465.28 | **9,628.32** | 3,651.59 | 6,967.62 | **10,619.21** | 1,723.59 | 4,428.18 | **6,151.78** | 7,768.89 | 6,967.16 | **14,736.05** |
| Health expenditure not elsewhere classified | 2,905.56 | 207.92 | **3,113.47** | 9,358.42 | 8,452.85 | **17,811.27** | 4,419.39 | 266.95 | **4,686.34** | 9,046.39 | 9,671.51 | **18,717.90** |
| **Recreation, culture and religion** | 582.80 | 243.59 | **826.39** | 2,580.50 | 1,379.01 | **3,959.50** | 4,361.86 | 2,221.45 | **6,583.31** | 6,395.58 | 2,506.32 | **8,901.90** |
| **Education** | **232,899.26** | **20,732.94** | **253,632.21** | **281,802.51** | **22,446.22** | **304,248.74** | **298,768.91** | **14,608.41** | **313,377.32** | **318,179.36** | **24,168.93** | **342,348.29** |
| Administration | 11,017.51 | 5,050.26 | **16,067.77** | 16,063.46 | 6,732.61 | **22,796.07** | 11,236.48 | 2,735.11 | **13,971.58** | 17,770.30 | 574.99 | **18,345.29** |
| Pre-primary and primary education | 92,768.76 | 854.45 | **93,623.21** | 113,348.52 | 691.53 | **114,040.05** | 117,839.24 | 754.03 | **118,593.27** | 136,135.60 | 2,050.13 | **138,185.73** |
| Secondary education | 72,785.55 | 2,116.93 | **74,902.48** | 84,947.43 | 2,242.17 | **87,189.60** | 96,680.34 | 1,523.93 | **98,204.28** | 88,466.32 | 8,182.52 | **96,648.84** |
| Tertiary education | 54,672.47 | 9,559.61 | **64,232.07** | 65,783.00 | 12,599.52 | **78,382.52** | 70,526.79 | 5,271.38 | **75,798.18** | 74,639.30 | 13,316.89 | **87,956.19** |
| Education expenditure not elsewhere classified | 1,654.98 | 3,151.70 | **4,806.68** | 1,660.10 | 180.40 | **1,840.50** | 2,486.05 | 4,323.96 | **6,810.02** | 1,167.84 | 44.40 | **1,212.24** |
| **Social protection** | 33,300.30 | 4,290.63 | **37,590.93** | 42,511.22 | 14,714.86 | **57,226.09** | 62,132.96 | 13,774.43 | **75,907.39** | 75,618.04 | 14,455.30 | **90,073.34** |
| **TOTAL OUTLAYS[1]** | **1,021,922.89** | **511,070.16** | **1,532,993.05** | **1,151,781.22** | **801,728.22** | **1,953,509.44** | **1,300,246.89** | **747,104.86** | **2,047,351.75** | **1,449,618.34** | **1,046,489.60** | **2,496,107.94** |

Source: The National Treasury

* Provisional

\+ Revised estimates

[1]Total in this Table vary with that in Table 6.9 by disposal of non financial assets and disposal of financial assets

6.12. Details of National Government expenditure by economic classification for 2012/13 to 2016/17 are given in Table 6.9. The approved expenditure for 2016/17 amounts to KSh 2,473.0 billion, a growth of 21.9 per cent, from KSh 2,028.2 billion in 2015/16. Total expense, inclusive of social benefits and capital grants, is estimated to reach KSh 1,968.0 billion, and account for 79.6 per cent of the total expenditure outlays. Compensation of employees and use of goods and services, are jointly estimated to reach KSh 672.7 billion in 2016/17, increasing by 10.3 per cent from KSh 609.8 billion in 2015/16. During the review period, compensation of employees is estimated to account for 63.9 per cent of the total consumption of goods and services. In the review period, current grants to county governments are estimated to rise by 7.9 per cent to KSh 284.8 billion, while the rest of the current grants are estimated to increase by 26.5 per cent to KSh 237.3 billion. In 2016/17, interest on domestic and foreign debt is expected to grow by 16.5 per cent to KSh 250.8 billion and account for 10.1 per cent of the budget.

6.13. Acquisition of non-financial assets expense is estimated to increase by 52.5 per cent to KSh 265.6 billion in the review period. This is mainly due to increased expenditure on building and structures. Capital grants to State Owned Enterprises (SOEs) are estimated to rise to KSh 414.3 billion, in the review period. In the acquisition of non-financial assets category, the building and structures; and machinery and equipment components, are expected to account for 9.4 and 2.0 per cent of the total expenditure, respectively, in 2016/17.

**Table 6.9: Economic Analysis of National Government Expenditure, 2012/13 - 2016/17**

KSh Million

| | 2012/13 | 2013/14 | 2014/15 | 2015/16* | 2016/17+ |
|---|---|---|---|---|---|
| **EXPENSE** | | | | | |
| Consumption expenditure on goods and services: | | | | | |
| Compensation of employees | 323,453.14 | 338,086.80 | 362,713.27 | 410,807.04 | 429,890.90 |
| Use of Goods and Services | 141,320.28 | 131,929.13 | 174,331.96 | 198,947.90 | 242,814.37 |
| **Total** | **464,773.41** | **470,015.93** | **537,045.23** | **609,754.94** | **672,705.26** |
| Subsidies | 32,026.74 | 22,475.46 | 30,583.64 | 30,324.21 | 29,766.49 |
| Interest: | 92,950.63 | 131,826.26 | 167,372.99 | 215,328.54 | 250,787.24 |
| Domestic | 82,144.68 | 119,065.03 | 137,635.27 | 172,857.04 | 197,266.82 |
| Foreign | 10,805.96 | 12,761.23 | 29,737.73 | 42,471.50 | 53,520.42 |
| **Grants to:** | | | | | |
| International organisations | 1,968.45 | 2,919.91 | 2,807.70 | 2,744.44 | 5,857.99 |
| General Government units | 166,536.06 | 123,653.05 | 163,618.06 | 174,424.02 | 227,981.66 |
| County Governments | 0.00 | 210,000.05 | 229,263.65 | 264,038.64 | 284,784.60 |
| Other Grants | 9,994.84 | 9,375.04 | 10,108.08 | 10,398.21 | 3,444.12 |
| **Total grants** | **178,499.36** | **345,948.04** | **405,797.48** | **451,605.31** | **522,068.37** |
| Social benefits | 29,116.10 | 29,221.49 | 33,704.74 | 58,120.99 | 72,730.92 |
| Other expense | 5,106.71 | 4,746.71 | 3,752.36 | 7,119.59 | 5,606.55 |
| **Total current expenditure** | **802,472.96** | **1,004,233.89** | **1,178,256.45** | **1,372,253.58** | **1,553,664.83** |
| Capital Grants (TRANSFERS) | 126,618.57 | 169,620.98 | 185,407.80 | 219,705.73 | 414,332.67 |
| **1 Total Expense** | **929,091.54** | **1,173,854.87** | **1,363,664.25** | **1,591,959.31** | **1,967,997.50** |
| **2 Acquisition of Non Financial Assets(net)** | **137,193.72** | **135,008.60** | **312,101.47** | **174,078.54** | **265,555.70** |
| Building and structures | 109,467.67 | 107,939.30 | 295,659.70 | 151,974.19 | 231,938.48 |
| Machinery and equipment | 26,717.60 | 25,017.81 | 32,780.25 | 31,533.32 | 48,308.10 |
| Inventories | 2,743.39 | 3,917.78 | 5,714.44 | 1,735.19 | 2,527.77 |
| Non- produced assets & Land | 791.47 | 1,113.88 | 1,638.40 | 8,005.05 | 5,842.69 |
| Less Disposal of Non financial assets | -2,526.41 | -2,980.17 | -23,691.30 | -19,169.21 | -23,061.34 |
| Equity Participation and on-lending | 9,839.56 | 7,196.46 | 18,301.32 | 39,248.00 | 22,749.90 |
| **3 PUBLIC DEBT REDEMPTION** | 162,745.13 | 213,953.00 | 232,950.71 | 222,896.68 | 216,743.99 |
| **4 Total Expenditure (1+2+3)** | **1,238,869.95** | **1,530,012.93** | **1,927,017.76** | **2,028,182.54** | **2,473,047.10** |

Source: The National Treasury

* Provisional.

+ Revised Budget Estimates

**General Government**

6.14. Table 6.10 presents the consolidated statement of operations for the General Government for the 2015/16. Total gross revenue received by General Government amounted to KSh 1,512.5 billion, with tax revenue accounting for 75.8 per cent of the total. In the other revenue category, sale of goods and services, and property income, accounted for 7.9 and 3.0 per cent of the total revenue, at KSh 119.1 billion and KSh 45.9 billion, respectively. Total compensation of employees and Use of goods and services amounted to KSh 622.3 billion and KSh 415.2 billion, respectively. The two categories accounted for 64.2 per cent of total expense, while interest, grants and social benefit expenses accounted for 13.9, 11.8 and 5.4 per cent, respectively, in the review period. The General Government spent KSh 405.4 billion in net acquisition of non-financial assets, of which building and structures stood at KSh 353.5 billion and accounted for 87.2 per cent. Further, machinery and equipment accounted for 11.5 per cent of the total expendetiture on non-financial assets. In the review period, the General Government net borrowing stood at KSh 507.9 billion, mainly driven by operations of the National Government and the extra-budgetary units.

## Table 6.10: General Government Statement of Operations, 2015/16

KSh Million

| | Central Government | | | Consolidation | Total | County Government | Consolidation | General Government |
|---|---|---|---|---|---|---|---|---|
| | National Government | Extra-budgetary Units | Social Security Funds | | | | | |
| **Revenue** | **1,262,720.32** | **374,192.43** | **56,544.22** | **-215,993.08** | **1,477,463.88** | **311,420.76** | **-276,373.03** | **1,512,511.60** |
| Tax revenue | 1,136,563.52 | 0.00 | | | **1,136,563.52** | 10,355.99 | | **1,146,919.50** |
| Social contributions | 129.63 | 0.00 | 41,422.08 | | **41,551.71** | | | **41,551.71** |
| **Grants** | | | | | | | | |
| International organisation | 29,596.68 | 0.00 | 0.00 | | **29,596.68** | | | **29,596.68** |
| Other general government | | | | | | | | |
| Current | | 125,225.89 | | -125,225.89 | **0.00** | 276,373.03 | -276,373.03 | **0.00** |
| Capital | | 90,767.19 | | -90,767.19 | **0.00** | | | **0.00** |
| Other revenue | **96,430.49** | **158,199.34** | **15,122.14** | | **269,751.97** | **24,691.74** | | **294,443.71** |
| Sale of Goods & Services | 6,022.75 | 90,737.84 | | | **96,760.58** | 22,318.65 | | **119,079.23** |
| Property income | 21,324.81 | 7,568.16 | 14,629.06 | | **43,522.03** | 2,351.86 | | **45,873.89** |
| Ministerial AIA | 62,398.11 | | | | **62,398.11** | | | **62,398.11** |
| Fines, Penalties &Forfeits | 2,278.34 | 10,144.11 | | | **12,422.45** | 21.23 | | **12,443.68** |
| Other transfers NEC | 4,406.48 | 49,749.23 | 493.08 | | **54,648.79** | | | **54,648.79** |
| **Expense** | **1,604,293.70** | **259,232.75** | **37,663.83** | **-215,993.08** | **1,685,197.21** | **206,209.07** | **-276,373.03** | **1,615,033.25** |
| Compensation of employees | 410,807.04 | 88,057.23 | 8,460.98 | | **507,325.24** | 114,943.30 | | **622,268.55** |
| Use of goods and services | 198,947.90 | 142,721.35 | 6,126.64 | | **347,795.90** | 67,370.85 | | **415,166.74** |
| CFC/Depreciation | 0.00 | 13,343.55 | 570.81 | | **13,914.36** | 0.00 | | **13,914.36** |
| Interest | 215,328.54 | 2,599.46 | 237.87 | | **218,165.87** | 7,121.41 | | **225,287.27** |
| Subsidies | 30,324.21 | 11,541.88 | | | **41,866.09** | 701.93 | | **42,568.02** |
| **Grants** | | | | | | | | |
| International Organisation | 2,744.44 | 0.00 | | | **2,744.44** | | | **2,744.44** |
| Other General Government | | | | | | | | |
| Current | 184,822.24 | | | -125,225.89 | **59,596.34** | | | **59,596.34** |
| Capital | 219,705.73 | | | -90,767.19 | **128,938.55** | | | **128,938.55** |
| County governments | 276,373.03 | | | | **276,373.03** | | -276,373.03 | **0.00** |
| Social benefits | 58,120.99 | 7.04 | 22,034.71 | | **80,162.73** | 7,812.17 | | **87,974.91** |
| Other expense | 7,119.59 | 962.25 | 232.83 | | **8,314.67** | 8,259.41 | | **16,574.08** |
| **Net Operating Balance** | **-341,573.39** | **114,959.68** | **18,880.38** | **0.00** | **-207,733.33** | **105,211.68** | **0.00** | **-102,521.65** |
| **Acquisition of Non-Financial Assets** | **174,078.54** | **132,884.21** | **813.02** | | **307,775.76** | **97,579.77** | | **405,355.54** |
| Building and Structures | 151,974.19 | 122,516.07 | 305.99 | | **274,796.24** | 78,728.22 | | 353,524.46 |
| Machinery and equipment | 31,533.32 | 678.92 | 502.31 | | **32,714.55** | 13,718.62 | | 46,433.17 |
| Inventories | 1,735.19 | 2,946.61 | 4.72 | | **4,686.52** | 1,498.95 | | 6,185.47 |
| Non-produced Assets and Land | 8,005.05 | 6,742.61 | | | **14,747.66** | 3,633.99 | | 18,381.65 |
| Disposal of non-financial assets | -19,169.21 | | | | **-19,169.21** | | | -19,169.21 |
| **Net lending/Borrowing** | **-515,651.93** | **-17,924.53** | **18,067.37** | **0.00** | **-515,509.09** | **7,631.91** | **0.00** | **-507,877.19** |
| **Net Financial Worth** | **-482,422.88** | **3,710.89** | **17,645.00** | **0.00** | **-461,067.00** | **24,872.94** | **0.00** | **-436,194.06** |
| **Transactions in Financial assets** | **180,977.17** | **37,175.52** | **18,307.83** | | **236,460.52** | **28,157.62** | **0.00** | **264,618.14** |
| Currency and deposits | 141,729.17 | 17,864.35 | 7,111.52 | | **166,705.04** | 23,156.20 | | **189,861.24** |
| Debt securities | | 3,408.67 | 18,075.33 | | **21,484.01** | | | **21,484.01** |
| Loans | 39,248.00 | -2,456.57 | -8.37 | | **36,783.07** | 5,001.42 | | **41,784.49** |
| Equity and investment fund shares | | 7,045.93 | -7,051.81 | | **-5.88** | | | **-5.88** |
| Accounts receivable | | 11,313.13 | 181.15 | | **11,494.28** | | | **11,494.28** |
| **Transactions in Liabilities** | **663,400.05** | **33,464.63** | **662.83** | **0.00** | **697,527.51** | **3,284.69** | **0.00** | **700,812.20** |
| Debt securities | 350,705.06 | | | | **350,705.06** | | | **350,705.06** |
| Domestic | 350,705.06 | | | | **350,705.06** | | | **350,705.06** |
| Foreign | 0.00 | | | | **0.00** | | | **0.00** |
| Loans | 312,694.99 | 6,571.03 | | | **319,266.02** | 3,284.69 | | **322,550.71** |
| Equity and investment fund shares | | | | | **0.00** | | | **0.00** |
| Accounts payable | | 26,893.60 | 662.83 | | **27,556.43** | | | **27,556.43** |

Source: The National Treasury, Central Bank of Kenya and KNBS

6.15. Table 6.11 presents details of the National Government outstanding debt by source for 2011/12 to 2015/16. The total stock of public debt grew by 23.1 per cent to KSh 3,203.3 billion as at June 2016. Total external debt registered a 26.2 per cent growth to KSh 1,796.2 billion in 2015/16. Similarly, the stock of internal debt rose by 19.4 per cent to KSh 1,407.1 billion during the same period. Growth in stock of bilateral debt in the review period was mainly driven by a rise in stock of debt from the People's Republic of China, which rose by 24.2 per cent to KSh 313.1 billion, accounting for more than half of the total bilateral. Outstanding stock of debt from Japan and Germany also registered positive growths of 19.5 per cent and 37.1 per cent, respectively. These growths are mainly attributed to increased disbursements to finance infrastructure development.

6.16. The stock of debt from International Development Association/International Fund for Agricultural Development (IDA/IFAD) and the African Development Fund/African Development Bank (ADF/AfDB) registered growths of 20.5 per cent and 19.3 per cent, respectively, in the review period. As at the end of June 2016, the outstanding stock of debt from commercial banks registered a significant growth amounting to KSh 154.3 billion, up from KSh 5.7 billion as at end of June 2015. The stock of debt due to Treasury bonds rose by 11.2 per cent to KSh 1,152.0 billion, while the stock of Treasury bills rose significantly to KSh 587.5 billion over the same period. The total stock of internal debt grew by 19.4 per cent to KSh 1,407.1 billion as at end of June 2016, mainly attributable to growth in the stock of Treasury bonds and bills in the period.

**Table 6.11: National Government Outstanding Debt by Source, 2012 - 2016**

KSh Million

| Outstanding as at 30th June | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **EXTERNAL DEBT:** | | | | | |
| **Lending Countries:** | | | | | |
| Germany | 24,878.80 | 25,042.37 | 26,571.29 | 22,558.54 | 30,935.11 |
| Japan | 107,402.77 | 86,788.50 | 84,514.51 | 79,016.83 | 94,413.95 |
| France | 36,708.95 | 47,397.05 | 61,579.73 | 59,032.26 | 59,371.47 |
| USA | 5,136.78 | 4,816.04 | 4,542.27 | 4,461.92 | 4,035.13 |
| Netherlands | 2,925.78 | 2,599.67 | 2,701.91 | 1,960.29 | 2,349.99 |
| Denmark | 2,076.63 | 1,987.79 | 1,991.76 | 1,437.14 | 1,540.67 |
| Finland | 104.81 | 96.64 | 93.59 | 71.43 | 269.38 |
| China | 36,661.87 | 63,123.40 | 80,858.59 | 252,039.33 | 313,127.34 |
| Belgium | 7,365.07 | 7,607.22 | 8,096.36 | 6,141.68 | 7,468.84 |
| Other | 20,281.11 | 22,048.18 | 22,907.13 | 18,337.23 | 34,838.82 |
| **Total (billateral)** | **243,542.57** | **261,506.86** | **293,857.14** | **445,056.63** | **548,350.69** |
| **International Organisations:** | | | | | |
| IDA / IFAD | 297,588.74 | 328,753.29 | 378,282.41 | 418,596.27 | 504,490.39 |
| EEC/ EIB | 10,933.89 | 15,769.40 | 20,657.26 | 20,624.97 | 21,073.19 |
| IMF | 66,593.02 | 73,779.44 | 83,282.16 | 86,149.90 | 84,847.00 |
| ADF/ AfDB | 70,863.36 | 80,728.61 | 102,118.16 | 150,229.35 | 179,226.58 |
| Other multilateral | 9,098.86 | 8,889.77 | 9,056.67 | 9,030.22 | 9,204.40 |
| **Total (multilateral)** | **455,077.87** | **507,920.51** | **593,396.67** | **684,630.72** | **798,841.56** |
| Commercial Banks | 50,539.98 | 58,927.52 | 59,545.24 | 5,678.32 | 154,346.23 |
| International Sovereign Bond | 0.00 | 0.00 | 175,253.80 | 271,258.35 | 278,031.05 |
| Suppliers' Credit | 14,811.51 | 15,207.35 | 16,451.86 | 16,628.21 | 16,628.00 |
| **TOTAL EXTERNAL** | **763,971.93** | **843,562.24** | **1,138,504.71** | **1,423,252.24** | **1,796,197.52** |
| **INTERNAL DEBT:** | | | | | |
| Treasury Bills[1] | 131,831.29 | 267,693.15 | 299,406.15 | 318,928.15 | 587,478.70 |
| Treasury Bonds | 686,950.90 | 744,174.06 | 914,762.09 | 1,035,706.68 | 1,152,041.17 |
| Non Interest bearing debts[2] | 29,998.76 | 28,888.76 | 28,273.00 | 26,615.00 | 25,559.00 |
| Others(includes stocks) | 10,048.60 | 9,860.00 | 41,886.01 | 39,194.54 | 50,391.63 |
| Less govt deposits & on-lending | -90,260.29 | -161,435.17 | -205,520.00 | -242,264.49 | -408,389.00 |
| **TOTAL INTERNAL (net)[3]** | **768,569.26** | **889,180.80** | **1,078,807.25** | **1,178,179.89** | **1,407,081.50** |
| **TOTAL DEBT** | **1,532,541.19** | **1,732,743.04** | **2,217,311.96** | **2,601,432.13** | **3,203,279.02** |

Source: The National Treasury and Central Bank of Kenya

* Provisional

[1] Excludes Repo Bills

[2] Pre-1997 Govt. Overdraft debt (Repo T-bills)

[3] Excludes Government deposits to Central Bank and Commercial Banks

6.17. Table 6.12 shows the National Government debt servicing charges and receipts from interest and loan repayments for 2012 to 2016. The net debt servicing charges grew by 9.6 per cent from KSh 397.4 billion in 2015/16 to KSh 435.6 billion in the review period, compared to 15.5 per cent growth in 2014/15. Interest and loan repayments receipts decreased by 10.3 per cent from KSh 2.9 billion registered in 2014/15 to KSh 2.6 billion in 2015/16. The net external debt servicing charges reduced by 30.7 per cent to KSh 78.1 billion at the end of June 2016, while the net domestic debt servicing charges rose by 25.6 per cent to 357.5 billion.

**Table 6.12: National Government Debt Servicing Charges, 2012 - 2016**

KSh Million

| As at 30th June | Annual Debt Servicing Charges | | | Interest and Loan Repayment Receipts | | Net Servicing Charges | | |
|---|---|---|---|---|---|---|---|---|
| | External | Internal | Total | Internal | Total | External | Internal | Total |
| 2012 | 35,705.51 | 151,980.77 | 187,686.28 | 1,611.56 | 1,611.56 | 35,705.51 | 150,369.21 | 186,074.72 |
| 2013 | 45,142.66 | 210,553.11 | 255,695.76 | 2,183.55 | 2,183.55 | 45,142.66 | 208,369.56 | 253,512.21 |
| 2014 | 98,014.23 | 247,765.03 | 345,779.26 | 1,618.36 | 1,618.36 | 98,014.23 | 246,146.67 | 344,160.90 |
| 2015 | 112,687.54 | 287,636.17 | 400,323.71 | 2,897.37 | 2,897.37 | 112,687.54 | 284,738.80 | 397,426.34 |
| 2016* | 78,104.86 | 360,120.36 | 438,225.22 | 2,578.66 | 2,578.66 | 78,104.86 | 357,541.70 | 435,646.56 |

Source: The National Treasury

* Provisional

6.18. Table 6.13 presents the ratio of National Government external public debt servicing charges to earnings from export of goods and services from 2012 to 2016. This ratio indicates the economy's ability to service external debt by comparing how much of foreign exchange export earnings are used in servicing the external debt. In 2015/16, the percentage of debt servicing charges to export earnings was 7.5 per cent compared to 10.8 per cent in 2014/15. This is mainly due to a reduction in external debt service charges in 2015/16.

**Table 6.13: The Ratio of National Government Debt Service Charges on External Debt to Exports of Goods and Services+, 2012 - 2016**

KSh Million

| | Debt Service Charges on 'External Debt[1] (As at 30th June) | Exports of Goods and Services (Calender Year) | External debt service Charges as a Percentage of Exports of Goods and Services |
|---|---|---|---|
| | KSh Million | KSh Million | % |
| 2012 | 35,705.51 | 947,189.78 | 3.8 |
| 2013 | 45,142.66 | 945,477.64 | 4.8 |
| 2014 | 98,014.23 | 988,521.37 | 9.9 |
| 2015 | 112,687.54 | 1,042,699.82 | 10.8 |
| 2016* | 78,104.86 | 1,043,002.00 | 7.5 |

Source: The National Treasury and Kenya National Bureau of Statistics

* Provisional.

+ Revised

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

## County Governments

6.19. Details of annual county governments' revenue by source for 2015/16 and 2016/17 are presented in Table 6.14. The County Allocation of Revenue Act, 2016, allocated KSh 302.2 billion for transfers to county governments, which comprised KSh 280.3 billion as equitable share and a conditional grant of KSh 21.9 billion. The equitable share increased by 7.9 per cent from KSh 259.8 billion allocated in 2015/16 to KSh 280.3 billion in 2016/17. The additional conditional grants allocated increased by 31.9 per cent to KSh 21.9 billion in 2016/17. County governments have budgeted to collect a total of KSh 59.3 billion as local revenue in 2016/17, compared to KSh 35.0 billion in 2015/16.

## Table 6.14: Annual County Government revenue, 2015/16 - 2016/17+

KSh Million

| | Equitable share | | Conditional Grant++ | | Annual Local Revenue | | Total Revenue | |
|---|---|---|---|---|---|---|---|---|
| County | 2015/16 | 2016/17+ | 2015/16 | 2016/17+ | 2015/16 | 2016/17+ | 2015/16 | 2016/17+ |
| Baringo | 4,440.58 | 4,791.44 | 230.86 | 338.14 | 279.32 | 472.00 | 4,950.76 | 5,601.58 |
| Bomet | 4,706.89 | 5,078.80 | 230.87 | 258.04 | 166.99 | 207.71 | 5,104.75 | 5,544.55 |
| Bungoma | 7,675.73 | 8,282.21 | 401.90 | 453.23 | 630.99 | 731.90 | 8,708.61 | 9,467.33 |
| Busia | 5,440.25 | 5,870.10 | 275.99 | 301.82 | 334.22 | 587.51 | 6,050.46 | 6,759.42 |
| Elgeyo Marakwet | 3,270.44 | 3,528.85 | 189.32 | 276.48 | 128.06 | 160.00 | 3,587.82 | 3,965.33 |
| Embu | 3,837.94 | 4,141.19 | 407.01 | 518.72 | 396.53 | 803.77 | 4,641.47 | 5,463.67 |
| Garissa | 5,771.69 | 6,227.73 | 593.92 | 636.79 | 105.94 | 350.00 | 6,471.56 | 7,214.52 |
| Homa Bay | 5,634.96 | 6,080.19 | 320.88 | 352.91 | 183.77 | 233.54 | 6,139.61 | 6,666.64 |
| Isiolo | 3,056.57 | 3,298.07 | 161.12 | 198.35 | 110.11 | 250.00 | 3,327.80 | 3,746.42 |
| Kajiado | 4,412.63 | 4,761.28 | 217.68 | 389.50 | 650.98 | 1,248.37 | 5,281.29 | 6,399.15 |
| Kakamega | 8,908.23 | 9,612.09 | 805.42 | 917.92 | 504.24 | 894.07 | 10,217.89 | 11,424.09 |
| Kericho | 4,505.06 | 4,861.02 | 269.50 | 288.04 | 434.40 | 620.35 | 5,208.97 | 5,769.41 |
| Kiambu | 7,463.54 | 8,053.26 | 783.22 | 879.44 | 2,461.35 | 3,767.97 | 10,708.12 | 12,700.67 |
| Kilifi | 7,441.22 | 8,029.17 | 393.22 | 549.60 | 519.08 | 1,585.88 | 8,353.51 | 10,164.65 |
| Kirinyaga | 3,538.22 | 3,817.78 | 203.72 | 217.80 | 390.38 | 460.00 | 4,132.31 | 4,495.59 |
| Kisii | 7,093.63 | 7,654.11 | 746.03 | 817.59 | 306.13 | 750.00 | 8,145.79 | 9,221.71 |
| Kisumu | 5,681.27 | 6,130.16 | 652.90 | 719.54 | 978.89 | 1,584.99 | 7,313.05 | 8,434.68 |
| Kitui | 7,267.27 | 7,841.48 | 275.28 | 443.76 | 416.19 | 668.61 | 7,958.74 | 8,953.85 |
| Kwale | 5,125.70 | 5,530.69 | 280.45 | 404.48 | 248.62 | 330.00 | 5,654.76 | 6,265.18 |
| Laikipia | 3,449.55 | 3,722.11 | 212.48 | 290.03 | 471.15 | 670.00 | 4,133.18 | 4,682.14 |
| Lamu | 2,051.88 | 2,214.01 | 140.94 | 265.97 | 57.32 | 100.00 | 2,250.15 | 2,579.97 |
| Machakos | 6,768.65 | 7,303.46 | 608.80 | 716.87 | 1,121.68 | 2,855.67 | 8,499.13 | 10,876.00 |
| Makueni | 5,969.67 | 6,441.35 | 273.00 | 309.93 | 213.17 | 500.00 | 6,455.84 | 7,251.28 |
| Mandera | 8,955.70 | 9,663.32 | 279.84 | 364.87 | 88.23 | 265.64 | 9,323.78 | 10,293.83 |
| Marsabit | 5,189.46 | 5,599.50 | 187.80 | 256.05 | 111.94 | 125.00 | 5,489.20 | 5,980.55 |
| Meru | 6,493.60 | 7,006.68 | 577.95 | 2,416.57 | 548.29 | 713.24 | 7,619.84 | 10,136.48 |
| Migori | 5,836.85 | 6,298.04 | 356.31 | 535.19 | 339.37 | 420.00 | 6,532.54 | 7,253.22 |
| Mombasa | 5,197.89 | 5,608.59 | 722.83 | 720.25 | 2,943.52 | 5,553.99 | 8,864.24 | 11,882.84 |
| Murang'a | 5,356.00 | 5,779.19 | 266.56 | 296.52 | 617.53 | 850.00 | 6,240.08 | 6,925.71 |
| Nairobi City County | 12,996.61 | 14,023.51 | 636.58 | 964.89 | 11,710.01 | 19,565.66 | 25,343.20 | 34,554.06 |
| Nakuru | 8,116.33 | 8,757.62 | 833.04 | 853.50 | 2,295.46 | 2,597.26 | 11,244.84 | 12,208.39 |
| Nandi | 4,755.11 | 5,130.82 | 240.75 | 269.99 | 236.90 | 362.28 | 5,232.76 | 5,763.09 |
| Narok | 5,287.90 | 5,705.71 | 239.06 | 363.82 | 1,752.94 | 3,623.47 | 7,279.90 | 9,693.00 |
| Nyamira | 4,154.54 | 4,482.80 | 242.41 | 270.34 | 106.98 | 274.98 | 4,503.93 | 5,028.12 |
| Nyandarua | 4,307.07 | 4,647.38 | 215.07 | 236.22 | 279.23 | 390.00 | 4,801.37 | 5,273.60 |
| Nyeri | 4,449.22 | 4,800.76 | 619.14 | 652.98 | 709.55 | 1,095.10 | 5,777.92 | 6,548.84 |
| Samburu | 3,552.28 | 3,832.96 | 160.28 | 212.26 | 166.84 | 341.87 | 3,879.40 | 4,387.08 |
| Siaya | 4,995.30 | 5,389.99 | 306.92 | 323.94 | 127.93 | 270.00 | 5,430.15 | 5,983.93 |
| Taita/Taveta | 3,309.57 | 3,571.07 | 186.54 | 238.34 | 172.77 | 355.59 | 3,668.88 | 4,165.00 |
| Tana River | 3,984.57 | 4,299.40 | 171.30 | 321.55 | 28.41 | 60.00 | 4,184.27 | 4,680.96 |
| Tharaka -Nithi | 3,137.57 | 3,385.47 | 179.36 | 236.85 | 139.13 | 200.00 | 3,456.06 | 3,822.33 |
| Trans Nzoia | 5,099.61 | 5,502.55 | 247.52 | 282.46 | 364.97 | 500.00 | 5,712.10 | 6,285.01 |
| Turkana | 10,479.03 | 11,307.01 | 272.01 | 400.86 | 134.02 | 180.00 | 10,885.06 | 11,887.87 |
| Uasin Gishu | 5,190.88 | 5,601.03 | 299.86 | 253.41 | 719.04 | 1,192.00 | 6,209.79 | 7,046.44 |
| Vihiga | 3,871.41 | 4,177.30 | 225.76 | 246.49 | 138.94 | 220.00 | 4,236.11 | 4,643.79 |
| Wajir | 7,232.74 | 7,804.22 | 253.34 | 343.45 | 81.78 | 230.12 | 7,567.86 | 8,377.79 |
| West Pokot | 4,313.69 | 4,654.53 | 203.75 | 292.77 | 98.31 | 122.25 | 4,615.75 | 5,069.54 |
| **Total** | **259,774.50** | **280,300.00** | **16,598.53** | **21,898.52** | **35,021.57** | **59,340.79** | **311,394.60** | **361,539.31** |

Source: County Allocation of Revenue Act. No22 of 2016 and Office of the Controller of Budget

+ Printed Estimates

++ Includes Conditional Additional Allocations to County Governments from National Government Revenue & Conditional Additional Allocations to County Governments from Loans and Grants

6.20. Details of county governments' expenditure by economic classification for 2013/14 to 2016/17 are given in Table 6.15. Total expenditure is expected to grow by 13.6 per cent and amount to KSh 360.0 billion as at end of June 2017 compared to KSh 317.0 billion spent as at end of June 2016. Compensation of employees and, Use of goods and services are expected to account for 32.3 per cent and 20.6 per cent of the total expenditure, respectively. Compensation of employees is estimated to register a marginal growth of 1.2 per cent to KSh 116.3 billion in 2016/17. The use of goods and services is expected to rise by 10.2 per cent to KSh 74.2 billion, in the review period. Acquisition of non-financial assets, is estimated to register a 30.1 per cent growth to KSh 127.0 billion by the end of 2016/17, and is budgeted to account for 35.3 per cent of the overall expenditure. Expenditure on buildings and structures category is expected to increase by 27.6 per cent to KSh 100.5 billion in 2016/17, up from KSh 78.7 billion spent in 2015/16.

**Table 6.15: Economic classification of County Governments Expenditure, 2013/14 - 2016/17**

KSh Million

| | 2013/14 | 2014/15 | 2015/16* | 2016/17+ |
|---|---|---|---|---|
| **Compensation of Employees** | **64,262.36** | **96,212.69** | **114,943.30** | **116,319.06** |
| Salaries | 51,487.67 | 71,168.66 | 83,398.01 | 78,585.14 |
| Allowances | 11,407.41 | 23,277.19 | 28,342.60 | 33,840.06 |
| Social contbributions | 1,367.28 | 1,766.85 | 3,202.70 | 3,893.86 |
| **Use of goods and services** | **35,353.92** | **55,465.22** | **67,370.85** | **74,230.25** |
| Utilities, Supplies and Services | 895.72 | 2,457.71 | 2,984.93 | 2,423.96 |
| Printing , Advertising and Information Supplies and Services | 1,895.56 | 3,109.46 | 2,985.69 | 3,490.35 |
| Rentals | 897.73 | 1,120.94 | 1,617.53 | 2,285.09 |
| Communication, Supplies and Services | 503.53 | 686.40 | 787.93 | 984.20 |
| Transportation costs | 6,520.28 | 8,955.77 | 11,745.81 | 10,791.73 |
| Training Expenses | 2,413.92 | 2,968.22 | 3,505.32 | 4,274.20 |
| Hospitality Supplies and Services | 2,158.33 | 3,349.47 | 4,172.83 | 4,239.19 |
| Insurance | 1,564.41 | 2,476.30 | 4,490.18 | 4,948.17 |
| Specialised Materials | 4,744.72 | 9,979.71 | 11,649.31 | 14,329.29 |
| Office and General Supplies and Services and materials | 1,507.25 | 1,959.27 | 1,995.40 | 2,174.16 |
| Fuel Oil and Lubricants | 1,930.10 | 2,403.35 | 2,833.50 | 2,774.95 |
| Other Operating Expenses | 6,047.14 | 12,286.95 | 14,473.83 | 14,530.37 |
| Routine Maintenance | 4,275.24 | 3,711.65 | 4,128.60 | 6,984.57 |
| Subsidies | 330.78 | 569.82 | 701.93 | 1,133.44 |
| Interest | 4,723.25 | 5,188.24 | 7,121.41 | 6,723.43 |
| Grants | 6,708.38 | 5,715.38 | 8,215.42 | 13,453.34 |
| Other expense | 1,971.43 | 7,012.16 | 8,259.41 | 2,111.70 |
| Social benefits | | 6,228.52 | 7,812.17 | 11,395.75 |
| **Acquisition of Non-financial Assets** | **42,423.74** | **91,217.78** | **97,579.77** | **126,999.72** |
| Building and Structures | 26,428.02 | 69,270.39 | 78,728.22 | 100,485.92 |
| Plant and Machinery | 9,748.19 | 20,457.73 | 13,718.62 | 18,727.57 |
| Inventories | .. | 318.46 | 1,498.95 | 2,203.50 |
| Non- produced assets & Land | 6,247.53 | 1,171.20 | 3,633.99 | 5,582.73 |
| **Acquisition of Financial Assets** | 1,912.56 | 3,700.17 | 5,001.42 | 7,630.42 |
| **Memo Item** | | | | |
| Debt repayment and pending bills | 3,711.04 | .. | .. | .. |
| **Total** | **161,397.47** | **271,309.98** | **317,005.69** | **359,997.11** |

Source: The National Treasury-IFMIS

+Printed estimates

* Provisional.

.. Data not available

6.21. Table 6.16 gives classification of county governments' expenditure by functions, for 2013/14 to 2016/17. Spending on general public services is estimated at KSh 122.2 billion in 2016/17, and will account for 33.9 per cent of the total outlays. Expenditure on general economic affairs and agriculture functions by County governments are estimated to register significant growths in the review period. In 2016/17, the health function is estimated to account for 32.8 per cent of the total budget at KSh 69.4 billion. During the review period, expenditure on education function is estimated to grow to KSh 29.3 billion, up from KSh 21.7 billion in 2015/16.

**Table 6.16: Classification of Expenditure by Functions of County Governments (COFOG), 2013/14 - 2016/17**

KSh Million

| | 2013/14 | 2014/15 | 2015/16* | 2016/17+ |
|---|---|---|---|---|
| General Public Services | 135,187.04 | 136,218.19 | 119,555.49 | 122,201.08 |
| Economic Affairs | **11,086.63** | **40,167.19** | **67,052.61** | **87,124.51** |
| General economic affairs | 1,312.91 | 6,286.50 | 18,547.94 | 25,167.85 |
| Agriculture | 2,876.45 | 14,199.56 | 11,169.44 | 14,819.98 |
| Transport | 5,930.08 | 18,854.74 | 21,404.53 | 20,900.68 |
| Other economic Affairs | 967.19 | 826.39 | 15,930.70 | 26,236.01 |
| Environmental Protection | 873.72 | 5,277.16 | 13,724.13 | 12,993.12 |
| Housing and Community Ammenities | 3,532.56 | 6,997.36 | 16,749.80 | 29,175.00 |
| Health | 8,492.22 | 54,671.70 | 70,732.25 | 69,406.81 |
| Recreation, Culture and Religion | 924.64 | 7,849.29 | 6,527.41 | 8,669.01 |
| Education | 1,228.71 | 19,952.39 | 21,685.06 | 29,271.45 |
| Social Protection | 71.95 | 176.70 | 978.95 | 1,156.12 |
| **Total** | **161,397.47** | **271,309.98** | **317,005.69** | **359,997.11** |

Source: The National Treasury-IFMIS

+ Printed estimates

* Provisional.

07 Chapter

# International Trade and Balance of Payments

## Overview

Total exports declined marginally from KSh 581.0 billion in 2015 to KSh 578.1 billion in 2016 while total imports contracted by 9.2 per cent from KSh 1,577.6 billion to KSh 1,431.7 billion, during the year under review. This led to narrowing of the trade deficit from KSh 996.5 billion in 2015 to KSh 853.7 billion, in 2016 and an improvement of export-import ratio from 36.8 per cent to 40.4 per cent over the same period. Tea; horticulture; articles of apparel and clothing accessories; and coffee were the leading export earners jointly accounting for 56.7 per cent of the total domestic exports during the review period.

7.2. Improved export unit prices of beverages and tobacco; animals and vegetable oils and fats; chemicals; and machinery and transport equipment, coupled with the declining import unit prices of mineral fuels, resulted in improvements in the terms of trade for all items by 2.8 percentage points to 78.8 per cent in 2016. The broad economic categories of food and beverages; consumer goods; and non-food industrial supplies contributed the highest proportion of total domestic exports at 45.2, 25.6 and 24.5 per cent, respectively, in 2016. Similarly, non-food industrial supplies; machinery and capital equipment; fuel and lubricants; and transport equipment contributed the highest share of the total import bill at 36.2, 21.8, 14.5 and 10.3 per cent, respectively, in 2016. Africa continued to be the leading destination of the country's exports accounting for 40.6 per cent, with East African Community (EAC) accounting for 21.1 per cent of the total exports, in 2016. During the review period, Europe and Asia accounted for 24.5 and 24.3 per cent of the total exports, with European Union (EU) and the Far East accounting for 21.0 per cent and 15.6 per cent, respectively. The main source of imports was Asia accounting for 66.8 per cent with the Far East accounting for 53.2 per cent of the total imports during the review period. This is related to the ongoing construction of the Standard Gauge Railway (SGR). Europe was the second largest source accounting for 18.5 per cent of the total imports with EU contributing 14.9 per cent in 2016.

7.3. The deficit in the current account narrowed by 11.9 per cent to KSh 370.8 billion in 2016 partly due to declines of 0.7 and 1.8 per cent in merchandise exports and imports on free on board basis, respectively. Net inflows of international trade in services increased by 32.7 per cent to a surplus of KSh 171.7 billion in 2016. The growth in earnings from services was mainly occasioned by increased foreign travel receipts boosted by conference tourism. The growth also supported the contraction in the current account deficit in the review period. Net financial inflows rose by 9.5 per cent to a surplus of KSh 420.0 billion in 2016 on account of short term capital flows. These developments led to improvement in the overall Balance of Payments (BOP) position from a deficit of KSh 24.9 billion in 2015 to a surplus of KSh 13.1 billion in 2016.

## Balance of Trade

7.4. Domestic exports continued to grow for the third consecutive year, rising from KSh 499.7 billion in 2015 to KSh 506.5 billion in 2016, as presented in Table 7.1. However, the value of total exports recorded a marginal drop from KSh 581.0 billion in 2015 to KSh 578.1 billion in 2016 on account of a 12.1 per cent decline in the value of re-exports. The decline in re-exports was attributed to a contraction in the re-exports of petroleum products and manufactured articles. Imports continued to exhibit a declining trend for the second consecutive year with the value decreasing by 9.2 per cent from KSh 1,577.6 billion in 2015 to KSh 1,431.7 billion in

2016. Imports remained subdued on account of lower global oil prices and reduced transport equipment acquisitions.

7.5. The decline in imports outweighed contraction in exports resulting in a 14.3 per cent improvement in the balance of trade deficit from KSh 996.5 billion in 2015 to KSh 853.7 billion in 2016. During the review period, the value of exports covered 40.4 per cent of the imports, an improvement from 36.8 per cent recorded in the previous year.

**Table 7.1: Balance of Trade, 2012-2016**

KSh Million

| DESCRIPTION | 2010 | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| **EXPORTS (f.o.b):** | | | | | | |
| Domestic Exports | 385,441 | 479,706 | 455,689 | 460,572 | 499,708 | 506,548 |
| Re-exports | 24,353 | 38,141 | 46,598 | 76,664 | 81,337 | 71,519 |
| **Total** | **409,794** | **517,847** | **502,287** | **537,236** | **581,045** | **578,067** |
| **IMPORTS (c.i.f):** | | | | | | |
| Commercial | 934,729 | 1,360,408 | 1,403,225 | 1,599,619 | 1,540,731 | 1,389,731 |
| Government | 12,476 | 14,179 | 10,091 | 18,702 | 36,826 | 42,014 |
| **Total** | **947,206** | **1,374,587** | **1,413,316** | **1,618,321** | **1,577,557** | **1,431,745** |
| **BALANCE OF TRADE** | **(537,412)** | **(856,740)** | **(911,029)** | **(1,081,085)** | **(996,512)** | **(853,678)** |
| **TOTAL TRADE** | **1,356,999** | **1,892,434** | **1,915,602** | **2,155,557** | **2,158,602** | **2,009,812** |
| **COVER RATIO[1] (in percentage)** | **43.3** | **37.7** | **35.5** | **33.2** | **36.8** | **40.4** |

Source: Kenya National Bureau of Statistics/Kenya Revenue Authority

*Provisional

[1]COVER RATIO =(Total Exports/Total Imports)*100

f.o.b=free on board

c.i.f =cost, insurance and freight

**Price changes**

7.6. Export and import unit price indices by commodity groups based on Standard International Trade Classification (SITC) for the period 2012 to 2016 are presented in Table 7.2(a). The unit price indices for all exports and non-oil exports declined by 4.7 per cent and 3.4 per cent, respectively, in 2016. This was mainly as a result of decreases in export unit prices of mineral fuels and inedible crude materials, which contracted by 40.1 per cent and 16.9 per cent, respectively, following the continued decline in oil prices. However, export price indices of beverages and tobacco; chemicals; and animal and vegetable oils and fats increased by 27.8, 19.4 and 14.7 per cent, respectively, in 2016. The unit price index for all imports went down by 7.7 per cent in the review period. This could be attributed to declines of 29.1 and 11.2 per cent, in import unit price indices of mineral fuels and miscellaneous manufactured articles, respectively, in 2016. There was a marginal decrease in unit price index for non-oil imports in 2016, following the declines in import unit price indices of miscellaneous manufactured articles (11.2 per cent), food and live animals (4.0 per cent) and manufactured goods (3.3 per cent). However, import price indices of beverages and tobacco; animals and vegetable oils and fats; and machinery and transport equipment rose by 12.8, 8.9 and 6.2 per cent, respectively, in 2016.

**Table 7.2 (a): Export and Import Price Indices, 2012-2016**

2009=100

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **EXPORTS:** | | | | | |
| Food and live animals | 137 | 133 | 121 | 155 | 146 |
| Beverages and tobacco | 134 | 133 | 142 | 126 | 161 |
| Crude materials, (inedible) | 98 | 126 | 125 | 124 | 103 |
| Mineral fuels | 151 | 150 | 219 | 193 | 115 |
| Animal and vegetable oils and fats | 152 | 125 | 128 | 136 | 156 |
| Chemicals | 127 | 114 | 134 | 155 | 185 |
| Manufactured goods | 123 | 113 | 112 | 117 | 108 |
| Machinery and transport equipment | 235 | 286 | 246 | 225 | 244 |
| Miscellaneous manufactured articles | 135 | 188 | 165 | 183 | 184 |
| **All Exports** | **131** | **136** | **132** | **149** | **142** |
| Non-oil Exports | 131 | 136 | 131 | 148 | 143 |
| **IMPORTS:** | | | | | |
| Food and live animals | 132 | 174 | 170 | 176 | 169 |
| Beverages and tobacco | 140 | 172 | 136 | 133 | 150 |
| Crude materials, (inedible) | 131 | 126 | 139 | 152 | 157 |
| Mineral fuels | 199 | 200 | 187 | 134 | 95 |
| Animals and vegetable oils and fats | 165 | 140 | 145 | 124 | 135 |
| Chemicals | 132 | 158 | 147 | 145 | 143 |
| Manufactured goods | 139 | 140 | 126 | 150 | 145 |
| Machinery and transport equipment | 198 | 181 | 227 | 275 | 292 |
| Miscellaneous manufactured articles | 150 | 164 | 189 | 169 | 150 |
| **All imports** | **166** | **168** | **180** | **196** | **181** |
| Non-oil Imports | 158 | 160 | 178 | 214 | 209 |

* Provisional

**Terms of Trade**

7.7. Table 7.2(b) shows terms of trade for the period 2012 to 2016. Terms of trade for all items continued to improve registering a 2.8 percentage point to 78.8 per cent in 2016. This was mainly due to improved export unit prices of beverages and tobacco; animals and vegetable oils and fats; chemicals; and machinery and transport equipment, coupled with the declining import unit prices of mineral fuels. In contrast, terms of trade for non-oil items deteriorated marginally to 68.3 per cent, following relative increases in import price indices of beverages and tobacco; animals and vegetable oils and fats; and machinery and transport equipment; and inedible crude materials.

**Table 7.2(b): Terms of Trade, 2012 - 2016**

2009=100

| Description | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| All Items | 78.7 | 81.1 | 73.1 | 76.0 | 78.8 |
| Non-oil Items | 82.8 | 85.1 | 73.1 | 69.2 | 68.3 |

*Provisional

**Volume changes**

7.8. Table 7.2(c) presents quantum indices for all exports and non-oil exports for the period 2012 to 2016. Quantum indices for all exports and non-oil exports increased by 6.7 per cent and 5.6 per cent respectively, in 2016. This was mainly on account of increased export quantities of inedible crude materials and mineral fuels whose export quantum indices rose by 32.6 and 30.6 per cent, respectively, in 2016. There was a marginal decline in all imports quantum index in 2016 despite the quantity of mineral fuel imports going up by 22.2 per cent. This was offset by a decline in the quantity of machinery and transport equipment whose import quantum index declined by a similar margin in the review period. The import quantum index for non-oil imports decreased by 6.9 per cent in 2016, as reflected in declines of 22.0 and 7.4 per cent in import quantum indices of machinery and transport equipment; and inedible crude materials, respectively.

**Table 7.2(c): Quantum Indices, 2012 - 2016**

2009=100

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **EXPORTS:** | | | | | |
| Food and live animals | 108 | 110 | 116 | 109 | 120 |
| Beverages and tobacco | 119 | 105 | 111 | 124 | 85 |
| Crude materials, (inedible) | 138 | 103 | 135 | 138 | 183 |
| Mineral fuels | 65 | 41 | 42 | 49 | 64 |
| Animal and vegetable oils and fats | 145 | 112 | 80 | 58 | 66 |
| Chemicals | 120 | 115 | 97 | 89 | 74 |
| Manufactured goods | 121 | 132 | 120 | 107 | 100 |
| Machinery and transport equipment | 73 | 48 | 45 | 55 | 61 |
| Miscellaneous manufactured articles | 112 | 84 | 108 | 100 | 98 |
| **All Exports** | **113** | **104** | **110** | **105** | **112** |
| Non-oil Exports | 115 | 105 | 112 | 107 | 113 |
| **IMPORTS:** | | | | | |
| Food and live animals | 90 | 64 | 73 | 78 | 76 |
| Beverages and tobacco | 118 | 141 | 158 | 143 | 149 |
| Crude materials, (inedible) | 121 | 117 | 118 | 122 | 113 |
| Mineral fuels | 103 | 99 | 112 | 108 | 132 |
| Animals and vegetable oils and fats | 120 | 125 | 125 | 138 | 143 |
| Chemicals | 130 | 122 | 139 | 157 | 155 |
| Manufactured goods | 129 | 149 | 171 | 162 | 162 |
| Machinery and transport equipment | 86 | 92 | 100 | 82 | 64 |
| Miscellaneous manufactured articles | 122 | 134 | 126 | 164 | 174 |
| **All imports** | **105** | **107** | **114** | **102** | **101** |
| Non-oil Imports | 105 | 109 | 114 | 101 | 94 |

* Provisional

**Quantities of Principal Domestic Exports and Imports**

7.9. Quantities of selected export and import commodities are presented in Tables 7.3 (a) and 7.3(b), respectively. Domestic exports of tea rose from 420.5 thousand tonnes in 2015 to 480.0 thousand tonnes in 2016 reflecting a 14.1 per cent increase. The volume of coffee exports rose slightly from 43.6 thousand tonnes in 2015 to 45.3 thousand tonnes in 2016. The quantity of horticultural exports expanded by 13.2 per cent to 501.6 thousand tonnes in 2016. Domestic exports of titanium ores and concentrates increased by 24.6 per cent to 614.6 thousand tonnes in 2016. Exports of iron and steel increased by 11.9 per cent to 139.0 thousand tonnes in 2016, which is a recovery after declining for two consecutive years.

7.10. The volume of cement exports declined for the third consecutive year to 420.2 thousand tonnes in 2016. This has been partly due to the domestic absorption of cement in the construction activities especially the SGR construction. Similarly, domestic exports of soda ash dropped by 5.1 per cent to 258.7 thousand tonnes in 2016 from 272.5 thousand tonnes in 2015. Domestic exports of fluorspar registered a 30.5 per cent decline from 70.1 thousand tonnes in 2015 to 48.7 thousand tonnes in 2016. This could be attributed to temporary closure of the local firm and constraints faced in production following low demand and fall in prices since 2013.

7.11. There was a marked decline in the quantities of maize imports from 480.1 thousand tonnes in 2015 to 148.6 thousand tonnes in 2016. The volumes of wheat imports also declined, albeit at a much slower rate, from 1,421.8 thousand tonnes in 2015 to 1,362.3 thousand tonnes in 2016. Imports of iron and steel dropped by 5.7 per cent to 1,442.6 thousand tonnes in 2016. There was a 22.5 per cent reduction in the number of imported road motor vehicles during the period under review. In contrast, the volume of rice imports grew by 14.8 per cent to 508.0 thousand tonnes in 2016. Other commodities that recorded notable increases in import volumes included chemical fertilizers (18.1 per cent); sugar, molasses and honey (31.6 per cent); liquefied propane and butane (29.1 per cent); and second hand clothing (19.2 per cent).

## Table 7.3(a): Quantities of Principal Domestic Exports, 2012-2016

| Commodity | Unit of Quantity | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| Fish and fish preparations | Tonne | 17,455 | 11,712 | 15,213 | 10,801 | 5,995 |
| Maize(unmilled,excluding sweet corn) | Tonne | 548 | 1,236 | 1,678 | 2,007 | 3,191 |
| Meals and flours of wheat | Tonne | 7,488 | 3,076 | 2,308 | 3,250 | 1,479 |
| Horticulture | Tonne | 367,885 | 394,387 | 434,950 | 443,076 | 501,573 |
| Sugar confectionery | Tonne | 33,188 | 30,159 | 28,986 | 29,988 | 28,836 |
| Coffee, unroasted | Tonne | 51,713 | 48,890 | 47,438 | 43,600 | 45,303 |
| Tea | Tonne | 376,996 | 446,033 | 456,492 | 420,527 | 479,969 |
| Margarine and shortening | Tonne | 18,532 | 15,924 | 17,097 | 18,397 | 17,787 |
| Edible products and preparations, n.e.s. | Tonne | 15,907 | 13,561 | 14,751 | 18,399 | 19,789 |
| Beer made from malt | 000 Lt. | 62,638 | 48,166 | 65,572 | 64,565 | 31,332 |
| Tobacco and tobacco manufactures | Tonne | 35,259 | 23,466 | 21,016 | 15,961 | 15,177 |
| Hides and Skins | Tonne | 10,200 | 2,832 | 2,560 | 2,272 | 2,777 |
| Sisal | Tonne | 11,066 | 10,010 | 10,093 | 9,015 | 9,595 |
| Stone, sand and gravel | Tonne | 39,138 | 29,632 | 45,460 | 38,678 | 104,493 |
| Fluorspar | Tonne | 105,753 | 78,002 | 94,021 | 70,096 | 48,662 |
| Salt | Tonne | 284,841 | 289,487 | 269,111 | 303,452 | 306,324 |
| Soda Ash | Tonne | 458,811 | 478,822 | 396,095 | 272,520 | 258,703 |
| Titanium ores and concentrates | Tonne | .. | .. | 360,525 | 493,201 | 614,609 |
| Metal scrap | Tonne | 5,465 | 4,478 | 5,091 | 5,814 | 10,657 |
| Animal and Vegetable oils | Tonne | 99,252 | 70,339 | 49,375 | 37,357 | 57,275 |
| Alcohols and derivatives thereof | 000 Lt. | 22,403 | 18,558 | 15,033 | 19,246 | 17,456 |
| Pigments, paints, varnishes and related materials | Tonne | 14,068 | 11,949 | 12,886 | 14,733 | 13,204 |
| Medicinal and pharmaceutical products | Tonne | 13,063 | 12,419 | 13,285 | 13,095 | 13,379 |
| Essential oils | Tonne | 120,059 | 94,157 | 87,779 | 78,356 | 81,769 |
| Plates, sheets, film, foil and strip, of plastics | Tonne | 9,121 | 7,927 | 8,479 | 7,247 | 5,309 |
| Insecticides and fungicides | Tonne | 1,709 | 1,416 | 1,597 | 2,209 | 2,314 |
| Leather | Tonne | 22,698 | 26,542 | 26,213 | 23,329 | 21,657 |
| Wood manufactures n.e.s | Tonne | 608 | 468 | 401 | 529 | 309 |
| Paper and paperboard | Tonne | 41,322 | 41,760 | 34,043 | 33,208 | 62,374 |
| Textile yarn | Tonne | 1,859 | 2,046 | 1,601 | 1,648 | 1,553 |
| Made-up articles, wholly or chiefly of textile materials, n.e.s. | Tonne | 14,255 | 11,464 | 16,619 | 16,679 | 11,018 |
| Glassware | Tonne | 45,861 | 22,693 | 13,411 | 13,106 | 11,373 |
| Cement | Tonne | 737,496 | 826,941 | 720,465 | 681,665 | 420,157 |
| Iron and steel | Tonne | 150,182 | 155,442 | 137,561 | 124,190 | 139,019 |
| Metal containers | Tonne | 3,432 | 2,831 | 3,162 | 2,542 | 3,569 |
| Wire products: nails screws, nuts, etc. | Tonne | 10,931 | 9,232 | 8,265 | 6,585 | 4,581 |
| Household equipment of base metal, n.e.s. | Tonne | 9,719 | 10,401 | 9,841 | 7,614 | 9,690 |
| Manufactures of base metal, n.e.s. | Tonne | 9,207 | 7,572 | 8,217 | 11,889 | 10,741 |
| Automatic data proccessing machines and units thereof; | No's | 97,431 | 45,737 | 106,895 | 76,375 | 25,031 |
| Footwear | '000' Pairs | 51,712 | 52,021 | 40,092 | 32,634 | 37,176 |
| Printed matter | Tonne | 5,859 | 6,553 | 9,006 | 6,854 | 6,724 |
| Articles of plastic | Tonne | 55,882 | 48,370 | 58,488 | 52,629 | 47,382 |

Source: Kenya National Bureau of Statistics/Kenya Revenue Authority

*Provisionals

## Table 7.3(b): Quantities of Principal Imports, 2012-2016

| Commodity | Unit of Quantity | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| Wheat, unmilled | Tonne | 1,044,848 | 1,033,054 | 1,225,690 | 1,421,785 | 1,362,309 |
| Rice | Tonne | 399,699 | 409,576 | 459,165 | 442,736 | 507,999 |
| Maize(unmilled,excluding sweet corn) | Tonne | 324,622 | 93,473 | 458,940 | 480,124 | 148,558 |
| Wheat flour | Tonne | 54,397 | 30,853 | 33,178 | 16,306 | 15,925 |
| Sugars, Mollases and Honey | Tonne | 267,679 | 276,542 | 228,834 | 286,732 | 377,334 |
| Edible products and preparations, n.e.s. | Tonne | 78,164 | 48,347 | 54,264 | 93,869 | 93,952 |
| Textile fibres and their waste | Tonne | 19,451 | 18,183 | 20,051 | 21,459 | 21,452 |
| Second - hand clothing | Tonne | 82,216 | 101,066 | 106,974 | 110,659 | 131,941 |
| Crude Petroleum | Tonne | 997,028 | 567,432 | - | - | - |
| Petroleum products | Mn. Lt. | 3,484 | 3,760 | 4,645 | 5,120 | 5,478 |
| Residual petroleum products, n.e.s. and related materials | Tonne | 102,018 | 71,863 | 72,684 | 116,450 | 71,781 |
| Liquefied propane and butane | Tonne | 75,565 | 55,874 | 111,933 | 129,395 | 167,057 |
| Animal/vegetable fats and oils | Tonne | 591,488 | 636,120 | 622,343 | 683,490 | 750,512 |
| Organic & inorganic chemicals | Tonne | 241,719 | 256,736 | 389,311 | 268,454 | 279,396 |
| Pigments, paints, varnishes and related materials | Tonne | 25,394 | 27,718 | 28,932 | 34,410 | 38,004 |
| Medicinal and pharmaceutical products | Tonne | 16,110 | 17,187 | 20,713 | 24,954 | 25,873 |
| Essential oils & pefumes | Tonne | 50,269 | 46,097 | 55,425 | 55,321 | 56,046 |
| Chemical fertilizers | Tonne | 425,840 | 688,436 | 496,057 | 568,600 | 671,781 |
| Plastics in primary & non-primary forms | Tonne | 342,163 | 377,340 | 400,188 | 455,432 | 469,426 |
| Insecticides and fungicides | Tonne | 13,050 | 14,761 | 15,232 | 15,342 | 16,781 |
| Miscellaneous chemical products, n.e.s. | Tonne | 31,985 | 37,245 | 38,880 | 52,804 | 49,767 |
| Rubber tyres and inner tubes, for wheels of all kinds | "000"No | 5,118 | 5,718 | 6,104 | 6,429 | 7,757 |
| Paper and Paperboard | Tonne | 306,933 | 305,869 | 351,174 | 331,136 | 348,685 |
| Textile yarn | Tonne | 20,295 | 20,173 | 22,814 | 21,734 | 23,572 |
| Cement Clinkers | Tonne | 1,489,245 | 1,427,115 | 1,307,225 | 1,973,231 | 2,002,865 |
| Iron and steel | Tonne | 778,859 | 1,217,865 | 1,196,273 | 1,530,606 | 1,442,612 |
| Non-ferrous metals | Tonne | 42,405 | 52,588 | 53,315 | 51,010 | 51,520 |
| Structures and parts of structures of iron, steel or aluminium | Tonne | 53,179 | 52,612 | 66,405 | 95,065 | 103,981 |
| Hand & machine tools | Tonne | 11,027 | 10,682 | 11,382 | 11,337 | 11,649 |
| Manufactures of base metal, n.e.s. | Tonne | 30,633 | 33,046 | 32,747 | 66,069 | 60,270 |
| Automatic data proccessing machines and units thereof; | "000"No | 1,515 | 1,618 | 405 | 538 | 1,025 |
| Motorcycles and cycles fitted with an auxilliary motor | "000"No | 109 | 165 | 148 | 182 | 146 |
| Bicycles, assembled or partly assembled | "000"No | 134 | 166 | 140 | 162 | 108 |
| Road Motor Vehicles | Nos. | 74,111 | 92,270 | 103,517 | 109,781 | 85,063 |
| Prefabricated buldings | Tonne | 14,614 | 22,136 | 27,280 | 30,010 | 18,205 |
| Printed matter | Tonne | 9,028 | 9,402 | 10,218 | 13,318 | 18,100 |
| Articles, n.e.s., of plastics | Tonne | 25,318 | 37,770 | 49,786 | 46,138 | 50,649 |

Source: Kenya National Bureau of Statistics/Kenya Revenue Authority

* Provisional.

-Negligible

**Values of Principal Domestic Exports and Imports**

7.12. Tables 7.4(a) and 7.4(b) show the value of exports and imports of principal commodities. Tea remained the leading export commodity in 2016 with its earnings rising from KSh 123.0 billion in 2015 to KSh 124.5 billion in 2016. Horticulture was the second highest source of export revenue with its earnings rising by 9.2 per cent to KSh 110.3 billion in 2016. Similarly, earnings from domestic exports of coffee registered improved performance of 3.9 per cent to KSh 21.4 billion in 2016. Other commodities that recorded increases in the value of domestic exports in 2016 included articles of apparel and clothing accessories; iron and steel; and animal and vegetable fats and oils, thus reversing from declines witnessed in 2015. Domestic exports of titanium ores and concentrates rose by 17.0 per cent to KSh 11.0 billion in 2016. Tobacco and tobacco manufactures; essential oils; leather; cement; and soda ash were some of the commodities that recorded export value declines during the review period.

7.13. Expenditure on imports of industrial machinery rose by 19.7 per cent to KSh 253.5 billion, accounting for 17.7 per cent of the total import bill in 2016. However, expenditure on petroleum products continued to decline for the second year in a row to KSh 183.8 billion and contributed 12.8 per cent of the total expenditure on imports in 2016. The value of imports of road motor vehicles decreased from KSh 117.6 billion in 2015 to KSh 85.8 billion in 2016. Iron and steel as well as wheat also registered significant declines in the value of imports to KSh 75.4 billion and KSh 28.9 billion, respectively, in 2016. A massive reduction was observed in the importation of aircraft and associated equipment. In contrast, expenditure on sugar, molasses and honey rose by 41.6 per cent while that on automatic data processing machines nearly doubled during the year under review.

## Table 7.4(a): Values of Principal Domestic Exports, 2012-2016

KSh Million

| Commodity | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Fish and fish preparations | 5,392 | 3,362 | 4,266 | 3,287 | 1,899 |
| Maize(unmilled,excluding sweet corn) | 57 | 192 | 324 | 312 | 511 |
| Meals and flours of wheat | 290 | 145 | 87 | 138 | 65 |
| Horticulture | 81,129 | 89,339 | 97,105 | 100,963 | 110,338 |
| Sugar confectionery | 5,818 | 5,401 | 5,345 | 5,475 | 4,895 |
| Coffee, unroasted | 22,271 | 16,328 | 19,913 | 20,580 | 21,371 |
| Tea | 101,441 | 104,648 | 93,996 | 123,025 | 124,497 |
| Margarine and shortening | 2,684 | 2,245 | 2,349 | 2,307 | 2,126 |
| Edible products and preparations, n.e.s. | 3,218 | 2,573 | 2,637 | 4,048 | 4,329 |
| Beer made from malt | 3,209 | 3,636 | 3,416 | 3,630 | 2,316 |
| Tobacco and tobacco manufactures | 16,615 | 13,709 | 16,827 | 15,757 | 14,574 |
| Hides and skins (undressed) | 504 | 134 | 126 | 124 | 171 |
| Sisal | 1,184 | 1,020 | 1,325 | 1,517 | 1,762 |
| Stone, sand and gravel | 385 | 389 | 643 | 444 | 726 |
| Fluorspar | 3,272 | 1,714 | 1,883 | 1,428 | 843 |
| Salt | 3,167 | 2,978 | 3,881 | 4,694 | 4,337 |
| Soda ash | 9,724 | 8,997 | 7,832 | 6,247 | 5,432 |
| Titanium ores and concentrates | .. | .. | 7,282 | 9,420 | 11,043 |
| Metal scrap | 2,826 | 2,498 | 3,403 | 2,598 | 2,490 |
| Animal and Vegatable oils | 12,727 | 8,156 | 6,003 | 4,650 | 6,040 |
| Alcohols , phenols, phenol-alcohols, and the like | 2,170 | 1,758 | 1,447 | 2,059 | 1,605 |
| Pigments, paints, varnishes and related materials | 1,830 | 1,628 | 1,894 | 2,271 | 1,818 |
| Medicinal and pharmaceutical products | 8,699 | 7,068 | 8,296 | 11,199 | 13,190 |
| Essential oils | 13,623 | 11,172 | 10,854 | 9,822 | 9,139 |
| Plates, sheets, film, foil and strip, of plastics | 2,495 | 2,415 | 2,641 | 2,419 | 1,995 |
| Insecticides and fungicides | 801 | 771 | 805 | 1,546 | 2,034 |
| Leather | 7,036 | 8,491 | 7,597 | 6,222 | 4,605 |
| Wood manufactures n.e.s | 140 | 159 | 146 | 124 | 107 |
| Paper and paperboard | 5,150 | 5,342 | 4,406 | 4,773 | 4,994 |
| Textile yarn | 792 | 885 | 721 | 721 | 637 |
| Made-up articles, wholly or chiefly of textile materials, n.e.s. | 3,907 | 2,881 | 3,772 | 3,400 | 3,018 |
| Glassware | 2,344 | 1,855 | 840 | 910 | 607 |
| Cement | 8,118 | 8,292 | 7,541 | 7,721 | 4,360 |
| Iron and steel | 15,098 | 15,560 | 13,443 | 12,290 | 13,183 |
| Metal containers | 715 | 500 | 556 | 575 | 575 |
| Wire products: nails screws, nuts, etc. | 1,649 | 1,036 | 1,295 | 992 | 646 |
| Household equipment of base metal, n.e.s. | 3,222 | 3,392 | 3,508 | 2,659 | 2,709 |
| Manufactures of base metal, n.e.s. | 2,195 | 1,948 | 1,938 | 2,633 | 2,553 |
| Automatic data proccessing machines and units thereof; | 2,819 | 980 | 331 | 236 | 337 |
| Electrical machinery and apparatus, n.e.s. | 2,696 | 2,706 | 2,025 | 2,022 | 6,285 |
| Trailers and semi-trailers; other vehicles | 2,519 | 2,597 | 2,041 | 1,624 | 1,494 |
| Furniture and parts thereof; bedding, mattresses | 1,894 | 1,922 | 1,697 | 1,421 | 1,215 |
| Footwear | 4,148 | 3,992 | 3,569 | 3,694 | 3,473 |
| Printed matter | 4,346 | 3,442 | 4,271 | 6,363 | 5,205 |
| Articles of plastics | 10,278 | 10,263 | 10,995 | 11,174 | 9,907 |
| Articles of apparel and clothing accessories | 20,676 | 24,379 | 28,948 | 28,226 | 30,741 |
| All other Commodities | 74,433 | 62,789 | 56,353 | 61,964 | 60,351 |
| **GRAND TOTAL** | **479,706** | **455,689** | **460,572** | **499,708** | **506,548** |

Source: Kenya National Bureau of Statistics/ Kenya Revenue Authority

* Provisional

.. Data not available

## Table 7.4(b): Values of Principal Imports, 2012-2016

KSh Million

| Commodity | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Wheat, unmilled | 29,743 | 30,189 | 33,831 | 35,663 | 28,883 |
| Rice | 14,520 | 14,111 | 15,305 | 13,370 | 14,200 |
| Maize(unmilled,excluding sweet corn) | 6,451 | 2,291 | 9,308 | 8,306 | 3,637 |
| Wheat flour | 2,120 | 1,964 | 1,712 | 902 | 767 |
| Sugars, Mollases and Honey | 17,030 | 16,770 | 12,009 | 15,503 | 21,953 |
| Edible products and preparations, n.e.s. | 8,466 | 7,402 | 7,463 | 10,646 | 12,461 |
| Textile fibres and their waste | 5,025 | 5,099 | 5,792 | 6,623 | 6,365 |
| Second - hand clothing | 8,400 | 8,345 | 8,815 | 10,151 | 12,859 |
| Crude Petroleum1 | 68,086 | 41,037 | - | - | - |
| Petroleum Products | 237,557 | 252,673 | 292,643 | 214,695 | 183,842 |
| Residual petroleum products, n.e.s. and related materials | 7,263 | 5,379 | 5,362 | 6,635 | 3,979 |
| Liquefied propane and butane | 8,350 | 5,515 | 10,834 | 7,879 | 7,895 |
| Animal/vegetable fats and oils | 54,876 | 48,371 | 50,044 | 47,038 | 53,285 |
| Organic & inorganic chemicals | 22,080 | 22,303 | 21,856 | 22,560 | 22,677 |
| Pigments, paints, varnishes and related materials | 5,766 | 5,608 | 6,369 | 6,872 | 7,080 |
| Medicinal & Pharmaceauticals Products | 41,307 | 40,114 | 52,088 | 61,513 | 60,455 |
| Essential oils & perfumes | 15,351 | 16,935 | 18,445 | 20,901 | 19,413 |
| Chemical Fertilizers | 20,184 | 27,957 | 19,331 | 23,468 | 23,064 |
| Plastics in primary & non-primary forms | 47,650 | 55,182 | 60,217 | 62,724 | 59,319 |
| Insecticides and fungicides | 8,828 | 10,879 | 10,797 | 11,335 | 11,381 |
| Miscellaneous chemical products, n.e.s. | 8,698 | 10,781 | 12,958 | 14,417 | 14,062 |
| Rubber tyres and inner tubes, for wheels of all kinds | 12,143 | 13,189 | 12,406 | 13,343 | 14,270 |
| Paper and Paperboard | 30,377 | 26,864 | 29,948 | 29,316 | 30,065 |
| Textile yarn | 4,027 | 4,106 | 4,421 | 4,332 | 4,137 |
| Cement Clinkers | 8,134 | 7,187 | 6,563 | 9,548 | 8,365 |
| Iron and Steel | 56,667 | 80,749 | 75,526 | 88,153 | 75,400 |
| Non-ferrous metals | 12,119 | 14,626 | 14,704 | 14,672 | 14,353 |
| Structures and parts of structures of iron, steel or aluminium | 9,621 | 10,011 | 11,211 | 14,338 | 17,141 |
| Hand & machine tools | 2,794 | 3,265 | 4,082 | 3,267 | 2,848 |
| Manufactures of base metal, n.e.s. | 7,677 | 8,938 | 8,459 | 10,967 | 11,916 |
| Industrial Machinery | 194,666 | 231,440 | 256,672 | 211,724 | 253,541 |
| Agricultural Machinery and Tractors | 6,347 | 7,802 | 7,925 | 8,664 | 8,918 |
| Automatic data proccessing machines and units thereof; | 19,556 | 15,019 | 9,720 | 11,212 | 18,959 |
| Telecommunications equipment, n.e.s., and parts, n.e.s | 24,582 | 24,160 | 23,622 | 29,444 | 28,694 |
| Parts, n.e.s. and accessories of the motor vehicles | 6,790 | 7,440 | 8,105 | 9,674 | 9,078 |
| Motorcycles and cycles fitted with an auxilliary motor | 5,103 | 8,306 | 8,002 | 10,177 | 8,247 |
| Bicycles, assembled or partly assembled | 354 | 429 | 392 | 498 | 357 |
| Road Motor Vehicles | 73,768 | 83,330 | 101,792 | 117,637 | 85,838 |
| Aircraft and associated equipment | 43,105 | 21,308 | 129,589 | 83,094 | 7,753 |
| Prefabricated buldings | 4,814 | 4,980 | 6,702 | 7,000 | 4,641 |
| Furniture and parts thereof | 5,443 | 5,842 | 6,325 | 7,161 | 7,132 |
| Quality control instruments and apparatus, n.e.s. | 9,799 | 12,231 | 12,110 | 9,651 | 9,590 |
| Printed matter | 3,778 | 4,022 | 4,822 | 5,060 | 5,707 |
| Articles, n.e.s., of plastics | 4,704 | 5,623 | 6,846 | 8,556 | 7,802 |
| All other Commodities | 190,466 | 183,546 | 213,194 | 268,866 | 229,413 |
| **GRAND TOTAL** | **1,374,587** | **1,413,316** | **1,618,321** | **1,577,557** | **1,431,745** |

Source: Kenya National Bureau of Statistics/ Kenya Revenue Authority

* Provisional

- Negligible

Importation of crude oil almost ceased after 2013 due the closure of Kenya Petroleum Refineries Ltd

**Prices of Principal Domestic Exports and Imports**

7.14. The unit price of exported tea declined by 11.6 per cent to KSh 259 per Kilogram in 2016 as shown in Table 7.5(a). The price of a Kilogram of coffee remained at 2015 level of KSh 472. Despite increase in the quantity and value of exported titanium ores and concentrates , the unit price declined by 5.9 per cent in 2016 to KSh 17,968. This trend was also observed for domestic exports of iron and steel with a tonne of the commodity exchanging for KSh 94,828 in 2016, compared to KSh 98,965 in 2015. Unit price of Soda ash exported declined from KSh 22,925 in 2015 to KSh 20,998 in 2016. One Kilogram of exported fish and fish preparations increased by 4.3 per cent in 2016 to KSh 317 resulting in decline of both quantity and value of exported fish and fish preparations.

7.15. The average unit prices of pricipal imports are shown in Table 7.5(b). The expenditure on road motor vehicle declined significantly despite a 5.8 per cent reduction in unit price in 2016. One tonne of imported iron and steel exchanged for KSh 52,266 in 2016, down from KSh 57,594 in 2015, albeit reduction in the quantity imported. Both the quantity and value of wheat imports declined in the review period resulting in a 15.5 per cent reduction in the unit price. The unit price of chemical fertilizers declined by 16.8 per cent to KSh 34,333 in 2016. The 41.5 per cent increase in the price of one tonne of imported maize could partly explain the substantial decrease in the import volumes of the commodity in 2016. On the contrary, the 6.2 per cent increase in the cost of a tonne of imported second hand clothes from KSh 91,735 in 2015 to KSh 97,463 in 2016 did not deter the volumes of imported second hand clothing during the year which rose by 19.2 per cent.

## Table 7.5(a): Average Unit Prices of Principal Domestic Exports, 2012-2016

KSh/Unit

| Commodity | Unit | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| **DOMESTIC EXPORTS** | | | | | | |
| Fish and fish preparations | Kg | 309 | 287 | 280 | 304 | 317 |
| Maize(unmilled,excluding sweet corn) | Tonne | 104,445 | 155,458 | 192,874 | 155,622 | 160,052 |
| Meals and flours of wheat | Tonne | 38,749 | 47,047 | 37,827 | 42,403 | 43,610 |
| Horticulture | Kg | 221 | 227 | 223 | 228 | 220 |
| Sugar confectionery | Kg | 175 | 179 | 184 | 183 | 170 |
| Coffee, unroasted | Kg | 431 | 334 | 420 | 472 | 472 |
| Tea | Kg | 269 | 235 | 206 | 293 | 259 |
| Margarine and shortening | Kg | 145 | 141 | 137 | 125 | 120 |
| Edible products and preparations, n.e.s. | Kg | 202 | 190 | 179 | 220 | 219 |
| Beer made from malt | Lt. | 51 | 75 | 52 | 56 | 74 |
| Tobacco and tobacco manufactures | Kg | 471 | 584 | 801 | 987 | 960 |
| Hides and Skins(undressed) | Kg | 49 | 47 | 49 | 54 | 61 |
| Sisal | Tonne | 107,039 | 101,904 | 131,316 | 168,286 | 183,643 |
| Stone, sand and gravel | Tonne | 9,828 | 13,139 | 14,139 | 11,487 | 6,944 |
| Fluorspar | Tonne | 30,941 | 21,978 | 20,029 | 20,368 | 17,313 |
| Salt | Tonne | 11,118 | 10,288 | 14,420 | 15,470 | 14,157 |
| Soda Ash | Tonne | 21,193 | 18,790 | 19,774 | 22,925 | 20,998 |
| Titanium ores and concentrates [1] | Tonne | 0 | 0 | 20,198 | 19,100 | 17,968 |
| Metal scrap | Tonne | 517,068 | 557,769 | 668,406 | 446,816 | 233,652 |
| Animal and Vegetable oils | Kg | 128 | 116 | 122 | 124 | 105 |
| Alcohols , phenols, phenol-alcohols, and the like | Lt. | 97 | 95 | 96 | 107 | 92 |
| Pigments, paints, varnishes and related materials | Kg | 130 | 136 | 147 | 154 | 138 |
| Medicinal and pharmaceutical products | Kg | 666 | 569 | 624 | 855 | 986 |
| Essential oils | Kg | 113 | 119 | 124 | 125 | 112 |
| Plates, sheets, film, foil and strip, of plastics | Kg | 274 | 305 | 312 | 334 | 376 |
| Insecticides and fungicides | Kg | 469 | 544 | 504 | 700 | 879 |
| Leather | Kg | 310 | 320 | 290 | 267 | 213 |
| Wood manufactures n.e.s | Tonne | 230,037 | 339,262 | 364,399 | 234,694 | 345,992 |
| Paper and paperboard | Tonne | 124,641 | 127,932 | 129,436 | 143,718 | 80,073 |
| Textile yarn | Kg | 426 | 432 | 450 | 437 | 410 |
| Made-up articles, wholly or chiefly of textile materials, n.e.s. | Kg | 274 | 251 | 227 | 204 | 274 |
| Glassware | Kg | 51 | 82 | 63 | 69 | 53 |
| Cement | Tonne | 11,008 | 10,027 | 10,466 | 11,327 | 10,377 |
| Iron and steel | Tonne | 100,531 | 100,105 | 97,725 | 98,965 | 94,828 |
| Metal containers | Tonne | 208,247 | 176,684 | 175,708 | 226,354 | 161,239 |
| Wire products: nails screws, nuts, etc... | Tonne | 150,850 | 112,271 | 156,752 | 150,659 | 141,121 |
| Household equipment of base metal, n.e.s. | Tonne | 331,565 | 326,149 | 356,500 | 349,294 | 279,561 |
| Manufactures of base metal, n.e.s. | Tonne | 238,374 | 257,235 | 235,891 | 221,489 | 237,724 |
| Automatic data proccessing machines and units thereof | No's | 28,930 | 21,434 | 3,096 | 24,256 | 13,460 |
| Footwear | Pair | 80 | 77 | 89 | 113 | 93 |
| Printed matter | Tonne | 742 | 525 | 474 | 928 | 774 |
| Gold, non-monetary (excluding gold ores and concentrates) | Kg | 2,692,785 | 267,574 | 11,197 | | |

Source: Kenya National Bureau of Statistics/Kenya Revenue Authority

[1] The country exported the first batch of Titanium ores in 2014

* Provisional.

## Table 7.5(b): Average Unit Prices of Principal Imports, 2012- 2016

KSh/Unit

| Commodity | Unit | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| Wheat, unmilled | Tonne | 28,467 | 29,223 | 27,601 | 25,083 | 21,201 |
| Rice | Tonne | 36,326 | 34,453 | 33,331 | 30,198 | 27,953 |
| Maize, unmilled | Tonne | 19,872 | 24,506 | 20,283 | 17,299 | 24,480 |
| Wheat flour | Tonne | 38,975 | 63,660 | 51,590 | 55,294 | 48,143 |
| Sugars, Mollases and Honey | Tonne | 63,621 | 60,642 | 52,478 | 54,070 | 58,179 |
| Edible products and preparations, n.e.s. | Tonne | 108,311 | 153,102 | 137,528 | 113,411 | 132,632 |
| Textile fibres and their waste | Tonne | 258,337 | 280,434 | 288,866 | 308,641 | 296,716 |
| Second - hand clothing | Tonne | 102,169 | 82,574 | 82,402 | 91,735 | 97,463 |
| Crude Petroleum[1] | Tonne | 68,289 | 72,321 | .. | .. | .. |
| Petroleum products | Lt. | 68 | 67 | 63 | 42 | 34 |
| Residual petroleum products, n.e.s. and related materials | Kg | 71 | 75 | 74 | 57 | 55 |
| Liquefied propane and butane | Kg | 111 | 99 | 97 | 61 | 47 |
| Animal and vegetable oils | Kg | 93 | 76 | 80 | 69 | 71 |
| Organic & inorganic chemicals | Kg | 91 | 87 | 56 | 84 | 81 |
| Pigments, paints, varnishes and related materials | Kg | 227 | 202 | 220 | 200 | 186 |
| Medicinal & Pharmaceauticals Products | Kg | 2,564 | 2,334 | 2,515 | 2,465 | 2,337 |
| Essential oils & pefumes | Kg | 305 | 367 | 333 | 378 | 346 |
| Chemical fertilizers | Tonne | 47,399 | 40,609 | 38,969 | 41,273 | 34,333 |
| Plastics in primary & non-primary forms | Tonne | 139,262 | 146,241 | 150,473 | 137,724 | 126,365 |
| Insecticides and fungicides | Tonne | 676,516 | 737,003 | 708,822 | 738,833 | 678,209 |
| Miscellaneous chemical products, n.e.s. | Tonne | 271,934 | 289,454 | 333,286 | 273,018 | 282,553 |
| Rubber tyres and inner tubes, for wheels of all kinds | No. | 2,373 | 2,307 | 2,033 | 2,075 | 1,840 |
| Paper and Paperboard | Tonne | 98,970 | 87,829 | 85,281 | 88,532 | 86,224 |
| Cement Clinkers | Tonne | 5,462 | 5,036 | 5,021 | 4,839 | 4,177 |
| Iron and steel | Tonne | 72,757 | 66,304 | 63,135 | 57,594 | 52,266 |
| Non-ferrous metals | Tonne | 285,799 | 278,116 | 275,797 | 287,634 | 278,589 |
| Structures and parts of structures of iron, steel or aluminium | Tonne | 180,918 | 190,280 | 168,826 | 150,822 | 164,846 |
| Hand & machine tools | Kg | 253 | 306 | 359 | 288 | 245 |
| Manufactures of base metal, n.e.s. | Tonne | 250,595 | 270,469 | 258,327 | 165,995 | 197,718 |
| Automatic data proccessing machines and units thereof | No. | 12,910 | 9,285 | 24,024 | 20,831 | 18,491 |
| Motorcycles and cycles fitted with an auxilliary motor | No. | 46,678 | 50,253 | 53,953 | 55,888 | 56,510 |
| Bicycles, assembled or partly assembled | No. | 2,647 | 2,583 | 2,801 | 3,083 | 3,302 |
| Road Motor Vehicles | No. | 995,372 | 903,108 | 983,339 | 1,071,563 | 1,009,116 |
| Prefabricated buldings | Tonne | 329,373 | 224,952 | 245,686 | 233,249 | 254,944 |
| Printed matter | Tonne | 418,500 | 427,753 | 471,934 | 379,909 | 315,328 |
| Articles, n.e.s., of plastics | Tonne | 185,808 | 148,883 | 137,511 | 185,452 | 154,050 |

Source: Kenya National Bureau of Statistics/Kenya Revenue Authority

[1] Importation of crude oil ceased after 2013 due to closure of the Kenya Petroleum Refineries Ltd

* Provisional.

.. Data not available

**Composition of Exports**

7.16. Food and beverages continued being the dominant category of exports accounting for 45.2 per cent of all domestic exports in 2016 as presented in Table 7.6. Food and beverages for household consumption accounted for the bulk of export earnings within this category, rising from KSh 160.1 billion in 2015 to KSh 164.4 billion in 2016. Consumer goods not elsewhere specified were the second leading category of domestic exports after recording a 4.6 per cent increase to KSh 129.9 billion in 2016. Consequently, the share of goods within this category accounted for 25.6 per cent of total domestic export earnings during the year. Earnings from non-food industrial supplies shrunk from KSh 129.3 billion in 2015 to KSh 124.2 billion in 2016, mainly driven by a 10.1 per cent reduction in the value of processed non-food industrial supplies. The share of machinery and other capital equipment, to the total domestic exports rose by 0.71 percentage points in 2016 on account of a 39.2 per cent increase in exports on machinery and capital equipment during the year under review.

## Table 7.6: Domestic Exports by Broad Economic Category, 2012-2016

KSh Million

| DESCRIPTION | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **FOOD AND BEVERAGES** | **197,491** | **195,094** | **188,094** | **223,281** | **228,789** |
| Primary | 153,198 | 153,613 | 147,099 | 182,774 | 187,837 |
| For Industry | 23,895 | 18,982 | 22,101 | 22,630 | 23,471 |
| For Household Consumption | 129,303 | 134,631 | 124,998 | 160,145 | 164,366 |
| Processed | 44,293 | 41,482 | 40,995 | 40,507 | 40,952 |
| For Industry | 8,071 | 5,256 | 4,312 | 2,478 | 3,516 |
| For Household Consumption | 36,222 | 36,226 | 36,683 | 38,029 | 37,436 |
| **INDUSTRIAL SUPPLIES (Non-Food)** | **142,019** | **126,192** | **124,452** | **129,288** | **124,176** |
| Primary | 29,370 | 24,669 | 39,428 | 40,896 | 44,739 |
| Processed | 112,649 | 101,523 | 85,024 | 88,392 | 79,437 |
| **FUEL AND LUBRICANTS** | **4,029** | **1,610** | **3,281** | **6,288** | **4,546** |
| Primary | 8 | 8 | 5 | 9 | 13 |
| Processed | 4,021 | 1,602 | 3,275 | 6,279 | 4,533 |
| Motor Spirit | 395 | 190 | 60 | 38 | 125 |
| Other | 3,625 | 1,412 | 3,215 | 6,240 | 4,407 |
| **MACHINERY & OTHER CAPITAL EQUIPMENT** | **13,713** | **9,736** | **7,503** | **9,522** | **13,257** |
| Machinery & Other Capital Equipment | 11,864 | 7,867 | 6,116 | 7,565 | 11,845 |
| Parts and Accessories | 1,849 | 1,868 | 1,387 | 1,957 | 1,412 |
| **TRANSPORT EQUIPMENT** | **7,858** | **8,130** | **7,235** | **7,118** | **5,826** |
| Passenger Motor Vehicles | 103 | 122 | 92 | 454 | 516 |
| Other | 4,091 | 4,522 | 3,505 | 3,744 | 3,551 |
| For Industry | 3,942 | 4,402 | 3,250 | 3,571 | 3,474 |
| Non-Industrial | 149 | 120 | 255 | 173 | 77 |
| Parts and Accessories | 3,664 | 3,487 | 3,638 | 2,921 | 1,759 |
| **CONSUMER GOODS NOT ELSEWHERE SPECIFIED** | **113,869** | **113,537** | **128,463** | **124,180** | **129,879** |
| Durable | 3,803 | 3,819 | 4,503 | 1,449 | 1,258 |
| Semi-Durable | 27,999 | 31,404 | 35,417 | 35,088 | 35,462 |
| Non-Durable | 82,068 | 78,314 | 88,544 | 87,643 | 93,159 |
| **GOODS NOT ELSEWHERE SPECIFIED** | **727** | **1,390** | **1,544** | **31** | **77** |
| **TOTAL** | **479,706** | **455,689** | **460,572** | **499,708** | **506,548** |
| **SHARES:** | | | | | |
| Food and Beverages | 41.17 | 42.81 | 40.84 | 44.68 | 45.17 |
| Industrial Supplies (Non-Food) | 29.61 | 27.69 | 27.02 | 25.87 | 24.51 |
| Fuel and Lubricants | 0.84 | 0.35 | 0.71 | 1.26 | 0.90 |
| Machinery and other Capital Equipment | 2.86 | 2.14 | 1.63 | 1.91 | 2.62 |
| Transport Equipment | 1.64 | 1.78 | 1.57 | 1.42 | 1.15 |
| Consumer Goods not elsewhere specified | 23.74 | 24.92 | 27.89 | 24.85 | 25.64 |
| Goods not elsewhere specified | 0.15 | 0.31 | 0.34 | 0.01 | 0.02 |
| **TOTAL** | **100.00** | **100.00** | **100.00** | **100.00** | **100.00** |

* Provisional

**Composition of Imports**

7.17. Table 7.7 presents expenditure on imports by Broad Economic Category (BEC) for the period 2012 to 2016. The share of non-food industrial supplies to the total expenditure on imports rose by 3.0 percentage points to 36.2 per cent to remain the leading category of imports in 2016. This was in spite of a marginal decline in the value of imports within this category from KSh 524.6 billion in 2015 to KSh 518.7 billion in 2016. Machinery and capital equipment was the second leading source of expenditure on imports in 2016 accounting for 21.8 per cent of the total import bill at KSh 312.1 billion. Fuel and lubricants accounted for 14.5 per cent of total expenditure on imports in 2016, down from 15.0 per cent in the previous year. This could be explained by a 12.3 per cent decline in the value of imports of fuel and lubricants from KSh 237.3 billion in 2015 to KSh 208.0 billion in 2016. There was a substantial decline in the value of imports of transport equipment from KSh 266.9 billion in 2015 to KSh 147.5 billion in 2016. This mainly resulted from a 69.1 per cent decline in the value of imports of industrial transport equipment from KSh 158.2 billion in 2015 to KSh 49.0 billion in 2016. Consequently, the share of imports of transport equipment to the total imports dropped to 10.3 per cent in 2016 from 16.9 per cent in 2015.

## Table 7.7: Total Imports by Broad Economic Category, 2012-2016

KSh Million

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **FOOD AND BEVERAGES** | **109,074** | **101,590** | **111,838** | **123,444** | **114,560** |
| Primary | 52,592 | 48,048 | 59,437 | 66,528 | 48,528 |
| For Industry | 43,342 | 39,624 | 50,767 | 53,985 | 37,677 |
| For Household Consumption | 9,250 | 8,425 | 8,670 | 12,543 | 10,850 |
| Processed | 56,482 | 53,542 | 52,401 | 56,915 | 66,033 |
| For Industry | 12,093 | 8,933 | 8,981 | 10,934 | 15,125 |
| For Household Consumption | 44,389 | 44,609 | 43,420 | 45,981 | 50,907 |
| **INDUSTRIAL SUPPLIES (Non-Food)** | **407,225** | **450,479** | **462,172** | **524,556** | **518,672** |
| Primary | 23,319 | 25,862 | 26,051 | 29,318 | 30,389 |
| Processed | 383,906 | 424,617 | 436,121 | 495,238 | 488,283 |
| **FUEL AND LUBRICANTS** | **336,838** | **326,305** | **346,745** | **237,295** | **208,047** |
| Primary | 71,104 | 43,940 | 3,998 | 3,789 | 3,797 |
| Processed | 265,734 | 282,365 | 342,747 | 233,506 | 204,250 |
| Motor Spirit | 50,889 | 58,685 | 70,683 | 57,035 | 53,148 |
| Other | 214,845 | 223,680 | 272,064 | 176,471 | 151,101 |
| **MACHINERY AND OTHER CAPITAL EQUIPMENT** | **253,281** | **250,873** | **278,709** | **287,544** | **312,076** |
| Machinery and Other Capital Equipment | 202,175 | 200,349 | 225,337 | 242,172 | 251,200 |
| Parts and Accessories | 51,106 | 50,524 | 53,372 | 45,372 | 60,876 |
| **TRANSPORT EQUIPMENT** | **162,854** | **160,841** | **278,706** | **266,874** | **147,464** |
| Passenger Motor Vehicles | 35,796 | 44,604 | 51,430 | 56,138 | 50,046 |
| Other | 87,014 | 72,054 | 191,815 | 170,092 | 58,736 |
| Industrial | 80,141 | 61,998 | 181,963 | 158,164 | 48,950 |
| Non-Industrial | 6,874 | 10,055 | 9,853 | 11,928 | 9,786 |
| Parts and Accessories | 40,044 | 44,183 | 35,461 | 40,645 | 38,682 |
| **CONSUMER GOODS NOT ELSEWHERE SPECIFIED** | **95,965** | **96,299** | **113,537** | **125,884** | **126,668** |
| Durable | 17,203 | 24,386 | 22,469 | 23,899 | 23,736 |
| Semi-Durable | 21,603 | 20,738 | 27,853 | 32,100 | 30,795 |
| Non-Durable | 57,159 | 51,175 | 63,215 | 69,884 | 72,137 |
| **GOODS NOT ELSEWHERE SPECIFIED** | **9,350** | **26,927** | **26,616** | **11,960** | **4,257** |
| **TOTAL** | **1,374,587** | **1,413,316** | **1,618,321** | **1,577,557** | **1,431,745** |
| **SHARES:** | | | | | |
| Food and Beverages | 7.94 | 7.19 | 6.91 | 7.82 | 8.00 |
| Industrial Supplies (Non-Food) | 29.63 | 31.87 | 28.56 | 33.25 | 36.23 |
| Fuel and Lubricants | 24.50 | 23.09 | 21.43 | 15.04 | 14.53 |
| Machinery and other Capital Equipment | 18.43 | 17.75 | 17.22 | 18.23 | 21.80 |
| Transport Equipment | 11.85 | 11.38 | 17.22 | 16.92 | 10.30 |
| Consumer Goods not elsewhere specified | 6.98 | 6.81 | 7.02 | 7.98 | 8.85 |
| Goods not elsewhere specified | 0.68 | 1.91 | 1.64 | 0.76 | 0.30 |
| **TOTAL** | **100.00** | **100.00** | **100.00** | **100.00** | **100.00** |

* Provisional

**Direction of Trade**

7.18. The value of total exports declined marginally from KSh 581.0 billion in 2015 to KSh 578.1 billion in 2016 as presented in Table 7.8. Africa remained the leading destination of Kenya's exports; accounting for 40.6 per cent of total exports in 2016. This was despite a 3.1 per cent decline in the value of exports to the continent during the year to KSh 234.7 billion. Exports to the EAC accounted for slightly more than half of total exports to Africa. Europe was the second leading destination of exports accounting for 24.5 per cent of total exports in 2016. However, during the review period, exports to Europe registered a 3.0 per cent decline to KSh 141.5 billion. This followed a 3.7 per cent decline in exports to the European Union (EU) that accounted for 85.7 per cent of total exports to Europe. Total exports to the United Kingdom, traditionally one of the major destinations of Kenya's exports within the EU, declined by 7.6 per cent to KSh 37.6 billion in 2016. Similarly, export earnings from Germany dropped by 4.8 per cent to KSh 11.9 billion in 2016. Exports to the Netherlands however, rose from KSh 42.0 billion in 2015 to KSh 43.5 billion in 2016, largely associated with expansion of horticulture exports.

7.19. Export earnings from Asia increased by 7.4 per cent to KSh 140.5 billion in 2016. Pakistan continued being a major destination of exports within Asia with export earnings rising from KSh 35.3 billion in 2015 to KSh 40.3 billion in 2016. The same trend was exhibited in export earnings from the United Arab Emirates which rose for the second consecutive year, to KSh 31.0 billion. Exports to China and India rose by 18.8 and 32.2 per cent to KSh 10.1 billion and KSh 11.9 billion, respectively, in 2016. Total export earnings from Afghanistan decreased by 26.2 per cent to KSh 10.7 billion. Revenue from total exports to America continued to grow for the fifth consecutive year, being KSh 52.9 billion in 2016. This was largely on account of increased exports to the United States of America (USA) which rose by an average of 6.4 per cent for the last two years to KSh 43.4 billion in 2016. Similarly, total exports to Canada have been on an upward trend for the third consecutive year.

7.20. Total export earnings from the EAC registered 4.0 per cent decline to KSh 121.7 billion, to account for 51.9 per cent of total exports to Africa, during the review period. The decline could partly be explained by contraction of exports to Uganda and Rwanda by 9.3 and 2.5 per cent, respectively. Some of the commodities that recorded declines in export earnings from Uganda included cement (34.7 per cent); petroleum oils (27.4 per cent); articles of plastics (29.0 per cent); soap, cleansing and polishing preparations (32.1 per cent); alcoholic beverages (28.2 per cent); and salt (12.0 per cent). Declines in the value of exports were recorded for the Democratic Republic of Congo (3.1 per cent), South Sudan (4.3 per cent), Sudan (10.2 per cent) and Zambia (12.5 per cent). Total exports to Tanzania grew from KSh 33.7 billion in 2015 to KSh 34.8 billion in 2016, mainly attributable to a 28.0 per cent growth in re-exports. Similarly, the value of exports to Egypt rose to KSh 20.6 billion on account of increase in tea exports, while those to Somalia grew to KSh 17.9 billion in 2016. Tea remained the leading export commodity to Egypt, constituting 88.7 per cent of total domestic export earnings in 2016. The robust growth in total exports to Somalia was a result of increase in earnings of vegetable materials and products which more than doubled in 2016. In addition, domestic exports of manufactured tobacco to Somalia rose, albeit marginally, during the year.

## Table 7.8: Values of Total Exports by Destination, 2012-2016

KSh Million

| | 2010 | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| **EUROPE** | | | | | | |
| WESTERN EUROPE: | | | | | | |
| **European Union** | | | | | | |
| Belgium | 4,159 | 5,267 | 6,193 | 6,730 | 4,540 | 5,395 |
| Finland | 1,808 | 1,476 | 1,106 | 1,514 | 1,973 | 1,412 |
| France | 5,093 | 4,915 | 5,379 | 5,689 | 6,074 | 6,412 |
| Germany | 7,715 | 9,771 | 8,244 | 10,786 | 12,508 | 11,864 |
| Italy | 3,253 | 5,413 | 4,541 | 6,960 | 5,248 | 3,733 |
| Netherlands | 26,868 | 31,056 | 32,578 | 40,614 | 42,041 | 43,492 |
| Spain | 2,034 | 1,934 | 2,018 | 2,627 | 3,239 | 2,302 |
| Sweden | 2,742 | 3,810 | 2,503 | 2,731 | 2,510 | 3,066 |
| United Kingdom | 40,211 | 40,630 | 37,613 | 35,868 | 40,668 | 37,581 |
| Poland | 1,170 | 1,290 | 1,630 | 1,847 | 2,263 | 1,804 |
| Other | 2,869 | 3,157 | 2,840 | 4,591 | 4,867 | 4,205 |
| **Total** | **97,922** | **108,719** | **104,645** | **119,958** | **125,932** | **121,267** |
| Other Western Europe | 3,767 | 5,692 | 6,948 | 8,080 | 8,527 | 9,631 |
| **Total Western Europe** | **101,689** | **114,411** | **111,594** | **128,038** | **134,460** | **130,899** |
| EASTERN EUROPE: | | | | | | |
| Russia Federation | 4,515 | 6,582 | 6,831 | 7,124 | 8,065 | 6,996 |
| Kazakhstan | 2,870 | 3,777 | 4,346 | 3,267 | 2,855 | 3,028 |
| Other | 348 | 426 | 528 | 536 | 565 | 611 |
| **Total Eastern Europe** | **7,734** | **10,784** | **11,705** | **10,927** | **11,484** | **10,635** |
| **TOTAL, EUROPE** | **109,422** | **125,195** | **123,299** | **138,965** | **145,944** | **141,533.65** |
| **AMERICA** | | | | | | |
| U.S.A | 22,522 | 26,405 | 29,936 | 38,290 | 40,725 | 43,354 |
| Canada | 1,170 | 1,516 | 1,297 | 1,690 | 2,289 | 5,729 |
| Other | 688 | 820 | 2,533 | 5,684 | 7,575 | 3,808 |
| **TOTAL AMERICA** | **24,380** | **28,740** | **33,765** | **45,664** | **50,589** | **52,891** |
| **AFRICA** | | | | | | |
| **EAC** | | | | | | |
| Uganda | 52,108 | 67,450 | 65,362 | 60,783 | 68,574 | 62,163 |
| Tanzania | 33,211 | 46,036 | 40,496 | 42,725 | 33,663 | 34,797 |
| Rwanda | 10,535 | 16,151 | 13,500 | 14,441 | 17,950 | 17,500 |
| Burundi | 5,458 | 5,309 | 5,599 | 7,849 | 6,595 | 7,242 |
| **Total EAC** | | **134,946** | **124,957** | **125,798** | **126,782** | **121,702** |
| **Rest of Africa** | | | | | | |
| South Africa | 2,444 | 2,684 | 3,277 | 5,936 | 4,338 | 4,149 |
| Egypt | 18,116 | 21,464 | 17,001 | 17,509 | 20,166 | 20,619 |
| Somalia | 13,054 | 19,237 | 16,940 | 13,202 | 15,210 | 17,932 |
| Ethiopia | 4,385 | 4,578 | 4,885 | 6,919 | 7,154 | 8,053 |
| Sudan | 18,815 | 6,633 | 6,425 | 6,241 | 5,967 | 5,361 |
| South Sudan | 0 | 17,964 | 16,680 | 19,823 | 17,065 | 16,326 |
| Democratic R of Congo | 12,792 | 18,427 | 18,437 | 21,052 | 20,673 | 20,035 |
| Zambia | 4,688 | 6,667 | 6,288 | 6,668 | 5,909 | 5,172 |
| Other[1] | 13,308 | 17,987 | 16,584 | 18,215 | 18,921 | 15,325 |
| **TOTAL AFRICA** | **188,914** | **250,589** | **231,474** | **241,363** | **242,187** | **234,673** |
| **ASIA** | | | | | | |
| MIDDLE EAST: | | | | | | |
| Iran | 859 | 1,310 | 2,798 | 2,283 | 1,152 | 1,757 |
| Israel | 1,547 | 2,058 | 1,126 | 1,337 | 1,449 | 1,064 |
| Jordan | 163 | 272 | 260 | 309 | 853 | 1,059 |
| Saudi Arabia | 1,843 | 3,316 | 3,190 | 4,879 | 5,551 | 6,727 |
| United Arab Emirates | 18,856 | 28,608 | 25,144 | 20,198 | 29,239 | 30,974 |
| Yemen Arab Republic | 4,519 | 4,508 | 5,044 | 4,356 | 4,023 | 4,803 |
| Other | 2,738 | 1,993 | 1,941 | 2,445 | 2,941 | 4,140 |
| **Total Middle East** | **30,525** | **42,065** | **39,502** | **35,806** | **45,207** | **50,525** |
| FAR EAST | | | | | | |
| China(Mainland) | 2,512 | 5,384 | 4,199 | 6,597 | 8,471 | 10,061 |
| India | 8,478 | 7,528 | 9,475 | 8,753 | 8,954 | 11,919 |
| Indonesia | 989 | 1,571 | 1,252 | 885 | 1,323 | 934 |
| Japan | 2,091 | 2,457 | 2,711 | 3,526 | 4,054 | 4,071 |
| Korea Republic (South Korea) | 177 | 1,018 | 1,077 | 2,532 | 1,734 | 1,869 |
| Pakistan | 18,069 | 23,889 | 24,130 | 22,022 | 35,250 | 40,254 |
| Singapore | 649 | 345 | 1,679 | 1,169 | 1,404 | 357 |
| Afghanistan | 11,928 | 12,837 | 15,861 | 10,373 | 14,502 | 10,686 |
| Thailand | 1,120 | 1,728 | 1,620 | 1,657 | 2,071 | 1,727 |
| Other | 5,063 | 6,639 | 6,052 | 6,700 | 7,782 | 8,132 |
| **Total Far East** | **51,075** | **63,395** | **68,056** | **64,212** | **85,545** | **90,011** |
| **TOTAL, ASIA** | **81,600** | **105,460** | **107,558** | **100,018** | **130,752** | **140,536** |
| **AUSTRALIA & OCEANIC** | | | | | | |
| Australia | 636 | 1,638 | 2,663 | 3,029 | 2,313 | 2,203 |
| Other | 131 | 256 | 195 | 436 | 1,089 | 3,920 |
| **TOTAL Australia & Oceania** | **767** | **1,894** | **2,858** | **3,465** | **3,402** | **6,123** |
| All Other Countries | 1,661 | 1,191 | 1,456 | 1,166 | 800 | 1,045 |
| Aircraft and Ships Stores | 3,051 | 4,776 | 1,876 | 6,595 | 7,372 | 1,265 |
| **Total All Other Counties n.e.s** | **4,712** | **5,968** | **3,332** | **7,761** | **8,172** | **2,310** |
| **GRAND TOTAL EXPORTS** | **409,794** | **517,847** | **502,286** | **537,236** | **581,045** | **578,067** |

Source: Kenya National Bureau of Statistics/ Kenya Revenue Authority

*Provisional

[1]See Table 7.10 for details

7.21. Expenditure on imports declined by 9.2 per cent to KSh 1,431.7 billion in 2016 as presented in Table 7.9. Asia accounted for 66.8 per cent of total value of imports in 2016 continuing its dominance as the leading source of Kenya's imports. However, the value of imports from Asia reduced from KSh 981.7 billion in 2015 to KSh 956.7 billion in 2016. Imports from India declined by 18.6 per cent to KSh 205.5 billion during the same period. Similarly, the value of imports from Japan dropped by 6.6 per cent from KSh 88.2 billion in 2015 to KSh 82.4 billion in 2016. The value of imports from Israel nearly halved in 2016. Imports from China have continued to grow over the last five years making the country the leading source of Kenya's imports in 2016. The value of imports from China rose from KSh 320.8 billion in 2015 to KSh 337.5 billion in 2016. The major commodities imported from China included; wind-powered generators, rails and signaling systems. The value of imports from the United Arab Emirates rose marginally from KSh 90.6 billion in 2015 to KSh 91.5 billion in 2016. Similarly, the value of imports from Saudi Arabia rose by 25.2 per cent over the same period. Petroleum products were the main items imported from the United Arab Emirates and Saudi Arabia.

7.22. Europe accounted for 18.5 per cent of total expenditure on imports in 2016. Imports from Europe declined by 10.3 per cent to KSh 265.3 billion in 2016. This reduction was as a result of an 8.7 per cent drop in imports from the EU which constitute the largest share of imports from Europe. Imports from the United Kingdom declined for the third year in a row to stand at KSh 33.5 billion in 2016. Declines were also recorded in value of imports from Netherlands, Spain and Poland in 2016. The value of imports from America reduced by more than half from KSh 146.1 billion in 2015 to KSh 65.2 billion in 2016. This was largely on account of a 62.1 per cent drop in imports from the USA from KSh 126.0 billion to KSh 47.8 billion in 2016.

7.23. Imports from Africa contributed 9.8 per cent of the total import bill in 2016. However, the value of imports from Africa dropped by 6.0 per cent to KSh 140.2 billion in 2016 as shown in Table 7.10. Common Market for Eastern and Southern Africa (COMESA) accounted for 49.6 per cent of total imports from Africa at KSh 69.6 billion, in 2016. Within COMESA, imports from Uganda dropped from KSh 22.3 billion in 2015 to KSh 19.3 billion in 2016. Similarly, imports from Swaziland and Madagascar declined by 10.7 and 67.1 per cent, respectively, in 2016. In contrast, expenditure on imports from Egypt rose by 16.3 per cent to KSh 30.0 billion in 2016, making the country second leading source of imports from Africa. South Africa accounted for 35.6 per cent of total imports from Africa despite a reduction in the value of imports from KSh 61.3 billion in 2015 to KSh 49.9 billion in 2016 mainly due to reduction of iron and steel; and motor vehicles. Imports from Tanzania also contracted by 24.3 per cent to KSh 12.8 billion in 2016.

## Table 7.9: Values of Imports by County of Origin, 2012-2016

KSh Million

| DESCRIPTION | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **EUROPE** | | | | | |
| **WESTERN EUROPE** | | | | | |
| **European Union** | | | | | |
| Belgium | 10,907 | 13,059 | 13,159 | 14,966 | 13,496 |
| Finland | 2,245 | 3,665 | 3,840 | 5,415 | 3,339 |
| France | 27,081 | 20,666 | 22,447 | 21,066 | 21,534 |
| Germany | 41,474 | 37,488 | 47,409 | 47,381 | 43,353 |
| Italy | 20,736 | 20,324 | 19,946 | 22,722 | 23,738 |
| Netherlands | 17,635 | 24,788 | 18,792 | 20,527 | 16,510 |
| Spain | 7,981 | 8,365 | 12,516 | 11,376 | 11,023 |
| Sweden | 8,117 | 7,091 | 6,233 | 6,364 | 5,844 |
| United Kingdom | 43,849 | 49,020 | 47,037 | 42,970 | 33,487 |
| Denmark | 4,745 | 4,633 | 4,223 | 4,097 | 6,020 |
| Ireland | 4,560 | 4,383 | 5,689 | 7,525 | 6,949 |
| Czech Republic | 1,350 | 2,073 | 1,959 | 1,929 | 3,300 |
| Austria | 2,962 | 1,843 | 2,635 | 2,680 | 3,300 |
| Poland | 1,744 | 2,290 | 4,720 | 8,643 | 6,020 |
| Hungary | 1,387 | 1,627 | 1,449 | 2,565 | 2,494 |
| Other | 7,362 | 6,313 | 13,363 | 12,494 | 12,157 |
| **Total** | **204,133** | **207,628** | **225,416** | **232,720** | **212,566** |
| Other Western Europe | 21,410 | 23,969 | 20,235 | 27,112 | 23,836 |
| **Total Western Europe** | **225,543** | **231,597** | **245,651** | **259,832** | **236,402** |
| **EASTERN EUROPE** | | | | | |
| Russian Federation | 15,212 | 23,182 | 23,118 | 28,583 | 24,260 |
| Ukraine | 8,516 | 13,708 | 15,008 | 6,118 | 3,819 |
| Other | 498 | 2,148 | 2,168 | 1,059 | 842 |
| **Total** | **24,226** | **39,039** | **40,294** | **35,759** | **28,921** |
| **TOTAL, EUROPE** | **249,769** | **270,635** | **285,945** | **295,592** | **265,323** |
| **AMERICA** | | | | | |
| U.S.A | 65,966 | 57,412 | 168,720 | 126,041 | 47,819 |
| Canada | 13,372 | 6,525 | 7,886 | 7,754 | 7,807 |
| Brazil | 25,290 | 15,603 | 6,094 | 6,968 | 4,370 |
| Other | 14,665 | 4,936 | 4,775 | 5,294 | 5,195 |
| **TOTAL AMERICA** | **119,293** | **84,477** | **187,476** | **146,056** | **65,190** |
| **AFRICA** | | | | | |
| South Africa | 61,954 | 70,724 | 63,893 | 61,311 | 49,857 |
| Tanzania | 14,402 | 11,666 | 18,364 | 16,906 | 12,806 |
| Uganda | 15,323 | 16,086 | 17,549 | 22,284 | 19,276 |
| Swaziland | 4,093 | 5,436 | 5,594 | 7,162 | 6,398 |
| Mauritius | 3,057 | 2,011 | 2,794 | 2,713 | 5,174 |
| Rwanda | 822 | 1,006 | 716 | 790 | 775 |
| Zambia | 2,880 | 2,894 | 4,380 | 3,895 | 4,201 |
| Other[1] | 38,225 | 38,016 | 32,851 | 34,037 | 41,755 |
| **TOTAL AFRICA** | **140,755** | **147,839** | **146,141** | **149,096.93** | **140,240.65** |
| **ASIA** | | | | | |
| **MIDDLE EAST** | | | | | |
| Iran | 3,686 | 2,434 | 3,788 | 3,808 | 6,134 |
| Israel | 7,230 | 9,437 | 5,659 | 10,410 | 5,027 |
| Jordan | 1,175 | 799 | 789 | 945 | 806 |
| Saudi Arabia | 66,841 | 41,423 | 56,565 | 55,306 | 69,259 |
| United Arab Emirates | 149,879 | 117,360 | 103,255 | 90,573 | 91,482 |
| Bahrain | 22,915 | 34,977 | 41,367 | 5,759 | 8,095 |
| Oman | 9,113 | 3,819 | 10,518 | 5,942 | 5,697 |
| Other | 23,279 | 9,631 | 6,028 | 5,775 | 8,186 |
| **Total Middle East** | **284,117** | **219,880** | **227,969** | **178,517** | **194,687** |
| **FAR EAST** | | | | | |
| China | 167,206 | 182,356 | 248,648 | 320,816 | 337,450 |
| India | 195,230 | 258,230 | 264,536 | 252,523 | 205,499 |
| Indonesia | 55,241 | 45,041 | 48,598 | 45,939 | 45,372 |
| Japan | 63,135 | 83,720 | 86,554 | 88,239 | 82,409 |
| Korea South | 22,541 | 24,471 | 29,105 | 18,822 | 14,211 |
| Pakistan | 12,881 | 15,647 | 18,020 | 18,347 | 18,175 |
| Singapore | 13,025 | 19,437 | 14,624 | 9,612 | 6,795 |
| Taiwan | 13,409 | 12,304 | 15,541 | 12,391 | 12,296 |
| Malaysia | 7,017 | 9,349 | 11,066 | 10,556 | 12,321 |
| Thailand | 11,361 | 12,673 | 12,527 | 12,913 | 12,059 |
| Other | 11,362 | 13,593 | 12,984 | 12,976 | 15,406 |
| **Total Far East** | **572,408** | **676,820** | **762,204** | **803,133** | **761,992** |
| **TOTAL, ASIA** | **856,525** | **896,700** | **990,173** | **981,650** | **956,679** |
| **AUSTRALIA & OCEANIA** | | | | | |
| Australia | 4,589 | 12,422 | 7,069 | 4,032 | 2,878 |
| Other | 3,523 | 618 | 431 | 787 | 1,190 |
| **TOTAL AUSTRALIA & OCEANIA** | **8,112** | **13,040** | **7,500** | **4,820** | **4,068** |
| All Other Countries N.E.S. | 134 | 624 | 1,086 | 342 | 243 |
| **Total All Other Counties n.e.s** | **134** | **624** | **1,086** | **342** | **243** |
| **GRAND TOTAL** | **1,374,587** | **1,413,316** | **1,618,321** | **1,577,557** | **1,431,745** |

Source: Kenya National Bureau of Statistics/ Kenya Revenue Authority

*Provisional

[1]See table 7.10 for details

## Table 7.10: Trade with African Countries, 2012-2016

KSh '000

| ZONES/COUNTRIES | Total Exports | | | | | Imports | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2012 | 2013 | 2014 | 2015 | 2016* | 2012 | 2013 | 2014 | 2015 | 2016* |
| **EAST AFRICAN COMMUNITY (EAC)** | | | | | | | | | | |
| Tanzania | 46,036,163 | 40,496,493 | 42,724,911 | 33,663,396 | 34,796,571 | 14,401,599 | 11,666,407 | 18,364,083 | 16,906,157 | 12,806,098 |
| Uganda | 67,450,115 | 65,361,907 | 60,782,664 | 68,573,904 | 62,163,383 | 15,322,810 | 16,085,806 | 17,549,421 | 22,283,692 | 19,275,753 |
| Rwanda | 16,151,363 | 13,499,695 | 14,440,844 | 17,949,831 | 17,499,630 | 822,286 | 1,005,755 | 715,591 | 789,704 | 774,593 |
| Burundi | 5,308,763 | 5,598,956 | 7,849,463 | 6,594,983 | 7,242,223 | 310,424 | 52,577 | 29,446 | 223,663 | 68,353 |
| **Total, EAC** | **134,946,405** | **124,957,051** | **125,797,882** | **126,782,115** | **121,701,806** | **30,857,118** | **28,810,546** | **36,658,542** | **40,203,215** | **32,924,797** |
| **COMESA** | | | | | | | | | | |
| Comoros | 1,213,819 | 880,126 | 478,664 | 1,103,877 | 1,127,582 | 540 | 63 | - | - | 1,247 |
| Congo, D.R | 18,427,368 | 18,436,875 | 21,052,099 | 20,673,353 | 20,035,483 | 883,829 | 561,648 | 259,805 | 127,763 | 208,300 |
| Djibouti | 1,181,098 | 1,227,723 | 1,011,457 | 1,110,081 | 1,318,178 | 119,318 | 2,020 | 3,486 | 15,328 | 3,010 |
| Egypt | 21,464,391 | 17,001,458 | 17,509,233 | 20,166,293 | 20,618,514 | 29,844,316 | 25,602,868 | 25,532,067 | 25,816,669 | 30,042,739 |
| Eritrea | 266,221 | 306,469 | 396,846 | 449,632 | 117,935 | 275 | 4,578 | 19 | 68 | .. |
| Ethiopia | 4,578,469 | 4,885,115 | 6,918,973 | 7,154,246 | 8,052,619 | 354,122 | 278,631 | 424,764 | 501,056 | 531,602 |
| Libya | 70,435 | 112,165 | 128,998 | 131,594 | 126,330 | 33,181 | 6,472 | 8,591 | 181,901 | .. |
| Madagascar | 450,088 | 312,625 | 429,997 | 449,833 | 205,535 | 638,314 | 790,495 | 590,369 | 2,433,745 | 801,749 |
| Malawi | 4,693,589 | 3,497,283 | 3,326,340 | 3,047,465 | 2,791,807 | 782,922 | 1,041,386 | 302,633 | 249,795 | 377,281 |
| Mauritius | 1,296,488 | 956,755 | 1,060,761 | 1,083,200 | 976,999 | 3,057,571 | 2,011,224 | 2,793,710 | 2,713,035 | 5,173,580 |
| Seychelles | 183,693 | 379,669 | 177,399 | 321,581 | 161,718 | 403,870 | 290,695 | 470,097 | 64,171 | 236 |
| Sudan | 6,633,308 | 6,424,532 | 6,241,153 | 5,966,860 | 5,360,749 | 955,403 | 1,359,591 | 1,327 | 454,834 | 479,445 |
| South Sudan | 17,964,306 | 16,680,368 | 19,822,572 | 17,065,487 | 16,326,135 | 14,664.96 | 21,304 | 1,210,699 | 8,709 | 6,200 |
| Swaziland | 11,101 | 11,741 | 17,929 | 103,827 | 24,154 | 4,092,652 | 5,436,480 | 5,594,274 | 7,161,711 | 6,397,800 |
| Zambia | 6,666,568 | 6,287,696 | 6,667,898 | 5,909,279 | 5,171,559 | 2,879,769 | 2,893,584 | 4,380,297 | 3,894,811 | 4,200,643 |
| Zimbabwe | 1,721,158 | 1,809,563 | 1,663,268 | 1,217,307 | 914,062 | 1,056,068 | 819,548 | 494,674 | 224,209 | 1,256,194 |
| **Sub-Total** | **86,822,101** | **79,210,163** | **86,903,585** | **85,953,916** | **83,329,358** | **45,116,816** | **41,120,587** | **42,066,812** | **43,847,812** | **49,480,027** |
| **Total, COMESA** | **175,732,344** | **163,670,721** | **169,976,556** | **179,072,634** | **170,234,594** | **61,572,335** | **58,264,726** | **60,361,271** | **67,144,871** | **69,598,727** |
| **OTHER COUNTRIES** | | | | | | | | | | |
| Algeria | 4,503 | 545,188 | 108,318 | 361,859 | 122,583 | 19,391 | 13,650 | 857,743 | 799,089 | 300,993 |
| Angola | 402,105 | 178,648 | 108,415 | 102,377 | 74,733 | 284,979 | 132,449 | 116,955 | 24,676 | 59,990 |
| Ghana | 369,074 | 631,527 | 478,990 | 490,556 | 534,359 | 254,611 | 254,505 | 368,916 | 121,385 | 205,283 |
| Nigeria | 2,923,891 | 2,350,105 | 2,429,578 | 3,659,278 | 2,559,422 | 48,664 | 1,596,189 | 698,214 | 205,491 | 459,985 |
| Lesotho | 110,192 | 33,351 | 47,556 | 61,418 | 28,801 | 49,184 | 79,011 | 10,165 | 2,191 | 1,829 |
| Mozambique | 1,246,300 | 1,407,050 | 1,809,120 | 1,292,855 | 2,358,730 | 695,392 | 1,833,139 | 734,959 | 1,412,850 | 2,363,997 |
| Reunion | 92,686 | 126,331 | 127,782 | 127,091 | 160,438 | 4,985 | 6,595 | 2,516 | 3,561 | 1,561 |
| Somalia | 19,236,817 | 16,940,454 | 13,201,901 | 15,209,983 | 17,931,907 | 17,320 | 293,755 | 150,268 | 28,698 | 52,823 |
| South Africa | 2,684,280 | 3,276,892 | 5,936,345 | 4,338,440 | 4,149,033 | 61,953,797 | 70,724,146 | 63,893,353 | 61,311,246 | 49,857,194 |
| All Other African Countries | 1,750,702 | 1,817,737 | 4,413,643 | 3,806,935 | 1,721,975 | 1,452,794 | 2,974,601 | 582,942 | 1,136,711 | 4,532,170 |
| **Sub-Total** | **28,820,549** | **27,307,284** | **28,661,648** | **29,450,792** | **29,641,979** | **64,781,117** | **77,908,040** | **67,416,032** | **65,045,898** | **57,835,825** |
| **TOTAL AFRICA** | **250,589,055** | **231,474,498** | **241,363,115** | **242,186,823** | **234,673,144** | **140,755,051** | **147,839,173** | **146,141,386** | **149,096,925** | **140,240,649** |
| Percentage of all Exports/Imports | 48.4 | 46.1 | 44.9 | 41.7 | 40.6 | 10.2 | 10.5 | 9.0 | 9.5 | 9.8 |

Source: Kenya National Bureau of Statistics/Kenya Revenue Authority

* Provisional

\- Negligible

**Balance of Payments**

7.24. Balance of Payments (BOP) statistics are summarised in Table 7.11. The deficit in the current account narrowed by 11.9 per cent to KSh 370.8 billion in 2016 from 421.1 billion in 2015. This was partly due to a marginal decline of 0.7 per cent in merchandise exports and 1.8 per cent decrease in merchandise imports on free on board basis. Imports remained subdued on account of a depreciated Kenya Shilling and the reduction in transport equipment. The current account balance as a percentage of GDP was 5.2 per cent.

7.25. Net inflows in international trade in services increased by 32.7 per cent from a surplus of KSh 129.4 billion in 2015 to a surplus of KSh 171.7 billion in 2016. The growth in earnings from services was mainly occasioned by increased foreign travel receipts that rose by 17.6 per cent, boosted by conference tourism. Services payments decreased by 11.7 per cent to KSh 288.0 billion in 2016. The improvement in the services account mainly supported the narrowing in the current account deficit in the review period.

7.26. Net financial inflows went up by 9.5 per cent to a surplus KSh 420.0 billion in 2016. Other investment inflows increased by a surplus of 1.1 per cent to KSh 415.4 billion in 2016. However, foreign direct investment inflows declined by 34.4 per cent to a surplus of KSh 39.9

billion in 2016. These developments led to the improvement in the overall BOP position from a deficit of KSh 24.9 billion in 2015 to a surplus of KSh 13.1 billion in 2016.

**Table 7.11: Balance of Payments, 2012-2016**

KSh Million

| | 2012+ | 2013+ | 2014+ | 2015+ | 2016* |
|---|---|---|---|---|---|
| **A. Current Account, n.i.e** | **-356,389.1** | **-417,019.6** | **-560,761.1** | **-421,082.1** | **-370,801.9** |
| Goods: exports f.o.b | 525,120.0 | 503,491.1 | 546,781.5 | 587,330.0 | 583,378.0 |
| Goods: imports f.o.b | 1,312,483.6 | 1,385,669.8 | 1,488,446.8 | 1,409,606.4 | 1,384,265.7 |
| Services: credit | 422,069.7 | 441,986.5 | 441,739.9 | 455,369.8 | 459,624.3 |
| *of which Travel* | 79,016.6 | 75,843.8 | 71,277.6 | 71,081.1 | 83,614.2 |
| Services: debit | 201,910.3 | 190,061.0 | 294,498.4 | 326,014.9 | 287,970.3 |
| *Balance on goods and services* | -567,204.1 | -630,253.1 | -794,423.8 | -692,921.5 | -630,705.1 |
| Primary income: credit | 29,289.5 | 28,712.4 | 43,643.4 | 48,298.1 | 43,991.1 |
| Primary income: debit | 55,973.1 | 80,383.9 | 119,981.0 | 115,459.3 | 113,406.5 |
| *Balance on goods, services, and primary income* | -593,887.6 | -681,924.6 | -870,761.4 | -760,082.7 | -703,638.7 |
| Secondary income[1], n. i. e.: credit | 240,850.5 | 268,925.2 | 327,853.4 | 345,217.9 | 333,039.1 |
| Secondary income[1]: debit | 3,351.9 | 4,020.2 | 17,853.1 | 6,217.3 | 5,191.9 |
| **B. Capital Account, n.i.e.** | **19,890.0** | **13,644.0** | **24,204.0** | **25,718.0** | **20,878.0** |
| Capital account, n.i.e.: credit | 19,890.0 | 13,644.0 | 24,204.0 | 25,718.0 | 20,878.0 |
| Capital account: debit | - | - | - | - | - |
| **C. Financial Account, n.i.e.** | **-471,905.1** | **-448,096.6** | **-650,365.7** | **-383,721.0** | **-419,998.1** |
| Direct investment: assets | 20,149.6 | 17,105.0 | 6,604.6 | 23,758.5 | 16,008.5 |
| Direct investment: liabilities, n.i.e. | 116,665.5 | 96,356.4 | 72,178.6 | 60,843.6 | 39,927.7 |
| Portfolio investment: assets | 3,451.7 | 3,285.4 | 4,869.6 | 18,722.0 | 42,939.3 |
| Equity and investment fund shares | 1,864.1 | 1,016.3 | 310.0 | 996.0 | 41,283.6 |
| Debt securities | 1,587.6 | 2,269.1 | 4,559.6 | 17,726.0 | 1,655.7 |
| Portfolio investment: liabilities, n.i.e. | 21,853.3 | 26,581.6 | 331,663.4 | 3,499.1 | 4,050.4 |
| Equity and investment fund shares | 21,734.0 | 25,563.0 | 83,907.5 | 1,061.1 | 2,295.6 |
| Debt securities | 119.3 | 1,018.6 | 247,755.9 | 2,438.0 | 1,754.9 |
| Financial derivatives: net | - | - | - | - | - |
| Other investment: assets | -4,306.4 | 56,268.7 | -505.0 | 49,206.0 | -19,542.1 |
| Other equity | - | - | - | - | - |
| Other debt instruments | -4,306.4 | 56,268.7 | -505.0 | 49,206.0 | -19,542.1 |
| Central bank | - | - | - | - | - |
| Deposit-taking corporations, except the central bank, | -28,646.6 | 40,048.0 | -7,067.2 | 40,885.7 | -24,812.7 |
| General government | - | - | - | - | - |
| Other sectors | 24,340.3 | 16,220.7 | 6,562.2 | 8,320.3 | 5,270.7 |
| Other financial corporations | - | - | - | - | - |
| Nonfinancial corporations, households, and NPISHs[2] | 24,340.3 | 16,220.7 | 6,562.2 | 8,320.3 | 5,270.7 |
| Other investment: liabilities, n.i.e. | 352,681.1 | 401,817.7 | 257,492.8 | 411,064.8 | 415,425.6 |
| Other equity | 1,930.3 | 1,859.1 | -1,380.1 | -274.6 | -827.4 |
| Special Drawing Rights | - | - | - | - | - |
| Other debt instruments | 350,750.8 | 399,958.6 | 258,872.9 | 411,339.4 | 416,253.0 |
| Central bank | 2,737.9 | -1,433.9 | 6,910.7 | -217.0 | -3,646.0 |
| Deposit-taking corporations, except the central bank | 45,130.5 | 44,300.8 | 51,500.4 | 47,241.8 | -28,732.8 |
| General government | 93,042.0 | 71,353.7 | -21,877.9 | 202,052.1 | 200,165.0 |
| Other sectors | 209,840.4 | 285,738.1 | 222,339.8 | 162,262.4 | 248,466.8 |
| Other financial corporations | - | - | - | - | - |
| Nonfinancial corporations, households, and NPISHs[2] | 209,840.4 | 285,738.1 | 222,339.8 | 162,262.4 | 248,466.8 |
| **D. Net Errors and Omissions** | **-32,049.4** | **-12,955.5** | **14,033.7** | **-13,262.0** | **-56,978.1** |
| **E. Overall Balance** | **-103,356.6** | **-31,765.5** | **-127,842.3** | **24,905.1** | **-13,096.1** |
| **F. Reserves and Related Items** | **103,356.6** | **31,765.5** | **127,842.3** | **-24,905.1** | **13,096.1** |
| Reserve assets | 122,919.4 | 73,921.9 | 117,353.1 | -35,386.7 | 3,894.7 |
| Credit and loans from the IMF | 16,314.8 | 15,252.4 | -10,489.1 | -10,481.6 | -9,201.4 |
| Exceptional financing | 3,248.0 | 26,904.0 | - | - | - |
| *Current Account balance as % of GDP* | -8.4 | -8.8 | -10.4 | -6.7 | -5.2 |

* Provisional

\+ Revised with survey data

[1]Includes current transfers

[2]NPISHs: Non-Profit Institutions Serving Households

**International Liquidity**

7.28. Stock of foreign reserves of Central Monetary Authorities held by the Central Bank of Kenya (CBK) and the National Treasury from 2012 to 2016 is shown in Table 7.12. The gross stock of foreign reserves reduced by 0.8 per cent to KSh 736.5 billion as at December 2016, compared to an increase of 5.4 per cent as at December 2015. However, net foreign assets of the CBK, increased from KSh 636.6 billion as at December 2015 to KSh 643.1 billion as at December 2016. The reserve position in the International Monetary Fund (IMF) contracted by 4.8 per cent as at December 2016 while Special Drawings Rights (SDRs) more than doubled in the same period. The Central Bank's foreign liabilities reduced by 12.3 per cent to KSh 91.4 billion as at December 2016 from KSh 104.2 billion as at December 2015.

**Table 7.12: Central Monetary Authorities: Foreign Exchange Reserves, 2012-2016**

KSh Million

| As at end of | Official Foreign Assets and Liabilities | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Central Bank Of Kenya | | | | | Government | | | Foreign Reserves[1] of Central Monetary Authorities |
| | S.D.R.'s | Foreign Exchange (cash + gold) | External Banks' Deposits | Use of Fund Credit | Total Net Foreign Assets of Central Bank | Reserve Position in IMF | Other Holdings | Total Reserves of Central Government | |
| 2012 | 596 | 478,334 | 11,653 | 76,814 | 390,417 | 1,719 | 110 | 1,829 | 480,759 |
| 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 | | | | | | | | | |
| January | 513 | 682,582 | 14,395 | 84,185 | 584,515 | 1,692 | 114 | 1,805 | 684,900 |
| February | 3,411 | 688,455 | 18,339 | 83,802 | 589,725 | 1,767 | 122 | 1,888 | 693,754 |
| March | 3,370 | 680,534 | 18,565 | 82,968 | 582,371 | 1,805 | 125 | 1,930 | 685,835 |
| April | 2,991 | 678,626 | 19,554 | 86,153 | 575,910 | 1,842 | 129 | 1,972 | 683,589 |
| May | 2,562 | 684,202 | 19,076 | 87,534 | 580,153 | 1,899 | 133 | 2,032 | 688,795 |
| June | 4,385 | 678,775 | 17,260 | 87,433 | 578,466 | 1,936 | 134 | 2,070 | 685,229 |
| July | 4,528 | 677,608 | 19,506 | 90,111 | 572,519 | 1,936 | 134 | 2,070 | 684,206 |
| August | 4,618 | 683,498 | 20,375 | 91,894 | 575,847 | 1,936 | 134 | 2,070 | 690,185 |
| September | 4,670 | 659,106 | 19,898 | 93,148 | 550,730 | 1,936 | 134 | 2,070 | 665,846 |
| October | 3,946 | 715,338 | 19,195 | 89,084 | 611,006 | 1,936 | 134 | 2,070 | 721,354 |
| November | 3,373 | 702,327 | 19,591 | 90,732 | 595,377 | 1,936 | 134 | 2,070 | 707,770 |
| December | 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 |

Source: Central Bank of Kenya

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

**Foreign Exchange Rates**

7.29. The overall trade weighted index deteriorated marginally from 114.3 in 2015 to 114.8 in 2016, as presented in Table 7.13. The Kenyan Shilling depreciated against the Japanese Yen, US Dollar, UAE Dirham and Euro by 15.3, 3.4, 3.4 and 3.1 per cent, respectively, in 2016. However, it strengthened against the South African Rand, Pound Sterling, Chinese Yuan and Indian Rupee by 10.3, 8.3, 2.1 and 1.2 per cent, respectively, in 2016. The Kenyan Shilling remained stable within the EAC, gaining against the Rwandese Franc, Tanzanian Shilling and Ugandan Shilling by 6.2, 3.9 and 2.2 per cent, respectively, in 2016.

**Table 7.13: Foreign Exchange Rates of the Kenya Shilling for Selected Currencies, 2012-2016**

| | Annual Av. | Annual Av. | Annual Av. | Annual Av. | Annual Av. |
|---|---|---|---|---|---|
| **Currency** | **2012** | **2013** | **2014** | **2015** | **2016*** |
| 1 Euro[1] | 108.73 | 114.41 | 116.84 | 108.96 | 112.33 |
| 1 US Dollar | 84.53 | 86.12 | 87.92 | 98.18 | 101.50 |
| 1 Pound Sterling | 134.00 | 134.75 | 144.88 | 150.17 | 137.66 |
| 1 UAE Dirham | 23.01 | 23.45 | 23.94 | 26.73 | 27.64 |
| 1 Indian Rupee | 1.59 | 1.48 | 1.44 | 1.53 | 1.51 |
| 1 Chinese Yuan | 13.40 | 14.01 | 14.27 | 15.62 | 15.29 |
| 1 SA Rand | 10.31 | 8.95 | 8.10 | 7.72 | 6.93 |
| 100 Japanese Yen | 106.01 | 88.43 | 83.26 | 81.12 | 93.55 |
| 1 Saudi Riyal | 22.54 | 22.97 | 23.44 | 26.17 | 27.06 |
| 1 Egyptian Pound[2] | 13.93 | 12.53 | 12.41 | 12.77 | 10.14 |
| TSh/KSh | 18.78 | 18.79 | 18.93 | 20.73 | 21.54 |
| 1 Pakistan Rupee[2] | 0.91 | 0.85 | 0.87 | 0.96 | 0.98 |
| 1 Swedish Kroner | 12.50 | 13.22 | 12.88 | 11.65 | 11.87 |
| 1 Swiss Franc | 90.22 | 92.96 | 96.18 | 102.04 | 103.04 |
| USh/KSh | 29.62 | 30.06 | 29.55 | 32.94 | 33.68 |
| 1 Congolese Franc | 0.09 | 0.09 | 0.10 | 0.11 | 0.11 |
| Rwanda Francs/KSh[2] | 7.21 | 7.55 | 7.79 | 7.09 | 7.53 |
| **Overall Weighted Index 2009=100** | **108.82** | **107.12** | **108.10** | **114.30** | **114.83** |

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)

* Provisional

08 Chapter

# Agriculture

## Overview

Growth in agriculture value added decelerated from a revised 7.2 per cent in 2015 to 4.4 per cent in 2016 occasioned by insufficient rains during the short rains period. Maize production declined from 42.5 million bags in 2015 to 37.1 million bags in 2016. Sugarcane production reduced from 7.2 million tonnes in 2015 to 7.1 million tonnes in 2016. Tea and coffee production increased by 18.5 per cent and 10.8 per cent to 473.0 thousand tonnes and 46.1 thousand tonnes, respectively in 2016. The volume of fresh horticultural exports increased by 9.4 per cent from 238.7 thousand tonnes in 2015 to 261.2 thousand tonnes in 2016. Marketed milk production increased by 5.6 per cent to 650.3 million litres.

8.2. The value of marketed agriculture production increased by 10.3 per cent from KSh 373.5 billion in 2015 to KSh 412.0 billion in 2016. Value of tea production declined by 1.6 per cent from KSh 118.4 billion in 2015 to KSh 116.5 billion in 2016 due to lower market prices, while value of marketed coffee increased by 33.9 per cent from KSh 12.1 billion in 2015 to KSh 16.2 billion in 2016. The value of marketed milk increased by 8.5 per cent from KSh 21.2 billion in 2015 to KSh 23.0 billion in 2016. Earnings from marketed maize and wheat reduced by 7.2 per cent and 2.1 per cent respectively in 2016 while those from fresh horticulture exports increased by 12.3 per cent from KSh 90.4 billion in 2015 to KSh 101.5 billion in 2016.

## Agriculture Output and Input

8.3. Table 8.1 and Figure 8.1 show agriculture output, intermediate consumption and value added at current and constant prices from 2012 to 2016. Output and intermediate consumption at current prices increased by 23.0 per cent to KSh 2,566.3 billion and 16.5 per cent to KSh 356.9 billion, respectively in 2016. Consequently, value added at current prices increased by 24.1 per cent from KSh 1,781.0 billion in 2015 to KSh 2,209.4 billion in 2016. Output and intermediate consumption at constant prices increased by 4.8 per cent to KSh 1,096.3 billion and 6.3 per cent to KSh 221.5 billion, respectively in 2016. Value added at constant prices increased by 4.4 per cent from KSh 837.7 billion in 2015 to KSh 874.8 billion in 2016.

**Table 8.1: Agricultural Output and Input[1], 2012 - 2016**

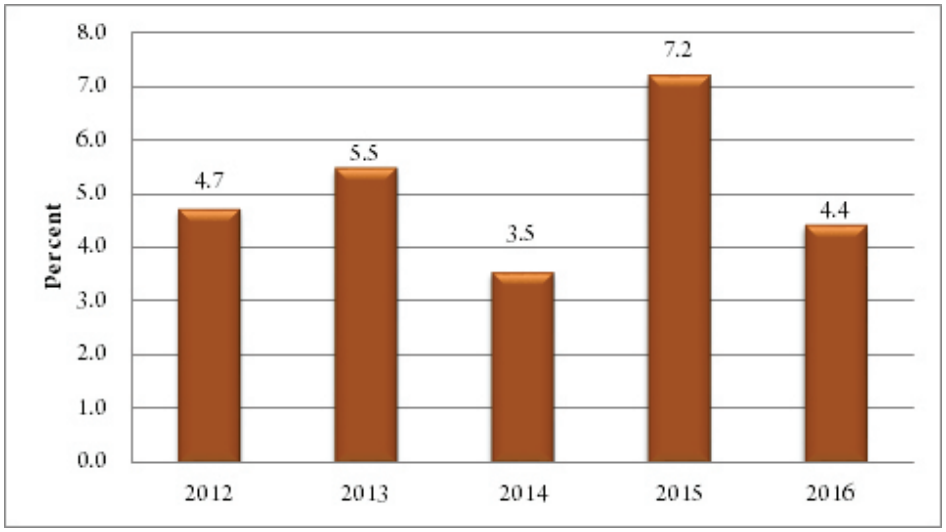
KSh Million

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **PRODUCTION AT CURRENT PRICES** | | | | | |
| Output at basic prices | 1,239,711 | 1,389,058 | 1,639,530 | 2,087,384 | 2,566,348 |
| Intermediate consumption | 211,347 | 235,791 | 267,570 | 306,363 | 356,937 |
| Value added at basic prices, gross | 1,028,364 | 1,153,268 | 1,371,960 | 1,781,021 | 2,209,411 |
| **PRODUCTION CONSTANT PRICES** | | | | | |
| Output | 887,605 | 936,928 | 983,176 | 1,046,190 | 1,096,297 |
| Intermediate consumption | 170,841 | 181,027 | 193,542 | 208,457 | 221,512 |
| Gross Value Added | 716,758 | 755,901 | 789,634 | 837,733 | 874,785 |

* Provisional

[1] Excludes forestry and fishing

Figure 8.1: Agricultural Gross Value Added Growth Rate, 2012 - 2016




**Marketed Production**

8.4. Table 8.2 presents value of marketed production for both crops and livestock from 2012 to 2016. The value of marketed agricultural production increased from KSh 373.5 billion in 2015 to KSh 412.0 billion in 2016. Value of marketed crops accounted for 69.7 per cent of overall marketed agricultural production in 2016.

8.5. Value of fresh horticultural exports increased by 12.3 per cent from KSh 90.4 billion in 2015 to KSh 101.5 billion in 2016. Cutflowers accounted for 69.8 per cent of the value of horticulture exports. Earnings from marketed tea declined by 1.6 per cent to KSh 116.5 billion due to lower prices of the commodity. Value of marketed sugarcane increased by 6.7 per cent from KSh 22.4 billion in 2015 to KSh 23.9 billion in 2016 while that of marketed coffee increased by 33.9 per cent from KSh 12.1 billion in 2015 to KSh 16.2 billion in 2016. Improved prices of sugarcane and coffee, coupled with increased marketed volumes for coffee resulted in the increased earnings. Value of marketed maize declined by 7.2 per cent to KSh 7.9 billion in 2016 while the value of marketed wheat declined by 2.1 per cent to KSh 8.0 billion in 2016.

**Table 8.2: Marketed Agricultural Production at Current Prices, 2012 - 2016**

KSh Million

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| CEREALS- | | | | | |
| Maize | 13,153.0 | 10,121.1 | 9,604.4 | 8,506.0 | 7,891.2 |
| Wheat | 5,612.8 | 6,926.1 | 7,618.0 | 8,198.2 | 8,028.1 |
| Others | 5,721.2 | 7,555.3 | 7,720.8 | 7,488.5 | 7,266.2 |
| **Total** | **24,487.0** | **24,602.6** | **24,943.2** | **24,192.7** | **23,185.4** |
| HORTICULTURE[1]- | | | | | |
| Cut flowers | 64,962.6 | 55,975.7 | 59,893.1 | 62,937.5 | 70,829.5 |
| Vegetables | 20,225.4 | 22,923.3 | 18,780.6 | 20,939.5 | 23,366.8 |
| Fruits | 4,680.0 | 4,482.5 | 5,410.6 | 6,561.8 | 7,317.3 |
| **Total** | **89,868.0** | **83,381.5** | **84,084.3** | **90,438.8** | **101,513.5** |
| TEMPORARY INDUSTRIAL CROPS | | | | | |
| Sugar-cane | 21,676.2 | 24,583.4 | 20,294.5 | 22,397.1 | 23,917.2 |
| Pyrethrum | 17.0 | 52.6 | 61.1 | 51.0 | 37.9 |
| Others | 1,706.1 | 952.7 | 1,438.9 | 1,516.8 | 1,470.4 |
| **Total** | **23,399.3** | **25,588.7** | **21,794.5** | **23,964.9** | **25,425.5** |
| PERMANENT CROPS- | | | | | |
| Coffee | 15,375.2 | 10,910.2 | 16,634.4 | 12,074.7 | 16,192.3 |
| Tea | 100,262.3 | 94,722.0 | 84,854.6 | 118,391.2 | 116,547.3 |
| Sisal | 2,915.3 | 2,810.8 | 2,944.8 | 3,595.0 | 4,176.8 |
| **Total** | **118,552.7** | **108,443.0** | **104,433.7** | **134,060.9** | **136,916.3** |
| **TOTAL CROPS** | **256,307.1** | **242,015.7** | **235,255.7** | **272,657.4** | **287,040.8** |
| LIVESTOCK AND PRODUCTS- | | | | | |
| Cattle and Calves | 54,140.6 | 58,237.0 | 59,272.8 | 66,216.7 | 84,701.2 |
| Milk | 15,415.9 | 16,776.7 | 18,785.0 | 21,205.4 | 23,020.1 |
| Chicken and eggs | 6,482.2 | 7,086.4 | 7,440.7 | 6,005.9 | 8,788.4 |
| Others | 12,266.7 | 10,727.3 | 12,490.7 | 7,416.7 | 8,489.3 |
| **Total** | **88,305.3** | **92,827.4** | **97,989.2** | **100,844.7** | **124,999.0** |
| **GRAND TOTAL** | **344,612.4** | **334,843.1** | **333,245.0** | **373,502.1** | **412,039.8** |

* Provisional.

[1] Refers to fresh horticultural exports

8.6. Quantum and price indices for marketed agricultural produce are presented in Table 8.3. Quantum index for cereals declined by 7.4 per cent to 95.8 in 2016 while the price index increased by 2.0 per cent to 213.4 in 2016. The increase in price index was mainly due to reduced supply of the commodity in the market. Maize imports declined from 480.1 thousand tonnes in 2015 to 148.6 thousand tonnes in 2016. Rice imports increased by 14.8 per cent from 442.7 thousand tonnes in 2015 to 508.0 thousand tonnes in 2016. The quantum index for temporary industrial crops increased from 165.9 in 2015 to 172.4 in 2016. The price index for temporary industrial crops increased from 159.7 in 2015 to 169.7 in 2016 due to improved prices offered to farmers for sugarcane. The quantum index for permanent crops increased from 123.9 in 2015 to 146.3 in 2016. The price index for permanent crops declined from 243.2 in 2015 to 216.9 in 2016, attributable to lower prices offered for marketed tea compared to the previous year.

**Table 8.3: Volume and Price Indices of Recorded Sales of Agricultural Production, 2012 - 2016**

Base: 2001=100

| | | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| QUANTUM INDICES | Cereals | 104.2 | 98.7 | 100.4 | 103.5 | 95.8 |
| | Temporary Industrial Crops | 146.2 | 160.9 | 157.9 | 165.9 | 172.4 |
| | Horticulture | 223.2 | 230.7 | 237.6 | 251.8 | 277.1 |
| | Permanent Crops | 119.6 | 135.4 | 140.1 | 123.9 | 146.3 |
| | **TOTAL CROPS** | **131.4** | **145.7** | **146.4** | **143.5** | **160.3** |
| | Livestock and Products | 260.1 | 262.5 | 263.3 | 289.9 | 328.7 |
| | **TOTAL** | **194.3** | **201.6** | **203.5** | **215.0** | **242.5** |
| PRICE INDICES | Cereals | 227.5 | 224.1 | 228.6 | 209.3 | 213.4 |
| | Temporary Industrial Crops | 167.9 | 179.5 | 161.3 | 159.7 | 169.7 |
| | Horticulture | 165.3 | 151.3 | 146.3 | 148.9 | 151.7 |
| | Permanent Crops | 218.9 | 179.7 | 174.4 | 243.2 | 216.9 |
| | **TOTAL CROPS** | **190.3** | **166.7** | **163.0** | **197.9** | **184.1** |
| | Livestock and Products | 261.2 | 279.5 | 297.5 | 298.3 | 321.7 |
| | **TOTAL** | **224.9** | **212.9** | **228.7** | **246.9** | **252.2** |

* Provisional.

8.7. Average gross commodity prices paid to farmers for various products are presented in Table 8.4. Tea prices declined by 16.6 per cent from KSh 29,656.27 per 100 Kilogramme in 2015 to KSh 24,732.35 per 100 Kilogramme in 2016. Coffee prices paid to farmers improved by 8.9 per cent from KSh 37,480.02 per 100 Kilogramme in 2015 to KSh 40,815.54 per 100 Kilogramme in 2016. Maize, wheat, sugarcane, pyrethrum, milk, beef and pork recorded improved prices in 2016 compared to 2015.

**Table 8.4: Average Gross Commodity Prices[1] to Farmers, 2012 - 2016**

KSh per Unit

| | UNIT | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| Coffee | 100 Kg | 33,387.29 | 28,409.58 | 39,185.89 | 37,480.02 | 40,815.54 |
| Tea | 100 Kg | 27,130.04 | 21,903.43 | 19,063.96 | 29,656.27 | 24,732.35 |
| Sisal | 100 Kg | 10,461.70 | 10,817.84 | 11,122.13 | 16,924.71 | 19,463.38 |
| Sugar-cane | Tonne | 3,792.00 | 3,685.00 | 3,133.00 | 3,125.00 | 3,340.00 |
| Pyrethrum (Pyrethrin equivalent) | Kg | 12,626.40 | 12,626.17 | 16,871.76 | 12,570.82 | 12,906.70 |
| Seed Cotton | 100 Kg | 4,000.00 | 4,200.00 | 4,200.00 | 4,200.00 | 4,200.00 |
| Maize | 100 Kg | 3,396.00 | 3,133.16 | 3,318.49 | 2,870.08 | 2,968.80 |
| Wheat | 100 Kg | 3,622.31 | 3,744.85 | 3,495.34 | 3,561.62 | 3,718.40 |
| Beef (third grade) | 100 Kg | 20,977.97 | 26,000.00 | 27,500.00 | 30,510.49 | 35,904.54 |
| Pig meat | 100 Kg | 18,175.59 | 18,427.38 | 20,268.93 | 21,266.71 | 22,666.04 |
| Milk | 100 Litres | 2,650.00 | 3,100.00 | 3,470.00 | 3,443.00 | 3,543.00 |

* 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.

8.8. Table 8.5 shows recorded sales of agricultural produce from large and small farms for the period 2012 to 2016. Total recorded sales in agricultural production increased by 10.3 per cent from KSh 373.5 billion in 2015 to KSh 412.0 billion in 2016. Value of output from large farms increased by 9.9 per cent to KSh 111.3 billion in 2016, while sales from small farms expanded from KSh 272.3 billion in 2015 to KSh 300.8 billion in 2016.

**Table 8.5: Recorded Sale of Produce from Large and Small Farms, 2012 - 2016**

| Year | Large Farms+ | | Small Farms | | Total | | Percentage |
|---|---|---|---|---|---|---|---|
| | KSh Million | Annual Percentage change | KSh Million | Annual Percentage change | KSh Million | Annual Percentage change | Share of Small Farms |
| 2012 | 93,866.7 | 0.7 | 250,724.8 | 5.1 | 344,612.4 | 3.9 | 72.8 |
| 2013 | 90,375.1 | (3.7) | 244,468.0 | (2.5) | 334,843.1 | (2.8) | 73.0 |
| 2014 | 89,642.9 | (0.8) | 243,602.1 | (0.4) | 333,245.0 | (0.5) | 73.1 |
| 2015 | 101,219.0 | 12.9 | 272,283.0 | 11.8 | 373,502.0 | 12.1 | 72.9 |
| 2016* | 111,250.7 | 9.9 | 300,789.0 | 10.5 | 412,039.7 | 10.3 | 73.0 |

* Provisional

+ Large farms: 20 hectares and above

8.9. Quantum and price indices for purchased farm inputs are shown in Table 8.6. The quantum index for fertilizers increased by 14.4 per cent in 2016. The reduction was due to lower international prices for fertilizer during the year. The quantum index for fuel and power increased by 16.4 per cent while the price index reduced by 2.4 per cent in 2016 consistent with lower crude oil prices in the international market. The quantum and price indices of manufactured feeds increased by 4.2 per cent and 3.4 per cent, respectively in 2016. The price index for purchased seeds increased by 9.1 per cent to 159.4 in 2016. The overall inputs quantum index increased by 0.7 per cent to 304.7 while inputs price index reduced marginally by 1.1 per cent to 196.6 in 2016.

**Table 8.6: Quantum and Price Indices for Purchased Inputs, 2012 - 2016**

Base: 2001=100

| | | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| Quantum Indices | Fertilizers | 106.0 | 114.5 | 180.1 | 245.0 | 280.4 |
| | Fuel and Power | 68.7 | 84.1 | 101.1 | 106.2 | 123.6 |
| | Bags | 77.4 | 72.7 | 54.2 | 54.7 | 55.2 |
| | Manufactured Feeds+ | 304.4 | 364.8 | 381.6 | 398.5 | 415.3 |
| | Purchased Seeds | 120.2 | 118.7 | 206.3 | 210.5 | 158.9 |
| | Other Material Inputs | 137.1 | 149.3 | 152.7 | 151.5 | 179.0 |
| | **All Material Inputs** | **169.4** | **181.7** | **176.7** | **177.5** | **179.0** |
| | Service Inputs | 213.5 | 217.2 | 369.5 | 320.5 | 373.0 |
| | **TOTAL INPUTS** | **146.4** | **167.4** | **253.4** | **302.6** | **304.7** |
| Price Indices- | Fertilizers | 259.8 | 250.5 | 230.7 | 231.1 | 197.8 |
| | Fuel and Power | 230.9 | 232.0 | 179.2 | 126.3 | 123.3 |
| | Bags | 154.0 | 187.2 | 228.4 | 241.4 | 277.6 |
| | Manufactured Feeds | 203.0 | 260.4 | 226.9 | 244.3 | 252.7 |
| | Purchased Seeds | 100.8 | 116.4 | 131.5 | 146.1 | 159.4 |
| | Other Material Inputs | 155.7 | 166.0 | 173.4 | 201.3 | 196.5 |
| | **All Material Inputs** | **191.4** | **208.1** | **189.4** | **185.9** | **184.7** |
| | Service Inputs | 198.5 | 216.4 | 206.3 | 234.7 | 241.8 |
| | **TOTAL INPUTS** | **193.3** | **212.5** | **191.3** | **198.9** | **196.6** |

* Provisional

+ Revised

8.10. Table 8.7 shows expenditure on purchased agricultural inputs covering the period 2012 to 2016. The aggregated expenditure on farm inputs sold increased by 11.9 per cent to KSh 58.0 billion in 2016. Fuel and power accounted for the largest share of expenditure at 29.6 per

cent in 2016. Electricity sales to the agricultural sector increased by 51.2 per cent to 1,078.4 kilowatt hours in 2016. Purchases of fertilizer and manufactured feeds accounted for 24.0 per cent and 14.9 per cent of total farm inputs sold, respectively.

**Table 8.7: Value of Purchased Agricultural Inputs[1], 2012 - 2016**

KSh Million

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| MATERIAL INPUTS- | | | | | |
| Fertilizers | 7,737.6 | 8,898.2 | 11,817.9 | 12,172.4 | 13,930.7 |
| Crop chemicals | 4,514.3 | 4,477.8 | 4,337.6 | 4,771.4 | 5,572.3 |
| Livestock drugs and medicines | 2,289.3 | 2,988.4 | 2,688.3 | 3,606.6 | 4,179.2 |
| Fuel and power | 10,607.9 | 12,204.7 | 15,115.1 | 14,414.7 | 17,170.3 |
| Bags | 290.3 | 110.6 | 121.9 | 128.8 | 130.2 |
| Manufactured feeds+ | 5,031.6 | 6,192.2 | 7,073.2 | 7,983.5 | 8,628.3 |
| Purchased Seeds | 3,573.8 | 3,704.2 | 4,395.2 | 4,483.1 | 3,384.9 |
| Other material inputs | 748.2 | 924.8 | 1,030.8 | 1,197.0 | 1,414.0 |
| Total | 34,792.9 | 39,501.0 | 46,580.0 | 48,757.5 | 54,409.8 |
| SERVICE INPUTS | 1,745.9 | 2,158.1 | 2,709.7 | 3,082.6 | 3,588.0 |
| **TOTAL INPUTS** | **36,538.8** | **41,659.1** | **49,289.7** | **51,840.1** | **57,997.8** |

*Provisional.

[1]Excluding labour.

8.11. Price and terms of trade indices are presented in Table 8.8. Terms of trade in agriculture deteriorated from 50.2 in 2015 to 49.3 in 2016. Agricultural price index increased by 4.1 per cent in 2016 largely due to increased prices of consumer goods. The price index for purchased inputs however declined slightly from 198.9 in 2015 to 196.6 in 2016.

**Table 8.8: Price and Terms of Trade Indices for Agriculture, 2012 - 2016**

Base: 2001=100

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| General Index of Agricultural Output Prices | 148.6 | 140.4 | 150.9 | 162.9 | 166.4 |
| Index of Prices Paid | 281.0 | 301.4 | 306.0 | 324.3 | 337.6 |
| Purchased Inputs | 193.3 | 212.5 | 191.3 | 198.9 | 196.6 |
| Index of Purchased Consumer Goods-Rural Areas | 368.6 | 390.3 | 420.7 | 449.7 | 478.6 |
| Agricultural Sector Terms of Trade | 52.9 | 46.6 | 49.3 | 50.2 | 49.3 |

* Provisional

## Crops

8.12. Table 8.9 presents production quantities for the main food crops grown in the country. Production for all basic commodities decreased in 2016 compared to 2015. Maize production decreased mainly due to lower volume of rainfall, high cost of farm inputs and the residual effects of Maize Lethal Necrosis Disease (MLND). Production of beans decreased by 4.7 per cent from 8.5 million bags in 2015 to 8.1 million bags in 2016. During the period under review, production of potatoes and sorghum decreased by 35.0 per cent and 38.1 per cent, respectively.

**Table 8.9: Estimated Production of Selected Agricultural Commodities, 2012 – 2016**

| CROP | Unit | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| Maize ..... | Million bags | 41.9 | 40.7 | 39.0 | 42.5 | 37.1 |
| Beans ..... | " | 6.8 | 7.9 | 6.8 | 8.5 | 8.1 |
| Potatoes ..... | Million tonne | 1.5 | 2.1 | 2.3 | 2.0 | 1.3 |
| Sorghum ..... | Million bags | 1.9 | 1.7 | 1.9 | 2.1 | 1.3 |
| Millet ..... | " | 0.8 | 1.4 | 1.4 | 1.1 | 0.6 |

Source: Ministry of Agriculture, Livestock and Fisheries

* Provisional

8.13. Table 8.10 shows the retail market prices for selected food crops for the months of March and September from 2012 to 2016. Prices of most of the selected crops registered slight variations except for potatoes which recorded 14.8 per cent rise from KSh 34.46 per Kilogramme in March 2015 to KSh 39.56 per Kilogramme in March 2016. Maize recorded higher prices in the month of September 2016 compared to the same period in the previous year.

**Table 8.10: Retail Market Prices for Selected Food Crops, 2012 – 2016**

KSh per Kg

| CROP | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mar | Sept | Mar | Sept | Mar | Sept | Mar | Sept | Mar | Sept |
| Maize ..... | 39.6 | 40.51 | 38.01 | 35.38 | 38.24 | 35.47 | 33.19 | 33.77 | 33.92 | 35.10 |
| Beans ..... | 74.6 | 71.82 | 74.11 | 68.18 | 77.16 | 74.67 | 77.56 | 77.08 | 76.74 | 74.36 |
| Finger Millet ..... | 75.26 | 74.22 | 76.06 | 75.96 | 78.90 | 79.29 | 83.71 | 88.86 | 84.03 | 84.62 |
| Sorghum ..... | 53.42 | 54.03 | 53.47 | 42.1 | 54.07 | 54.01 | 55.51 | 53.60 | 54.36 | 52.58 |
| Potatoes ..... | 39.13 | 33.05 | 32.07 | 29.06 | 31.20 | 30.33 | 34.46 | 34.11 | 39.56 | 38.91 |
| Cabbages ..... | 33.54 | 28.56 | 23.99 | 28.19 | 24.67 | 24.75 | 38.86 | 22.17 | 25.71 | 31.73 |
| Tomatoes ..... | 57.66 | 43.41 | 56.24 | 41.74 | 58.70 | 68.11 | 68.09 | 55.03 | 70.23 | 52.60 |
| Bananas ..... | 40.13 | 38.7 | 39.01 | 34.98 | 42.50 | 42.46 | 37.26 | 37.46 | 37.36 | 41.82 |

8.14. Table 8.11 shows recorded sale of selected crops from 2012 to 2016. The quantity of maize sold declined by 10.0 per cent to 265.8 thousand tonnes in 2016. Quantity of sugarcane deliveries to millers decreased from 7.2 million tonnes in 2015 to 7.1 million tonnes in 2016. Sales of rice paddy reduced by 12.8 per cent to 38.1 thousand tonnes in 2016. Volume of coffee and tea sold increased by 23.3 per cent and 18.5 per cent to 39.7 thousand tonnes and 473.0 thousand tonnes, respectively in the year under review.

**Table 8.11: Recorded Sale of Selected Crops, 2012 - 2016**

| CROP | UNIT | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| Maize[1] | '000 Tonnes | 387.3 | 316.4 | 289.4 | 295.3 | 265.8 |
| Wheat[2] | '000 Tonnes | 155.0 | 185.0 | 218.0 | 227.3 | 215.9 |
| Coffee | '000 Tonnes | 46.1 | 38.4 | 42.5 | 32.2 | 39.7 |
| Tea | '000 Tonnes | 369.4 | 432.4 | 445.1 | 399.1 | 473.0 |
| Cotton[2] | '000 Tonnes | 11.8 | 7.2 | 1.5 | 15.7 | 15.8 |
| Sugar-cane[2] | Million Tonnes | 5.7 | 6.7 | 6.5 | 7.2 | 7.1 |
| Pyrethrum (extract equivalent) | Tonnes | 1.0 | 4.2 | 3.6 | 3.7 | 3.3 |
| Sisal | '000 Tonnes | 27.8 | 26.0 | 23.1 | 21.2 | 21.5 |
| Rice Paddy[2] | '000 Tonnes | 40.3 | 43.6 | 46.2 | 43.7 | 38.1 |

* Provisional.

[1] Includes purchases by National Cereals and Produce Board and millers.

[2] Deliveries to factories/ginneries.

8.15. **Wheat:** Table 8.12 presents annual production and imports of wheat from 2012 to 2016. Wheat production reduced by 6.8 per cent to 222.4 thousand tonnes in 2016. Wheat imports decreased by 4.2 per cent from 1,421.8 thousand tonnes in 2015 to 1,362.3 thousand tonnes in 2016.

**Table 8.12: Production and Imports of Wheat, 2012 - 2016**

'000 Tonnes

| YEAR | PRODUCTION[1] | IMPORTS | TOTAL |
|---|---|---|---|
| 2012 | 162.7 | 1,044.8 | 1,207.5 |
| 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* | 222.4 | 1,362.3 | 1,584.7 |

* Provisional.

[1]Includes retention for seed.

8.16. **Coffee:** Area, production and average yield of coffee by type of grower for the crop year s 2011/12 to 2015/16 is as shown in Table 8.13. Area under coffee production increased by 500 hectares to 114.0 thousand hectares in 2015/16. Coffee production increased by 9.8 per cent from 42.0 thousand tonnes in 2014/15 to 46.1 thousand tonnes in 2015/16. Production by co-operatives and estates increased by 13.2 per cent and 3.4 per cent to 30.8 thousand tonnes and 15.3 thousand tonnes, respectively. This increase in production may be as a result of the Government's intervention of providing subsidized fertilizer and partly due to bi-annual cyclic production, where a good year of harvest is followed by reduced harvest in the following year. The average yield for co-operatives increased by 10.0 per cent while that of estates decreased by 0.7 per cent in the 2015/16 period.

**Table 8.13: Production, Area and Average Yield⁺ of Coffee by Type of Grower, 2011/12 - 2015/16**

| | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16* |
|---|---|---|---|---|---|
| AREA ('000 Ha) | | | | | |
| Co-operatives | 85.2 | 85.2 | 85.3 | 87.8 | 88.2 |
| Estates | 24.6 | 24.6 | 24.7 | 25.7 | 25.8 |
| **TOTAL** | **109.8** | **109.8** | **110.0** | **113.5** | **114.0** |
| PRODUCTION ('000 Tonnes) | | | | | |
| Co-operatives | 27.0 | 21.9 | 32.7 | 27.2 | 30.8 |
| Estates | 22.0 | 17.9 | 16.8 | 14.8 | 15.3 |
| **TOTAL** | **49.0** | **39.8** | **49.5** | **42.0** | **46.1** |
| AVERAGE YIELD (Kg/Ha)[1] | | | | | |
| Co-operatives | 316.9 | 257.0 | 383.8 | 318.9 | 350.8 |
| Estates | 894.3 | 727.6 | 682.9 | 599.2 | 595.3 |

Source: Agriculture and Food Authority, Coffee Directorate

* Provisional

[1] Obtained by diving current production by previous year's acreage

⁺ Revised

8.17. **Tea:** Table 8.14 shows the annual performance of tea from 2012 to 2016. Area under tea increased by 4.3 per cent to 218.5 thousand hectares in 2016. Tea production increased by 18.5 per cent to 473.0 thousand tonnes in 2016. Tea production by small holder growers increased by 11.8 per cent from 237.6 thousand tonnes in 2015 to 265.6 thousand tonnes in 2016. Output within the tea estates recorded an increase of 28.3 per cent from 161.6 thousand tonnes in 2015 to 207.4 thousand tonnes recorded in 2016. The average yield increased from 2,459.7 Kilogrammes per hectare in 2015 to 2,908.8 Kilogrammes per hectare in 2016 for the tea estates and from 1,900.8 Kilogrammes per hectare in to 2,084.8 Kilogrammes per hectare in for the small holder tea producers.

**Table 8.14: Production, Area and Average Yield of Tea by Type of Grower, 2012 - 2016**

| | **2012** | **2013** | **2014** | **2015** | **2016*** |
|---|---|---|---|---|---|
| AREA ('000 Ha) | | | | | |
| Smallholders | 125.0 | 127.4 | 128.6 | 134.2 | 138.4 |
| Estates | 65.7 | 71.3 | 74.4 | 75.2 | 80.2 |
| **TOTAL** | **190.6** | **198.6** | **203.0** | **209.4** | **218.5** |
| PRODUCTION ('000 Tonnes) | | | | | |
| Smallholders | 218.6 | 249.8 | 262.4 | 237.6 | 265.6 |
| Estates | 151.0 | 182.6 | 182.7 | 161.6 | 207.4 |
| **TOTAL** | **369.4** | **432.4** | **445.1** | **399.1** | **473.0** |
| AVERAGE YIELD (Kg/Ha)[1] | | | | | |
| Smallholders | 2,037.7 | 2,172.0 | 2,126.8 | 1,900.8 | 2,084.8 |
| Estates | 2,953.1 | 3,209.8 | 2,833.7 | 2,459.7 | 2,908.8 |

Source: Agriculture and Food Authority, Tea Directorate

* Provisional

[1] Obtained by dividing current production by the area three years ago

8.18. **Sugarcane**: Sugarcane production from 2012 to 2016 is as shown in Table 8.15. Area under cane decreased by 2,607 hectares from 223,605 hectares in 2015 to 220,998 hectares in 2016. Area harvested increased by 11.6 per cent while total cane deliveries decreased by 70.2 thousand tonnes in 2016. The deliveries were lower despite a larger surface being harvested

due to low cane yields in 2016 ascribed to inadequate rainfall and harvesting of young cane. Consequently, there was a decrease in average yield compared to 2015.

**Table 8.15: Planted Area, Area Harvested, Production and Average Yield of Sugarcane, 2012 - 2016**

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Area under cane (Ha)..... | 204,074 | 213,920 | 211,342 | 223,605 | 220,998 |
| Area harvested (Ha)[1]..... | 87,340 | 85,857 | 72,180 | 77,830 | 86,876 |
| Production (Tonnes)[2]..... | 5,823,964 | 6,673,725 | 6,409,929 | 7,164,790 | 7,094,619 |
| Of which from Nucleus and contracted farms..... | 4,454,340 | 4,693,802 | 4,432,574 | 5,168,690 | 5,442,781 |
| Average yield (Tonnes/Ha)[1]..... | 51.00 | 54.67 | 61.41 | 66.41 | 62.65 |

Source: Agriculture and Food Authority, Sugar Directorate

* Provisional

[1]Based on area harvested and production from contracted farmers only

[2]Production includes contracted and non-contracted farmers

8.19. Table 8.16 shows domestic sugar production, imports and exports from 2012 to 2016. Total sugar production increased by 0.6 per cent from 635.7 thousand tonnes in 2015 to 639.7 thousand tonnes in 2016. Sugar imports increased by 35.0 per cent from 247.4 thousand tonnes in 2015 to 334.1 thousand tonnes in 2016.

**Table 8.16: Production, Imports and Exports of Sugar, 2012 - 2016**

'000 Tonnes

| YEAR | PRODUCTION | IMPORTS | EXPORTS |
|---|---|---|---|
| 2012..... | 493.9 | 238.6 | 0.4 |
| 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 |

Source: Agriculture and Food Authority, Sugar Directorate

*Provisional

8.20. **Horticulture:** Table 8.17 shows the quantities and values of fresh horticultural exports for the last five years. Volume and value of fresh horticultural exports has continued to increase for the last 3 years. In 2016, the volume of horticultural exports increased by 9.4 per cent from 238.7 thousand tonnes in 2015 to 261.2 thousand tonnes in 2016. Exports of fresh vegetables went up by 13.1 per cent from 69.7 thousand tonnes to 78.8 thousand tonnes. Exports of cut flowers and fresh fruits over the same period increased by 8.9 per cent and 5.4 per cent respectively.

8.21. Value of fresh horticultural exports increased by 12.3 per cent to KSh 101.5 billion in 2016 on account of improved prices for horticultural produce in the international market. Earnings from exports of fresh fruits and vegetables increased by 10.6 per cent and 12.0 per cent, respectively.

**Table 8.17: Exports of Fresh Horticultural Produce[1], 2012 - 2016**

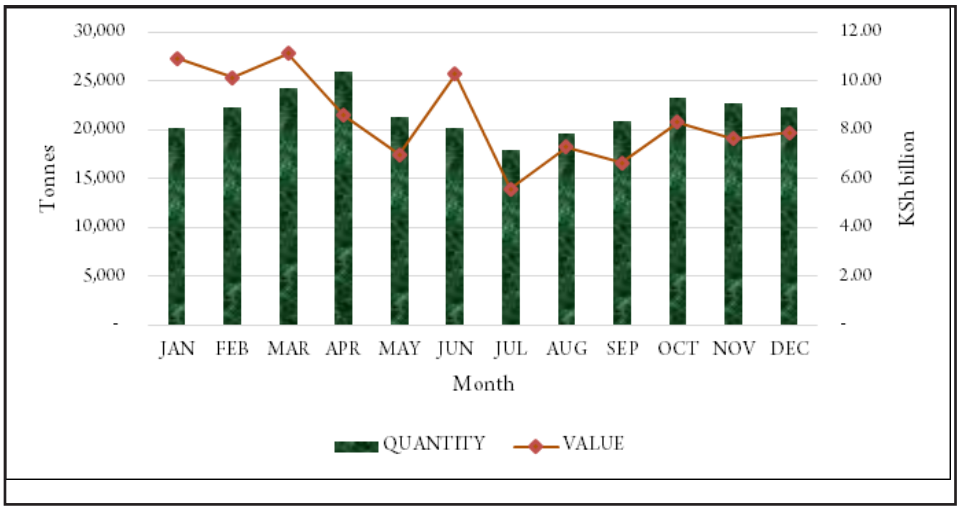
| YEAR | CUT FLOWERS | | FRUITS | | VEGETABLES | | TOTAL | |
|---|---|---|---|---|---|---|---|---|
| | Volume | Value | Volume | Value | Volume | Value | Volume | Value |
| | 000 Tonnes | KSh Billion | 000 Tonnes | KSh Billion | 000 Tonnes | KSh Billion | '000 Tonnes | KSh Billion |
| 2012 | 108.3 | 65.0 | 31.1 | 4.7 | 66.4 | 20.2 | 205.7 | 89.9 |
| 2013 | 105.6 | 56.0 | 31.1 | 4.8 | 77.2 | 22.9 | 213.8 | 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 |

Source: Agriculture and Food Authority, Horticulture Crops Directorate

* Provisional

[1] Excludes exports of processed horticultural produce and nuts.

**Figure 8.2: Monthly Performance of Fresh Horticultural Exports, 2016**




8.22. Figure 8.2 presents the monthly quantity and value of horticultural exports for 2016. The highest quantity of horticultural exports of over 25.0 thousand tonnes were made in the month of April 2016. Quantity of horticultural exports were above 20.0 thousand tonnes for all months except in July and August. Earnings from horticulture were higher in the first half of 2016.

8.23. **Rice:** Rice production from various irrigation schemes is shown in Table 8.18. Area under rice increased by 4.2 per cent from 13,998 hectares in 2014/15 to 14,586 hectares in 2015/16 while the number of plot holders remained the same at 13,055. Paddy production declined by 12.9 per cent from 116.5 thousand tonnes in 2014/15 to 101.5 thousand tonnes in 2015/16. This was precipitated by the dry weather conditions resulting in insufficient water for irrigation in the rice growing areas. Value of rice produced declined by 14.9 per cent from KSh 6.7 billion in 2014/15 to KSh 5.7 billion in 2015/16. Payment to farmers for rice produce reduced from KSh 5.5 billion in 2014/15 to KSh 4.6 billion in 2015/16.

**Table 8.18: Production of Rice in Irrigation Schemes, 2011/12 - 2015/16**

| | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16* |
|---|---|---|---|---|---|
| **MWEA-** | | | | | |
| Area cropped-Hectares | 10,629 | 10,629 | 10,629 | 10,629 | 10,629 |
| Plot-holders-Number | 7,178 | 7,178 | 7,178 | 7,178 | 7,178 |
| Gross value of output-KSh Million | 2,970 | 3,880 | 3,872 | 5,727 | 4,726 |
| Payments to plot-holders-KSh Million | 2,197 | 2,793 | 2,522 | 4,780 | 3,938 |
| **ALL SCHEME AREAS-** | | | | | |
| Area cropped-Hectares | 21,101 | 18,600 | 19,411 | 13,998 | 14,586 |
| Plot-holders-Number | 15,828 | 15,828 | 15,828 | 13,055 | 13,055 |
| Gross value of output-KSh Million | 4,932 | 4,347 | 4,536 | 6,717 | 5,673 |
| Payments to plot-holders-KSh Million | 3,637 | 3,205 | 3,345 | 5,508 | 4,591 |
| **CROPS PRODUCED - Tonnes** | | | | | |
| Mwea-Paddy | 54,000 | 64,672 | 70,416 | 91,624 | 78,760 |
| Ahero-Paddy | 7,484 | 8,326 | 7,405 | 7,942 | 6,494 |
| W.Kano-Paddy | 5,994 | 5,165 | 4,345 | 2,039 | 4,634 |
| Bunyala-Paddy | 4,666 | 4,278 | 4,289 | 4,600 | 4,522 |
| South West Kano- Paddy | 8,100 | 8,262 | 9,574 | 10,268 | 7,100 |
| **TOTAL PADDY** | **80,244** | **90,703** | **96,029** | **116,473** | **101,510** |

Source: National Irrigation Board

* Provisional

8.24. **Dairy Produce:** Table 8.19 shows the quantity of marketed dairy products from 2012 to 2016. The quantity of marketed and processed milk increased by 5.6 per cent and 3.2 per cent to 650.3 million litres and 451.7 million litres respectively, in 2016 . However, production of butter and ghee, and cheese decreased by 12.6 per cent and 24.9 per cent, respectively in 2016.

8.25. **Livestock Slaughtered:** Number of selected livestock slaughtered in the last five years are shown in Table 8.19. In 2016, number of cattle slaughtered increased by 8.2 per cent to 2,460.2 thousand heads. Number of goats and sheep slaughtered increased by 25.3 per cent to 8,220.2 thousand heads.

**Table 8.19: Livestock Slaughtered and Dairy Products, 2012 - 2016**

| | UNIT | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| RECORDED MILK PRODUCTION..... | Mn. Litres | 495.2 | 523.0 | 540.0 | 615.9 | 650.3 |
| MILK PROCESSED: | | | | | | |
| Milk and cream..... | Mn. Litres | 331.6 | 406.7 | 419.6 | 437.9 | 451.7 |
| Butter and ghee ..... | Tonnes | 1,800.7 | 1,231.0 | 1,444.5 | 1,646.4 | 1,438.7 |
| Cheese..... | Tonnes | 254.9 | 267.4 | 265.7 | 302.9 | 227.5 |
| LIVESTOCK SLAUGHTERED | | | | | | |
| Cattle and Calves..... | '000 Head | 2,194.2 | 2,147.3 | 2,076.7 | 2,274.5 | 2,460.2 |
| Sheep and Goats..... | '000 Head | 5,924.2 | 6,084.8 | 6,138.5 | 6,560.8 | 8,220.2 |
| Pigs ..... | '000 Head | 235.4 | 264.3 | 257.2 | 282.9 | 313.6 |

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

* Provisional

**Agricultural Training**

8.26. Table 8.20 shows students' enrolment in agriculture institutions by sex from 2012 to 2016. Students enrolment for agriculture degree courses in public universities increased by 12.3 per cent from 15,220 students in 2015 to 17,095 students. Enrolment for agriculture courses at diploma level in Egerton University declined by half to 665 students in 2016. Naivasha Dairy Training Institute enrolled its first diploma students in 2016 while during the same period, enrolment at Bukura Institute of Agriculture increased slightly to 1,031 diploma students. Total enrolment for certificate courses in Animal Health Training Institutes decreased by more than half from 711 students in 2015 to 326 students in 2016. During the period under review, enrolment for short term vocational training in Naivasha Dairy Training Institute and Athi River Meat Training school declined by 41.6 per cent and 49.1 per cent respectively. Across all agriculture institutions, the number of enrolled female students were fewer than the male students in 2016. Since 2013, enrolment of female students for agriculture courses at diploma level in Egerton University has been higher than that of males. However, the number of females enrolled in diploma courses at the university declined sharply to 206 students in 2016 compared to 800 students in 2015.

## Table 8.20: Enrolment in Agricultural Training Institutions, 2012 - 2016

Number

| | 2012 | | | 2013 | | | 2014 | | | 2015 | | | 2016* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **DEGREE LEVEL -Public Universities** | | | | | | | | | | | | | | | |
| All Universities | 4,705 | 2,841 | 7,546 | 5,948 | 3,587 | 9,535 | 7,758 | 4,438 | 12,196 | 9,420 | 5,800 | 15,220 | 10,165 | 6,930 | 17,095 |
| **DIPLOMA LEVEL -Public Universities** | | | | | | | | | | | | | | | |
| Egerton | 1,512 | 839 | 2,351 | 1,149 | 671 | 1,820 | 542 | 928 | 1,470 | 324 | 800 | 1,124 | 459 | 206 | 665 |
| **DIPLOMA LEVEL - MOA** | | | | | | | | | | | | | | | |
| Bukura Institute of Agriculture | 684 | 374 | 1,058 | 819 | 360 | 1,179 | 674 | 290 | 964 | 710 | 309 | 1,019 | 705 | 326 | 1,031 |
| Naivasha Dairy Training Institute[1] | - | - | - | - | - | - | - | - | - | - | - | - | 27 | 21 | 48 |
| **CERTIFICATE LEVEL-** | | | | | | | | | | | | | | | |
| Naivasha Dairy Training Institute | 134 | 80 | 214 | 122 | 79 | 205 | 138 | 93 | 231 | 102 | 68 | 170 | 64 | 59 | 123 |
| **Animal Health Training Institutes-** | | | | | | | | | | | | | | | |
| Kabete | 79 | 26 | 105 | 92 | 24 | 116 | 155 | 32 | 187 | 187 | 25 | 212 | 91 | 13 | 104 |
| Nyahururu | 51 | 27 | 78 | 52 | 28 | 80 | 51 | 27 | 78 | 51 | 22 | 73 | 52 | 24 | 76 |
| Ndomba | 99 | 57 | 156 | 140 | 44 | 184 | 230 | 65 | 295 | 337 | 89 | 426 | 118 | 28 | 146 |
| **Total** | **229** | **110** | **339** | **284** | **96** | **380** | **436** | **124** | **560** | **575** | **136** | **711** | **261** | **65** | **326** |
| **SHORT-TERM VOCATIONAL COURSES-** | | | | | | | | | | | | | | | |
| Naivasha Dairy Training School | 147 | 47 | 194 | 122 | 44 | 166 | 189 | 100 | 289 | 202 | 84 | 286 | 116 | 51 | 167 |
| Athi River M.T. School | 66 | 28 | 94 | 66 | 28 | 94 | 46 | 37 | 83 | 66 | 44 | 110 | 44 | 12 | 56 |
| **Total** | **213** | **75** | **288** | **188** | **72** | **260** | **235** | **137** | **372** | **268** | **128** | **396** | **160** | **63** | **223** |

**Source**: Ministry of Agriculture, Livestock and Fisheries; 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.

**Societies and Unions in Agricultural Activities**

8.27. The number of societies and unions in the country for the last five years are shown in Table 8.21. The number of societies and unions rose by 6.1 per cent from 17,498 in 2015 to 18,573 in 2016. The aggregate number of societies in the agricultural sector rose by 3.2 per cent from 5,454 in 2015 to 5,629 in 2016.

**Table 8.21: Number of Societies and Unions, 2012 - 2016**

Number

| TYPE OF SOCIETY | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **Agricultural:** | | | | | |
| Coffee | 594 | 597 | 600 | 605 | 613 |
| Sugar-cane | 191 | 191 | 191 | 192 | 199 |
| Pyrethrum | 148 | 148 | 146 | 146 | 146 |
| Cotton | 61 | 78 | 60 | 61 | 62 |
| Dairy | 343 | 376 | 412 | 427 | 465 |
| Multi-produce | 2,019 | 2,068 | 2,118 | 2,169 | 2,222 |
| Farm Purchase | 116 | 116 | 116 | 117 | 118 |
| Fisheries | 80 | 86 | 92 | 94 | 99 |
| Other Agricultural Societies | 1,436 | 1,518 | 1,605 | 1,643 | 1,706 |
| **Sub- Total** | **4,988** | **5,178** | **5,340** | **5,454** | **5,629** |
| **Non-Agricultural:** | | | | | |
| Savings and Credit | 7,341 | 7,942 | 8,592 | 8,914 | 9,567 |
| Other Non-Agricultural Societies | 2,553 | 2,735 | 2,938 | 3,031 | 3,279 |
| **Sub- Total** | **9,894** | **10,677** | **11,530** | **11,945** | **12,846** |
| Unions (Agricultural) | 108 | 109 | 99 | 99 | 98 |
| **GRAND TOTAL** | **14,990** | **15,964** | **16,969** | **17,498** | **18,573** |

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

* Provisional

8.28. Table 8.22 shows sales of agricultural produce by co-operatives and their contribution to gross farm revenue. Sales of agricultural produce increased marginally from KSh 10,509 million in 2015 to KSh 10,541 million in 2016. The value of milk sales through cooperatives increased from KSh 5,497 million in 2015 to KSh 5,554 million in 2016. Coffee sales through cooperatives declined slightly from KSh 4,769 million in 2015 to 4,755 million in 2016. The share of sales through cooperatives to total gross farm revenue declined from 19.4 per cent in 2015 to 17.7 per cent in 2016. Coffee and sugarcane shares declined while that for pyrethrum, cotton and milk increased.

Table 8.22: Sale of Selected Agricultural Produce by Co-operatives, 2012 - 2016

| YEAR | COFFEE | SUGAR CANE | PYRETHRUM | COTTON | MILK | TOTAL |
|---|---|---|---|---|---|---|
| **Sale KSh Million** | | | | | | |
| 2012..... | 4,807 | 269 | 48 | 3 | 5,320 | 10,447 |
| 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 |
| **Share to marketed production** | | | | | | |
| 2012..... | 28 | 2 | 43 | 4 | 35 | 31 |
| 2013..... | 37 | 1 | 65 | 3 | 33 | 33 |
| 2014..... | 29 | 1 | 44 | 5 | 29 | 19 |
| 2015..... | 40 | 1 | 53 | 5 | 27 | 19 |
| 2016*..... | 29 | 1 | 64 | 5 | 28 | 18 |

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

* Provisional.

**Food Balance Sheet**

8.29. Food Balance Sheet (FBS) is a food security monitoring tool used to evaluate the overall food supply, utilization and calories available to the population. Food supply components include food production, imports, exports and changes in stocks. Utilization includes produced food used for human consumption, animal feed, seeds and industrial use. The food component is used to calculate the calories, proteins and fats available to the population in a given year.

**FBS Indicators**

8.30. A summary of the FBS indicators for the period 2012 to 2016 is shown in Table 8.23. Per Caput Daily Supply from calories decreased by 5.8 per cent from 2,288 thousand in 2015 to 2,156 thousand in 2016. Per Caput Daily Supply from proteins and fats decreased by 7.2 per cent and 6.4 per cent respectively, in 2016. The Self Sufficiency Ratio (SSR) for all food commodities and vegetable products increased marginally by 0.5 per cent and 0.7 per cent respectively while the SSR for animal products decreased by 0.4 per cent in 2016. The overall Import Dependency Ratio (IDR) remained unchanged at 28.3 in 2016. During the review period, the IDR for vegetable products decreased by 0.6 per cent. The IDR for animal products increased from 0.8 in 2015 to 1.2 in 2016. The low IDR value is an indication of minimal reliance on imports of animal products during the review period. The Per Caput Daily Caloric Supply from vegetable decreased by 4.6 per cent from 1,975 thousand in 2015 to 1,885 thousand in 2016. The Per Caput Caloric Daily Supply from cereals decreased by 3.4 per cent from 920 thousand in 2015 to 890 thousand in 2016. Similarly, the Per Caput Daily Caloric Supply from animal products decreased by 13.1 per cent from 313 thousand in 2015 to 272 thousand in 2016.

## Table 8.23: Food Balance Sheet, 2012 - 2016

| Indicator | | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| **Per Caput Daily Supply** | Calories - '000 | 2,447 | 2,284 | 2,202 | 2,288 | 2,156 |
| | Proteins - Grams | 74 | 67 | 64 | 69 | 64 |
| | Fats - Grams | 47 | 46 | 43 | 47 | 44 |
| **SSR - Per Cent** | Total | 77.6 | 80.1 | 74.4 | 75.3 | 75.6 |
| | Vegetable Products | 75.1 | 77.7 | 71.6 | 72.2 | 72.7 |
| | Animal Products | 100.1 | 99.1 | 99.9 | 100.0 | 99.6 |
| **IDR - Per Cent** | Total | 25.7 | 23.3 | 29.2 | 28.2 | 28.2 |
| | Vegetable Products | 28.4 | 26 | 32.3 | 31.6 | 31.6 |
| | Animal Products | 1 | 1 | 1 | 0.8 | 1.2 |
| **Per Caput Caloric Daily Supply** | Vegetable Products - '000 Kcl. | 2,148 | 1,993 | 1,945 | 1,975 | 1,885 |
| | Cereals - '000 Kcl | 988 | 917 | 925 | 920 | 890 |
| | Animal Products - '000 Kcl | 299 | 291 | 256 | 313 | 272 |

*Provisional

## Figure 8.4: Import Dependency and Self-Sufficiency Ratios, 2016

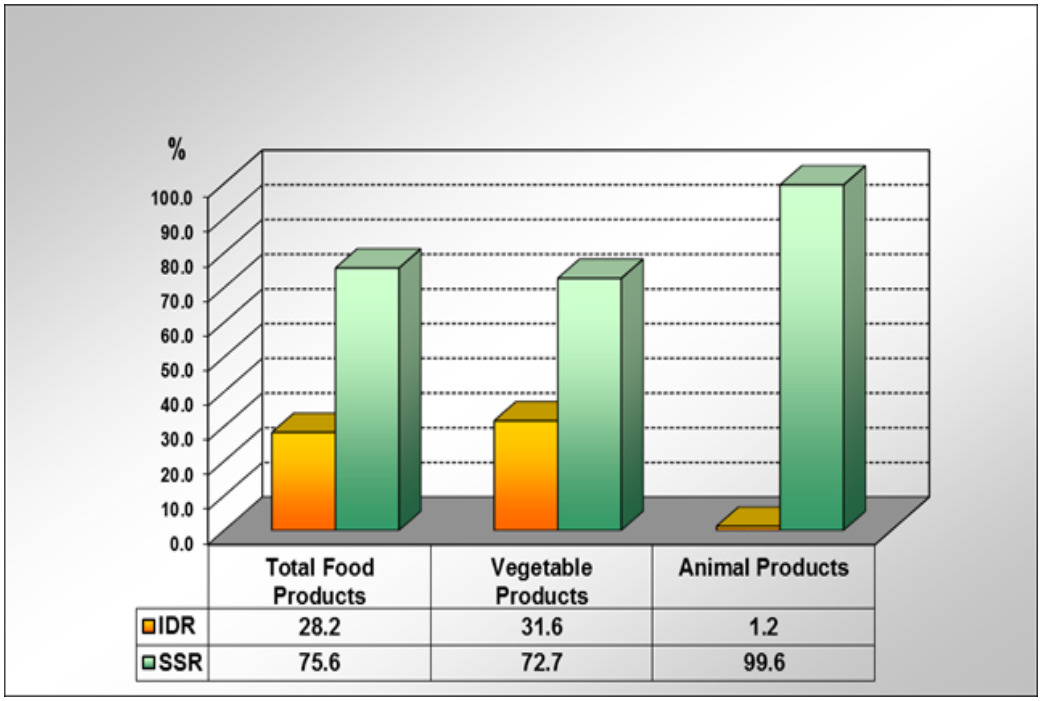
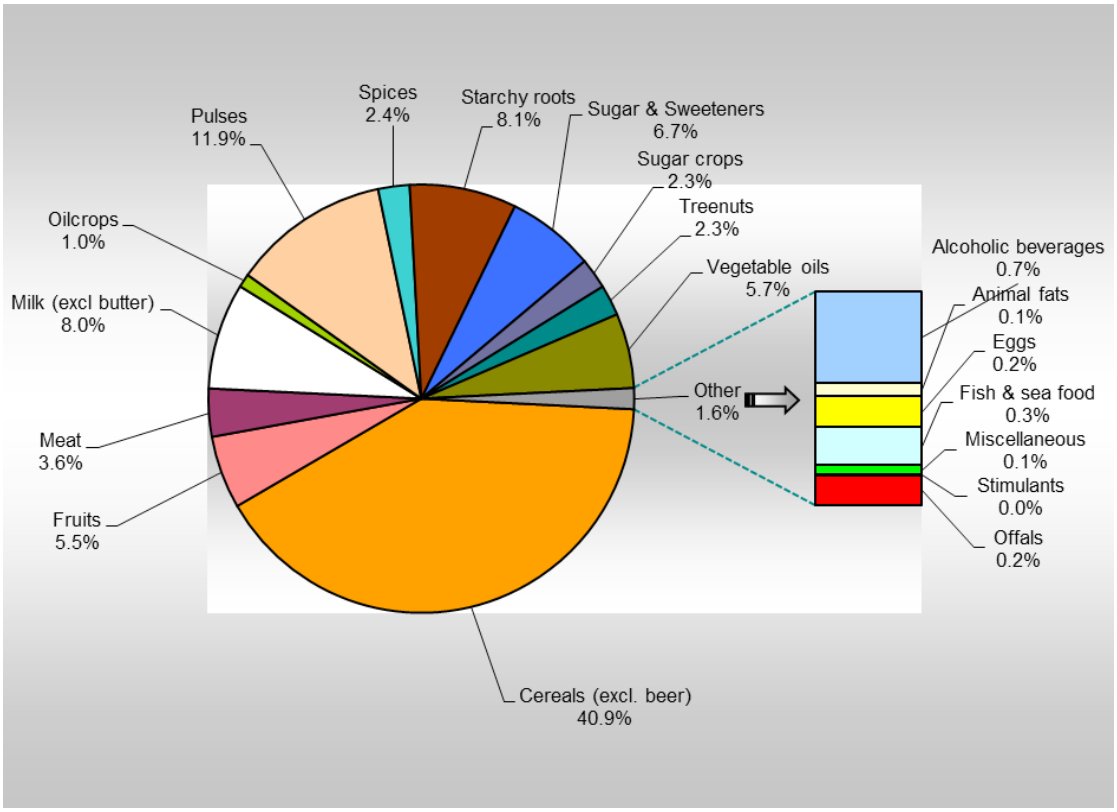


**Figure 8.5: Caloric Supply by Main Food Groups, 2016**



## Table 8.24 (a): 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 YEAR FOOD | PER DAY Calories | Proteins | Fats |
| | 1000 Metric Tons | | | | | | | | | | | Kg. | units | grams | grams |
| **Grand total** | | | | | | | | | | | | | **2156** | **64** | **44** |
| **Vegetable prod.** | | | | | | | | | | | | | **1885** | **47** | **26** |
| **Animal prod.** | | | | | | | | | | | | | **272** | **18** | **17** |
| **Cereals (excl. beer)** | **3878** | **2173** | **545** | **101** | **6495** | **104** | **80** | **736** | **547** | **0** | **4831** | **106** | **890** | **22** | **5** |
| Wheat | 222 | 1362 | 0 | 21 | 1563 | 0 | 11 | 53 | 32 | 0 | 1474 | 32.5 | 235 | 7 | 3 |
| Maize | 3339 | 150 | 545 | 4 | 4030 | 80 | 63 | 588 | 484 | 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 | 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 | 63 | 0 | 11 | 52 | 0 | 0 | 0 | 0 | 0 | 52 | 1.1 | 9 | 0 | 0 |
| **Starchy roots** | **3542** | **1** | **0** | **3** | **3541** | **0** | **104** | **2** | **276** | **0** | **3159** | **69.6** | **177** | **2** | **0** |
| Cassava | 1112 | 0 | 0 | 0 | 1113 | 0 | 0 | 1 | 33 | 0 | 1079 | 23.8 | 70 | 1 | 0 |
| Potatoes | 1250 | 0 | 0 | 3 | 1248 | 0 | 104 | 1 | 125 | 0 | 1018 | 22.4 | 44 | 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 | 0 |
| **Sugar crops** | **7095** | **1** | **0** | **0** | **7096** | **0** | **0** | **4150** | **0** | **0** | **2994** | **66.0** | **51** | **0** | **0** |
| Sugar cane | 7095 | 1 | 0 | 0 | 7096 | 0 | 0 | 4150 | 0 | 0 | 2994 | 66.0 | 51 | 0 | 0 |
| Sugar beet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 |
| **Sugar & Sweeteners** | **572** | **179** | **-20** | **19** | **712** | **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 | 0 |
| Sugar (raw equivalent | 527 | 167 | -20 | 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 | 22 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 22 | 0.5 | 4 | 0 | 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 | 0 |
| Pulses, other | 258 | 1 | 398 | 1 | 657 | 0 | 10 | 0 | 36 | 0 | 603 | 13.3 | 125 | 8 | 1 |
| **Treenuts** | **33** | **0** | **0** | **6** | **27** | **0** | **0** | **0** | **1** | **0** | **23** | **0.5** | **4** | **0** | **0** |
| **Oilcrops** | **179** | **8** | **0** | **8** | **179** | **10** | **2** | **82** | **8** | **0** | **78** | **1.7** | **22** | **1** | **2** |
| Soybeans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.0 | 0 | 0 | 0 |
| Groundnuts | 66 | 1 | 0 | 0 | 67 | 0 | 1 | 0 | 3 | 0 | 63 | 1.4 | 21 | 1 | 2 |
| 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) | 64 | 0 | 0 | 2 | 62 | 10 | 0 | 34 | 4 | 0 | 14 | 0.3 | 1 | 0 | 0 |
| 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** | **5.1** | **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 | 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 | 4.1 | 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 | 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** | **2214** | **114** | **0** | **227** | **2101** | **0** | **0** | **0** | **223** | **0** | **1914** | **42.2** | **25** | **1** | **0** |
| Tomatoes | 494 | 6 | 0 | 0 | 500 | 0 | 0 | 0 | 50 | 0 | 451 | 9.9 | 5 | 0 | 0 |
| Onions | 68 | 0 | 0 | 0 | 68 | 0 | 0 | 0 | 7 | 0 | 27 | 0.6 | 1 | 0 | 0 |
| Vegetables, other | 1652 | 108 | 0 | 227 | 1533 | 0 | 0 | 0 | 167 | 0 | 1436 | 31.6 | 19 | 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 Calories | PER DAY Proteins | PER DAY Fats |
| | 1000 Metric Tons | | | | | | | | | | | Kg. | units | grams | grams |
| Fruits | 4002 | 101 | 0 | 249 | 3855 | 0 | 0 | 6 | 455 | 0 | 3416 | 75.3 | 120 | 1 | 1 |
| Oranges & mandarins | 100 | 49 | 0 | 0 | 148 | 0 | 0 | 0 | 15 | 0 | 133 | 2.9 | 2 | 0 | 0 |
| Lemons & limes | 26 | 1 | 0 | 0 | 26 | 0 | 0 | 0 | 3 | 0 | 24 | 0.5 | 0 | 0 | 0 |
| Grapefruit | 13 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 1 | 0 | 12 | 0.3 | 0 | 0 | 0 |
| Citrus, other | 135 | 0 | 0 | 0 | 135 | 0 | 0 | 0 | 14 | 0 | 121 | 2.7 | 2 | 0 | 0 |
| Bananas | 1809 | 1 | 0 | 0 | 1809 | 0 | 0 | 0 | 271 | 0 | 1538 | 33.9 | 56 | 1 | 0 |
| Plantains | 600 | 0 | 0 | 0 | 600 | 0 | 0 | 6 | 60 | 0 | 534 | 11.8 | 29 | 0 | 0 |
| Apples (excl. cider) | 0 | 16 | 0 | 0 | 16 | 0 | 0 | 0 | 2 | 0 | 15 | 0.3 | 0 | 0 | 0 |
| Pineapples | 159 | 1 | 0 | 132 | 28 | 0 | 0 | 0 | 16 | 0 | 80 | 1.8 | 2 | 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 | 1160 | 27 | 0 | 116 | 1071 | 0 | 0 | 0 | 74 | 0 | 951 | 21.0 | 28 | 0 | 1 |
| 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 | 626 | 1 | 0 | 8 | 619 | 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 | 33 | 0 | 0 | 0 | 33 | 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 | 4514 | 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 | 125 | 47 | 0 | 19 | 153 | 0 | 0 | 0 | 0 | 0 | 157 | 3.5 | 6 | 1 | 0 |
| Freshwater fish | 108 | 23 | 0 | 3 | 129 | 0 | 0 | 0 | 0 | 0 | 127 | 2.8 | 5 | 1 | 0 |
| Demersal fish | 4 | 0 | 0 | 10 | -5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 |
| Pelagic fish | 3 | 21 | 0 | 3 | 21 | 0 | 0 | 0 | 0 | 0 | 21 | 0.5 | 1 | 0 | 0 |
| Marine fish, other | 8 | 2 | 0 | 1 | 9 | 0 | 0 | 0 | 0 | 0 | 9 | 0.2 | 0 | 0 | 0 |
| Crustaceans | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 |
| Molluscs other | 1 | 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 8.24 (b): Food Balance Sheet, 2015

**FOOD BALANCE SHEET 2015** Population('000): 44,156

| 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 |
| **Grand total** | | | | | | | | | | | | | **2288** | **69** | **47** |
| **Vegetable prod.** | | | | | | | | | | | | | **1975** | **49** | **27** |
| **Animal prod.** | | | | | | | | | | | | | **313** | **20** | **20** |
| **Cereals (excl. beer)** | **4507** | **2558** | **545** | **114** | **7497** | **115** | **80** | **1410** | **658** | **0** | **4884** | **111** | **920** | **23** | **5** |
| Wheat | 239 | 1422 | 0 | 9 | 1652 | 0 | 11 | 58 | 33 | 0 | 1539 | 34.9 | 252 | 7 | 3 |
| Maize | 3825 | 481 | 545 | 3 | 4848 | 80 | 63 | 1242 | 582 | 0 | 2638 | 59.7 | 520 | 12 | 2 |
| Rice (Milled Eq.) | 78 | 459 | 0 | 0 | 536 | 0 | 0 | 0 | 2 | 0 | 528 | 11.9 | 114 | 2 | 0 |
| Barley | 77 | 0 | 0 | 15 | 62 | 0 | 2 | 57 | 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 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.0 | 0 | 0 | 0 |
| Millet | 99 | 25 | 0 | 0 | 124 | 5 | 2 | 8 | 7 | 0 | 23 | 0.5 | 4 | 0 | 0 |
| Sorghum | 189 | 108 | 0 | 76 | 222 | 30 | 3 | 45 | 32 | 0 | 102 | 2.3 | 20 | 1 | 0 |
| Cereals, other | 0 | 63 | 0 | 11 | 52 | 0 | 0 | 0 | 0 | 0 | 52 | 1.2 | 9 | 0 | 0 |
| **Starchy roots** | **4252** | **6** | **0** | **2** | **4257** | **0** | **104** | **3** | **347** | **0** | **3803** | **86.1** | **210** | **3** | **0** |
| Cassava | 1112 | 1 | 0 | 0 | 1113 | 0 | 0 | 1 | 33 | 0 | 1079 | 24.4 | 72 | 1 | 0 |
| Potatoes | 1960 | 5 | 0 | 2 | 1963 | 0 | 104 | 2 | 196 | 0 | 1661 | 37.6 | 73 | 2 | 0 |
| Sweet Potatoes | 1150 | 0 | 0 | 0 | 1150 | 0 | 0 | 0 | 115 | 0 | 1035 | 23.4 | 63 | 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** | **6849** | **0** | **0** | **0** | **6849** | **0** | **0** | **4150** | **0** | **0** | **2699** | **61.1** | **47** | **0** | **0** |
| Sugar cane | 6849 | 0 | 0 | 0 | 6849 | 0 | 0 | 4150 | 0 | 0 | 2699 | 61.1 | 47 | 0 | 0 |
| Sugar beet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 |
| **Sugar & Sweeteners** | **572** | **179** | **-20** | **19** | **712** | **0** | **0** | **34** | **0** | **0** | **678** | **15.4** | **149** | **0** | **0** |
| Sugar non-centrifugal | 23 | 0 | 0 | 0 | 23 | 0 | 0 | 20 | 0 | 0 | 3 | 0.1 | 1 | 0 | 0 |
| Sugar (raw equivalent | 527 | 167 | -20 | 15 | 660 | 0 | 0 | 7 | 0 | 0 | 652 | 14.8 | 144 | 0 | 0 |
| Sweeteners, other | 0 | 12 | 0 | 4 | 8 | 0 | 0 | 7 | 0 | 0 | 1 | 0.0 | 0 | 0 | 0 |
| Honey | 22 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 22 | 0.5 | 4 | 0 | 0 |
| **Pulses** | **1023** | **8** | **433** | **1** | **1463** | **0** | **10** | **0** | **156** | **0** | **1296** | **29.3** | **275** | **18** | **1** |
| Beans | 765 | 1 | 35 | 0 | 801 | 0 | 0 | 0 | 120 | 0 | 681 | 15.4 | 144 | 9 | 1 |
| Peas | 0 | 5 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 5 | 0.1 | 1 | 0 | 0 |
| Pulses, other | 258 | 2 | 398 | 1 | 657 | 0 | 10 | 0 | 36 | 0 | 610 | 13.8 | 130 | 8 | 1 |
| **Treenuts** | **33** | **0** | **0** | **6** | **27** | **0** | **0** | **0** | **1** | **0** | **23** | **0.5** | **4** | **0** | **0** |
| **Oilcrops** | **179** | **8** | **0** | **11** | **176** | **10** | **2** | **82** | **8** | **0** | **75** | **1.7** | **23** | **1** | **2** |
| Soybeans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.0 | 0 | 0 | 0 |
| Groundnuts | 66 | 1 | 0 | 0 | 67 | 0 | 1 | 0 | 3 | 0 | 63 | 1.4 | 21 | 1 | 2 |
| 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) | 64 | 0 | 0 | 5 | 59 | 10 | 0 | 34 | 4 | 0 | 11 | 0.2 | 1 | 0 | 0 |
| 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** | **5.3** | **126** | **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 | 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 | 4.2 | 101 | 0 | 11 |
| Copra oil | 6 | 12 | 0 | 1 | 17 | 0 | 0 | 0 | 0 | 0 | 17 | 0.4 | 10 | 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 | 8 | 0 | 1 |
| Oilcrops oil, other | 14 | 1 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 3 | 12 | 0.3 | 6 | 0 | 1 |
| **Vegetables** | **2214** | **115** | **0** | **227** | **2101** | **0** | **0** | **0** | **223** | **0** | **1914** | **43.3** | **26** | **1** | **0** |
| Tomatoes | 494 | 7 | 0 | 0 | 501 | 0 | 0 | 0 | 50 | 0 | 451 | 10.2 | 5 | 0 | 0 |
| Onions | 68 | 0 | 0 | 0 | 68 | 0 | 0 | 0 | 7 | 0 | 27 | 0.6 | 1 | 0 | 0 |
| Vegetables, other | 1652 | 108 | 0 | 227 | 1532 | 0 | 0 | 0 | 167 | 0 | 1436 | 32.5 | 20 | 1 | 0 |

## FOOD BALANCE SHEET 2015

Population('000): 44,156

| 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** | **4002** | **65** | **0** | **250** | **3817** | **0** | **0** | **6** | **451** | **0** | **3390** | **76.8** | **123** | **1** | **1** |
| Oranges & mandarins | 100 | 13 | 0 | 1 | 112 | 0 | 0 | 0 | 11 | 0 | 101 | 2.3 | 2 | 0 | 0 |
| Lemons & limes | 26 | 1 | 0 | 0 | 26 | 0 | 0 | 0 | 3 | 0 | 24 | 0.5 | 0 | 0 | 0 |
| Grapefruit | 13 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 1 | 0 | 12 | 0.3 | 0 | 0 | 0 |
| Citrus, other | 135 | 0 | 0 | 0 | 135 | 0 | 0 | 0 | 14 | 0 | 121 | 2.8 | 2 | 0 | 0 |
| Bananas | 1809 | 1 | 0 | 0 | 1810 | 0 | 0 | 0 | 271 | 0 | 1538 | 34.8 | 57 | 1 | 0 |
| Plantains | 600 | 0 | 0 | 0 | 600 | 0 | 0 | 6 | 60 | 0 | 534 | 12.1 | 29 | 0 | 0 |
| Apples (excl. cider) | 0 | 15 | 0 | 0 | 16 | 0 | 0 | 0 | 1 | 0 | 14 | 0.3 | 0 | 0 | 0 |
| Pineapples | 159 | 1 | 0 | 132 | 28 | 0 | 0 | 0 | 16 | 0 | 80 | 1.8 | 2 | 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 | 1160 | 27 | 0 | 117 | 1069 | 0 | 0 | 0 | 74 | 0 | 957 | 21.7 | 29 | 0 | 1 |
| **Stimulants** | **441** | **16** | **5** | **483** | **-21** | **0** | **0** | **397** | **12** | **0** | **3** | **0.1** | **0** | **0** | **0** |
| Coffee | 42 | 1 | 5 | 58 | -10 | 0 | 0 | 0 | 0 | 0 | 1 | 0.0 | 0 | 0 | 0 |
| Cocoa Beans | 0 | 2 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0.0 | 0 | 0 | 0 |
| Tea | 399 | 13 | 0 | 424 | -12 | 0 | 0 | 397 | 12 | 0 | 0 | 0.0 | 0 | 0 | 0 |
| **Spices** | **256** | **3** | **0** | **3** | **256** | **0** | **0** | **0** | **0** | **0** | **256** | **5.8** | **53** | **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 | 5.7 | 52 | 2 | 2 |
| **Alcoholic beverages** | **499** | **7** | **0** | **2** | **504** | **0** | **0** | **0** | **0** | **0** | **504** | **11.4** | **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 | 4.8 | 6 | 0 | 0 |
| Beverages, fermente | 264 | 0 | 0 | 0 | 264 | 0 | 0 | 0 | 0 | 0 | 264 | 6.0 | 7 | 0 | 0 |
| Beverages, alcoholic | 26 | 1 | 0 | 1 | 26 | 0 | 0 | 0 | 0 | 0 | 26 | 0.6 | 5 | 0 | 0 |
| Alcohol, non food | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **Meat** | **568** | **0** | **0** | **8** | **561** | **0** | **0** | **0** | **0** | **0** | **683** | **15.5** | **81** | **6** | **7** |
| Bovine meat | 501 | 0 | 0 | 2 | 499 | 0 | 0 | 0 | 0 | 0 | 499 | 11.3 | 59 | 5 | 6 |
| Mutton & goat meat | 0 | 0 | 0 | 4 | -4 | 0 | 0 | 0 | 0 | 0 | 92 | 2.1 | 10 | 1 | 1 |
| Pig meat | 0 | 0 | 0 | 2 | -2 | 0 | 0 | 0 | 0 | 0 | 24 | 0.5 | 7 | 0 | 0 |
| Poultry meat | 33 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 33 | 0.7 | 2 | 0 | 0 |
| Other meat | 34 | 0 | 0 | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 34 | 0.8 | 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)** | **5289** | **26** | **0** | **11** | **5303** | **17** | **0** | **365** | **387** | **0** | **5350** | **121.2** | **212** | **11** | **12** |
| **Eggs** | **98** | **0** | **0** | **0** | **98** | **0** | **5** | **0** | **15** | **0** | **79** | **1.8** | **6** | **1** | **0** |
| **Fish & sea food** | **148** | **35** | **0** | **23** | **161** | **0** | **0** | **0** | **0** | **0** | **163** | **3.7** | **7** | **1** | **0** |
| Freshwater fish | 131 | 12 | 0 | 8 | 135 | 0 | 0 | 0 | 0 | 0 | 132 | 3.0 | 5 | 1 | 0 |
| Demersal fish | 4 | 0 | 0 | 10 | -5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 |
| Pelagic fish | 3 | 21 | 0 | 3 | 21 | 0 | 0 | 0 | 0 | 0 | 21 | 0.5 | 1 | 0 | 0 |
| Marine fish, other | 8 | 2 | 0 | 1 | 9 | 0 | 0 | 0 | 0 | 0 | 9 | 0.2 | 0 | 0 | 0 |
| Crustaceans | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0 | 0 | 0 |
| Molluscs other | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 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

09 Chapter

## Overview

Environment has been identified as a key sector in realization of Vision 2030 and Sustainable Development Goals. In 2016, the Government continued to institute and enforce policy and legal measures that govern the management, conservation and exploitation of natural resources. During the review period, the Climate Change Act 2016, the Forest Conservation and Management Act 2016, the Fisheries Management and Development Act 2016, the Water Act 2016 and the Mining Act 2016 were enacted to facilitate effective management of environment and natural resources. The Government commitment to environmental management was further illustrated by the inclusion of environmental considerations in the various sectoral activities.

9.2. There was mixed performance in the selected indicators on environmental and natural resources during 2016. The expenditure on water and related services is expected to increase by 32.2 per cent from KSh 41.3 billion in the 2015/16 financial year to KSh 54.6 billion in the 2016/17 financial year. Total quantity of fish landed declined from 146.3 thousand tonnes in 2015 to 128.6 thousand tonnes in 2016. This is reflected by the falling trend in fish production from all fresh water lakes and marine sources except for molluscs. The acreage under Government forest plantation expanded slightly from 130.5 thousand hectares in 2015 to 131.3 thousand hectares in 2016. Total mineral output increased by 9.5 per cent from 1,571.9 thousand tonnes in 2015 to 1,720.6 thousand tonnes in 2016.

## Environment and Natural Resources Gross Value Added

9.3. Table 9.1 presents Gross Value Added (GVA) of selected activities under the environment and natural resources sector for 2012 to 2016 period. The overall GVA by all the industries grew by 5.3 per cent from KSh 221.5 billion in 2015 to KSh 233.4 billion in 2016. Forestry and logging grew by 12.7 per cent in 2016 and accounted for 38.4 per cent of the GVA. Similarly, mining and quarrying, and water supply industries grew by 23.0 per cent and 5.3 per cent, respectively. In 2016, the GVA from the fishing industry declined by 13.2 per cent to KSh 35.0 billion from KSh 40.3 billion in 2015.

**Table 9.1: Trends in Environment and Natural Resources Gross Value Added, 2012 - 2016**

KSh Million

| Industry | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| Forestry and Logging | 58,039.0 | 67,229.0 | 73,355.0 | 79,619.0 | 89,723.0 |
| Fishing and Aquaculture | 28,902.0 | 34,333.0 | 39,344.0 | 40,324.0 | 35,013.0 |
| Mining and Quarrying | 46,623.0 | 38,802.0 | 44,162.0 | 54,806.0 | 59,402.0 |
| Water Supply[1] | 37,779.0 | 40,406.0 | 42,188.0 | 46,794.0 | 49,251.0 |
| **Total** | **171,343.0** | **180,770.0** | **199,049.0** | **221,543.0** | **233,389.0** |
| GDP at Current Prices | 4,261,151.0 | 4,730,601.0 | 5,398,000.0 | 6,260,646.0 | 7,158,695.0 |
| Resources Sector as per cent of GDP | 4.0 | 3.8 | 3.7 | 3.5 | 3.3 |

* Provisional

[1] Includes sewerage and waste management

**Water Supply**

9.4. The Government enacted the Water Act 2016 with a focus on improving water storage, strengthening regulation, creating viable water utilities and improving sector planning. Under the Act, sector coordination between the National Government and the County Governments under devolved water services provision will be enhanced.

9.5. In pursuit of the policy to provide safe drinking water to households within a realistic distance, the Government continued to initiate and maintain modest Water Purification Points (WPPs). The number of WPPs increased from 242 in the 2015/16 financial year to 247 in the 2016/17 financial year as presented in Table 9.2.

9.6. In 2016/17 financial year, a total of 263 boreholes are expected to be constructed compared to 446 boreholes drilled in 2015/16. The private sector is expected to contribute the highest number of boreholes drilled at 244 despite the decrease from 2015/16, while the public sector is expected to drill 19 boreholes.

**Table 9.2: Water Purification Points and Boreholes Drilled, 2012/13 - 2016/17**

Number

| | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17* |
|---|---|---|---|---|---|
| Water Purification Points (WPP)[1] .. | 218 | 230 | 234 | 242 | 247 |
| Boreholes (BH) Total ... ... ... ... ... . | 99 | 376 | 607 | 446 | 263 |
| Public ... ... ... ... ... ... ... ... ... ... | 99 | 74 | 13 | 4 | 19 |
| Private Sector ... ... ... ... ... ... ... | .. | 302 | 594 | 442 | 244 |

Source: Ministry of Water and Irrigation

* Provisional

.. Data not available

[1]Cumulative

9.7. Table 9.3 shows development expenditure by the National Government on water supplies and related services over the financial years 2012/13 to 2016/17. The expenditure on water and related services is expected to increase by 32.2 per cent from KSh 41.3 billion in 2015/16 financial year to KSh 54.6 billion 2016/17 financial year. This could be attributed to the Government's efforts to construct new water projects and rehabilitation of existing water supply schemes.

9.8. In the review period, water development expenditure is expected to grow by 49.1 per cent from KSh 23.2 billion to KSh 34.6 billion in the 2016/17 financial year, accounting for 63.4 per cent of the total development expenditure. Expenditure on Rural Water Supplies is expected to increase from KSh 1.4 billion in 2015/16 financial year to KSh 2.5 billion in 2016/17 financial year. Expenditures on Irrigation Development is expected to more than double over the same period.

9.9. Expenditure on National Irrigation Board (NIB) is expected to decline by 11.9 per cent to KSh 11.1 billion in 2016/17 financial year from KSh 12.6 billion in 2015/16 financial year. The expenditure on Training of Water Development Staff and National Water Conservation and Pipeline Corporation is also expected to decline by 79.3 and 80.6 per cent, respectively.

**Table 9.3: Development Expenditure on Water Supplies and Related Services by the National Government, 2012/13 - 2016/17**

KSh Million

| Item | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17* |
|---|---|---|---|---|---|
| Water Development ... ... ... ... ... ... ... ... ... ... ... ... ... ... | 11,713.9 | 15,385.0 | 17,329.0 | 23,247.7 | 34,640.1 |
| Training of Water Development Staff ... ... ... ... ... ... ... | 314.9 | 135.0 | 170.0 | 150.0 | 31.0 |
| Rural Water Supplies ... ... ... ... ... ... ... ... ... ... ... ... ... ... | 393.8 | 300.6 | 1,326.5 | 1,436.7 | 2,494.0 |
| Miscellaneous and Special Water Programmes ... ... ... ... | 2,080.4 | 2,153.0 | 304.8 | 528.0 | 1,347.0 |
| National Water Conservation and Pipeline Corporation . | 5,226.4 | 3,507.2 | 2,460.0 | 1,156.0 | 224.0 |
| Irrigation Development ... ... ... ... ... ... ... ... ... ... ... ... | 90.6 | 139.0 | 157.2 | 2,190.9 | 4,845.9 |
| National Irrigation Board ... ... ... ... ... ... ... ... ... ... ... ... | 671.4 | 11,268.6 | 10,900.0 | 12,569.7 | 11,052.0 |
| **TOTAL** | **20,491.4** | **32,888.4** | **32,647.5** | **41,279.0** | **54,634.0** |

Source: Ministry of Water and Irrigation

* Provisional

**Fisheries**

9.10. In 2016, the Government enacted Fisheries Management and Development Act 2016 and also continued to enforce controls for exploitation of fisheries resources. The Act provides for the conservation, management and development of fisheries and other aquatic resources and seeks to enhance the livelihood of communities that depend on fishing. The Act gives guidance on importation and exportation of fish and fish products, fish quality and safety.

9.11. The fisheries sub-sector registered a depressed performance for the second consecutive year, with total fish output dropping by 12.1 per cent from 146.3 thousand tonnes in the year 2015 to 128.6 thousand tonnes in 2016 as reflected in Table 9.4. This is reflected by the falling trend in fish production from all fresh water lakes and marine sources except for molluscs.

9.12. Freshwater fish production dropped by 12.3 per cent from 136.4 thousand tonnes in 2015 to 119.6 thousand tonnes in 2016. Lake Victoria continued to make a significant contribution accounting for 82.5 per cent of the total freshwater fish production. However, its output dropped by 10.2 per cent from 109.9 thousand tonnes in 2015 to 98.7 thousand tonnes in 2016. The decline is partly attributed to the presence of water hyacinth and destructive fishing methods. Similarly, the quantity of fish landed from Lake Turkana dropped by 24.5 per cent from 5.3 thousand tonnes in 2015 to 4.0 thousand tonnes in 2016. Fish production from the remaining lakes, Tana River dams and other areas also declined during the review period. The quantity of fish landed from fish farming dropped by 19.8 per cent from 18.7 thousand tonnes in 2015 to 15.0 thousand tonnes in 2016.

9.13. The marine fish landed declined by 10.6 per cent from 8.5 thousand tonnes in 2015 to 7.6 thousand tonnes in 2016. Crustaceans declined to 653 tonnes in 2016, while molluscs increased from 763 tonnes in 2015 to 824 tonnes in 2016. The decline is attributable to inadequate capacity to effectively utilize the Exclusively Economic Zone (EEZ).

9.14. The total value of fish landed declined by 11.5 per cent from KSh 20.9 billion in 2015 to KSh 18.5 billion in 2016. The value of fresh water fish dropped by 11.6 per cent from KSh 19.0 billion recorded in 2015 to KSh 16.8 billion in 2016. The value of marine fish and Crustaceans also decreased by 6.5 per cent and 32.7 per cent, to KSh 1,272 million and KSh 268 million, respectively, in 2016. However, the value of Molluscs increased from KSh 119 million in 2015 to KSh 141 million in 2016.

**Table 9.4: Quantity and Value of fish landed, 2012 - 2016**

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **Quantities - Tonnes:** | | | | | |
| Freshwater fish | | | | | |
| Lake Victoria ... ... | 118,992 | 124,643 | 128,708 | 109,902 | 98,666 |
| Lake Turkana ... ... | 3,001 | 4,338 | 4,166 | 5,303 | 3,963 |
| Lake Naivasha ... ... | 143 | 231 | 633 | 1,072 | 1,064 |
| Lake Baringo ... ... | 251 | 263 | 302 | 176 | 141 |
| Lake Jipe ... ... ... ... | 112 | 116 | 115 | 123 | 106 |
| Tana River dams ... | 967 | 705 | 1,024 | 852 | 444 |
| Fish Farming ... ... | 21,487 | 23,501 | 24,096 | 18,656 | 14,952 |
| Other areas ... ... .. | 197 | 456 | 296 | 312 | 214 |
| **SUB-TOTAL** | **145,150** | **154,253** | **159,340** | **136,396** | **119,550** |
| Marine Sources | | | | | |
| Marine fish ... ... ... | 7,477 | 7,667 | 7,872 | 8,453 | 7,618 |
| Crustaceans ... ... .. | 740 | 799 | 555 | 713 | 653 |
| Molluscs ... ... ... ... | 648 | 670 | 646 | 763 | 824 |
| **SUB-TOTAL** | **8,865** | **9,136** | **9,073** | **9,929** | **9,095** |
| **GRAND TOTAL** | **154,015** | **163,389** | **168,413** | **146,325** | **128,645** |
| **Value - KSh Million** | | | | | |
| Freshwater fish ... ... . | 16,867 | 19,984 | 20,941 | 18,983 | 16,836 |
| Marine fish ... ... ... .. | 878 | 921 | 1,072 | 1,360 | 1,272 |
| Crustaceans ... ... ... . | 233 | 286 | 243 | 398 | 268 |
| Molluscs ... ... ... ... ... | 96 | 90 | 125 | 119 | 141 |
| **TOTAL** | **18,074** | **21,281** | **22,382** | **20,860** | **18,517** |

Source: State Department Fisheries

* Provisional

## Forestry

9.15. The government enacted the Forest Conservation and Management Act 2016 to guide the sustainable exploitation of forest resources. As shown in Table 9.5, the forest areas declined marginally to 3,456 thousand hectares in 2016 from 3,464 thousand hectares in 2015. Total area under closed canopy forest cover stood at 1,402.0 thousand hectares in 2016 down from 1,408.0 thousand hectares in 2015. The indigenous closed canopy forests, with an area of 1,138.0 thousand hectares, contributed the largest share of 81.2 per cent under closed canopy forests. Area under Grasslands and Trees on farm lands decreased marginally in the review period.

**Table 9.5: Status of Forests, 2012 – 2016**

'000 Ha

| Category of forest cover type | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Indegenous Closed Canopy | 1,137.0 | 1,137.0 | 1,139.0 | 1,140.0 | 1,138.0 |
| Mangroves | 54.0 | 54.0 | 54.0 | 54.0 | 54.0 |
| Public Plantation forests | 127.0 | 135.0 | 130.0 | 132.0 | 131.0 |
| Private plantation forests | 94.0 | 71.0 | 80.0 | 82.0 | 79.0 |
| **Sub-total closed canopy forests** | **1,412.0** | **1,397.0** | **1,403.0** | **1,408.0** | **1,402.0** |
| Open woodlands | 2,052.0 | 2,053.0 | 2,056.0 | 2,056.0 | 2,054.0 |
| **Sub-total of forest areas** | **3,464.0** | **3,450.0** | **3,459.0** | **3,464.0** | **3,456.0** |
| Bush-lands | 24,245.0 | 24,245.0 | 24,260.0 | 24,255.0 | 24,256.0 |
| Grasslands | 10,528.0 | 10,664.0 | 10,670.0 | 10,665.0 | 10,664.0 |
| Trees on farmlands | 10,411.0 | 12,400.0 | 12,450.0 | 12,520.0 | 12,500.0 |

Source: Kenya Forest Service

*Provisional

9.16. Table 9.6 presents the Government forest plantation stocking for the 2012 to 2016 period. The total area under Government forest plantation improved from 130.5 thousand hectares in 2015 to 131.3 thousand hectares in 2016. The area planted in 2016 was 7.0 thousand hectares compared to 10.0 thousand hectares planted in the previous year. The area clear felled increased by 31.9 per cent from 4.7 thousand hectares in 2015 to 6.2 thousand hectares in 2016.

**Table 9.6: Government Forest Plantation Stocking, 2012 - 2016**

'000 Ha

| Stocking | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Previous Plantation Area[1] | 121.7 | 127.1 | 129.4 | 129.4 | 130.5 |
| Area Planted | 7.4 | 8.2 | 7.1 | 10.0 | 7.0 |
| **Total** | 129.1 | 135.3 | 136.5 | 139.4 | 137.5 |
| Area Clear felled | 2.0 | 4.7 | 6.1 | 4.7 | 6.2 |
| Planting failures/fire damages | - | 1.2 | 1.0 | 4.2 | - |
| **Total Area** | **127.1** | **129.4** | **129.4** | **130.5** | **131.3** |

Source: Kenya Forest Service

* Provisional

[1] Opening stock at the beginning of the year

9.17. Table 9.7 presents the recorded sale of Government forest products from 2012 to 2016. Total sales of timber increased to 1,123.6 thousand true cubic metres in 2016 up from 633.5 thousand true cubic metres recorded in 2015. Sale of charcoal and fuel wood, increased to 113.7 thousand stacked cubic metres in 2016 from 43.7 thousand stacked cubic metres in 2015. This may be attributed to legalizing of sustainable charcoal production and trade under the Forest Act 2016. However, sale of power poles decreased significantly from 34.5 thousand in 2015 to 2.0 thousand in 2016. The drop may be attributed to a shift in sourcing of poles from outside the Government forests and use of concrete poles.

**Table 9.7: Recorded Sale of Government Forest Products, 2012 - 2016**

| Forest Products | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Timber - '000 true cu. metres- | | | | | |
| Soft wood | 721.3 | 933.7 | 1,167.0 | 621.1 | 1,088.9 |
| Hard wood | 2.3 | - | 30.6 | 12.4 | 34.7 |
| TOTAL | 723.6 | 933.7 | 1,197.6 | 633.5 | 1,123.6 |
| Fuelwood/charcoal ('000 stacked cu. Metres) | 45.9 | 64.0 | 70.0 | 43.7 | 113.7 |
| Power & Telegraph Poles ('000) | 1.8 | 14.5 | 43.3 | 34.5 | 2.0 |

Source: Kenya Forest Service

* Provisional.

**Mining**

9.18. During the review period, the Government enacted the Mining Act 2016 to regulate the country's mining industry and attract investment. Table 9.8 presents the quantity and value of selected minerals for the period 2012 to 2016. Total mineral output increased by 7.6 per cent from 1,596.3 thousand tonnes in 2015 to 1,718.4 thousand tonnes in 2016. Production of soda ash declined by 5.6 per cent to 301.7 thousand tonnes in 2016. In contrast, production of titanium ore minerals recorded a growth of 7.0 per cent from 549.9 thousand tonnes in 2015 to 588.4 thousand tonnes in 2016. Fluorspar output declined from 70.1 thousand tonnes in 2015 to 42.7 thousand tonnes in 2016. The decline could be attributed to the temporary closure the local firm and constraints faced in production following low demand and slump in prices since 2013.

9.19. The overall value of mineral output declined marginally from KSh 23.8 billion in 2015 to KSh 23.3 billion in 2016. During the review period, earnings from titanium ores increased from KSh12.8 billion to KSh 13.3 billion.In contrast, value of soda ash declined by 6.1 per cent from KSh 6.6 billion in 2015 to KSh 6.2 billion in 2016.

**Table 9.8: Quantity and value of mineral Production, 2012 - 2016**

| Mineral | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **Quantities - Tonnes:** | | | | | |
| **Minerals-** | | | | | |
| Soda Ash | 449,269.0 | 468,215.0 | 409,845.0 | 319,761.0 | 301,719.0 |
| Fluorspar | 91,000.0 | 71,987.0 | 97,156.0 | 70,096.0 | 42,656.0 |
| Salt | 9,980.0 | 8,895.0 | 18,936.0 | 21,201.0 | 23,425.0 |
| Crushed Refined Soda | 882,801.0 | 947,074.0 | 851,906.0 | 614,055.0 | 741,000.0 |
| Carbon Dioxide | 19,919.0 | 18,436.0 | 19,450.0 | 19,750.0 | 19,550.0 |
| Diatomite | 1,746.0 | 1,054.0 | 1,195.0 | 1,090.0 | 1,092.0 |
| Gold | 3.6 | 2.1 | 0.2 | 0.3 | 0.2 |
| Gemstones | 120.9 | 563.0 | 247.3 | 442.0 | 518.2 |
| Titanium Ore o/w | - | - | 374,131.2 | 549,897.0 | 588,421.0 |
| Illmenite | - | - | 281,543.0 | 444,999.0 | 465,728.0 |
| Rutile | - | - | 52,465.0 | 78,947.0 | 87,716.0 |
| Zircon | - | - | 40,123.2 | 25,951.0 | 34,977.0 |
| **TOTAL** | **1,454,839.5** | **1,516,226.1** | **1,772,866.7** | **1,596,292.3** | **1,718,381.4** |
| **Value - KSh Million** | | | | | |
| Soda Ash | 9,388.0 | 8,865.2 | 7,840.8 | 6,599.6 | 6,227.2 |
| Fluorspar | 2,942.0 | 1,783.0 | 1,901.0 | 1,427.7 | 868.8 |
| Salt | 65.7 | 71.6 | 173.5 | 197.8 | 218.5 |
| Crushed Refined Soda | 589.0 | 631.9 | 568.4 | 409.7 | 494.4 |
| Carbon Dioxide | 503.0 | 495.6 | 503.9 | 525.6 | 514.9 |
| Diatomite | 85.6 | 69.6 | 70.6 | 70.6 | 70.7 |
| Gold | 13,919.7 | 7,432.6 | 695.3 | 978.7 | 652.5 |
| Gemstones | 157.5 | 411.0 | 263.6 | 798.4 | 936.0 |
| Titanium Ore o/w | - | - | 9,063.4 | 12,819.0 | 13,296.9 |
| Ilmenite | - | - | 3,697.0 | 3,763.0 | 3,430.8 |
| Rutile | - | - | 4,085.2 | 6,329.0 | 6,818.7 |
| Zircon | - | - | 1,281.2 | 2,727.0 | 3,047.4 |
| **TOTAL** | **27,650.5** | **19,760.5** | **21,080.5** | **23,827.1** | **23,279.9** |

Source: Department of Mines and Geology

* Provisional

9.20. Table 9.9 presents average export prices per tonne of soda ash, fluorspar and titanium ore and its concentrates over the period 2012 to 2016. The export price per tonne of soda ash, flouspar and titanium ore declined by 8.4, 15.0, and 5.9 per cent, respectively.

**Table 9.9: Average Export Prices of soda Ash, Flourspar, Tiomin Ore and Concentrates, 2012 - 2016**

KSh per tonne

| Mineral | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Soda Ash | 21,194 | 18,790 | 19,774 | 22,925 | 20,998 |
| Fluorspar | 30,941 | 21,978 | 20,029 | 20,368 | 17,313 |
| Titanium Ore and Concentrates | - | - | 20,198 | 19,100 | 17,968 |

Source: Kenya National Bureau of Statistics and Kenya Revenue Authority

*Provisional

**Refuse Management**

9.21. The management of solid wastes is considered an important determinant of human welfare as it plays a central role in reducing the incidence of diseases. Table 9.10 summarizes approved expenditure on refuse management in Nairobi City County. Total expenditure on solid waste management increased from KSh 454.6 in 2015/16 financial year to KSh 537.3 million in 2016/17 financial year.

**Table 9.10: Expenditure on Cleaning and Refuse Management by the Nairobi City County, 2012/13-2016/17**

KSh Million

| Expenditure category | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17* |
|---|---|---|---|---|---|
| Cleaning and Administration[1] | 72.1 | 151.0 | 143.0 | - | - |
| Cleaning - General[1] | 115.3 | 36.9 | 20.9 | - | - |
| Refuse Removal | 499.3 | 380.0 | 255.2 | 454.6 | 537.3 |
| **Total** | **686.7** | **567.9** | **419.1** | **454.6** | **537.3** |

Source: Nairobi City County

* Provisional

[1]Expenditure reallocated to Refuse removal in 2015/16 and 2016/17

**Wildlife**

9.22. Wildlife is a major tourist attraction in the country, and therefore its management, protection and conservation is key to the country's economic performance and national heritage. Table 9.11 presents the wildlife population estimates within the rangelands from 2012 to 2016. Generally, the population of most wildlife species declined during the review period. The decline is mainly attributed to land subdivisions in the rangelands, harsh climatic conditions, poaching and cross border movements in search of vegetation.

**Table 9.11: Wildlife Population Estimates in the Kenya Rangelands, 2012 – 2016**

'000 Number

| Species[1] | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| Buffalo | 15.2 | 13.0 | 15.6 | 15.0 | 14.8 |
| Burchell's Zebra | 100.0 | 100.3 | 110.2 | 100.0 | 100.2 |
| Eland | 6.8 | 5.8 | 4.7 | 4.3 | 4.0 |
| Elephant | 18.5 | 16.0 | 15.9 | 15.8 | 15.7 |
| Gerenuk | 18.0 | 16.0 | 15.8 | 15.5 | 15.4 |
| Giraffe | 23.1 | 19.0 | 18.9 | 18.5 | 18.6 |
| Grant's Gazelle | 112.0 | 111.7 | 111.9 | 111.9 | 111.8 |
| Grevy's Zebra | 3.1 | 3.0 | 3.0 | 3.0 | 2.9 |
| Hunters Hartebeest | 0.8 | 0.7 | 0.3 | 0.3 | 0.3 |
| Impala | 60.5 | 61.8 | 59.9 | 59.0 | 58.9 |
| Kongoni | 6.9 | 5.0 | 4.9 | 4.9 | 4.9 |
| Kudu | 11.1 | 11.0 | 11.0 | 11.0 | 11.0 |
| Oryx | 15.2 | 14.5 | 14.0 | 13.9 | 13.9 |
| Ostrich | 28.2 | 28.5 | 27.8 | 27.7 | 28.1 |
| Thomson's Gazelle | 43.5 | 42.0 | 43.4 | 43.0 | 42.0 |
| Topi | 20.0 | 20.5 | 15.3 | 15.3 | 15.3 |
| Warthog | 18.0 | 18.4 | 17.0 | 16.9 | 16.5 |
| Waterbuck | 2.9 | 3.5 | 2.9 | 2.8 | 2.3 |
| Wildebeest | 288.0 | 276.0 | 270.0 | 265.0 | 260.0 |

Source: Directorate of Resource Surveys and Remote Sensing

* Provisional

[1]derived using aerial sample surveys

**Environmental Impact Assessments**

9.23. Table 9.12 shows the number of Environmental Impact Assessments (EIAs) by sector from 2012 to 2016. In general, the number of EIAs increased by 19.5 per cent from 1,654 in 2015 to 1,977 in 2016. In the energy sector, the number of EIAs increased by 63.1 per cent from 298 in 2015 to 486 reported in 2016. Transport and Communication had an increase of 6.8 per cent from 607 in 2015 to 648 in 2016. Similarly, the number of EIAs in Human Settlements and Infrastructure increased by 8.9 per cent from 505 to 550 over the same period.

**Table 9.12: Environment Impact Assessments (EIA) by Sector, 2012-2016**

Number

| Sector | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Transport and Communication | 293 | 208 | 437 | 607 | 648 |
| Energy | 184 | 163 | 188 | 298 | 486 |
| Tourism | 22 | 12 | 11 | 14 | 12 |
| Mining and Quarrying | 22 | 26 | 19 | 18 | 33 |
| Human settlements and Infrastructure | 371 | 320 | 340 | 505 | 550 |
| Agriculture and Forestry | 29 | 34 | 34 | 26 | 22 |
| Commerce and Industry | 138 | 85 | 149 | 135 | 163 |
| Water Resources | 25 | 8 | 41 | 51 | 63 |
| **TOTAL** | **1,084** | **856** | **1,219** | **1,654** | **1,977** |

Source: National Environment Management Authority (NEMA)

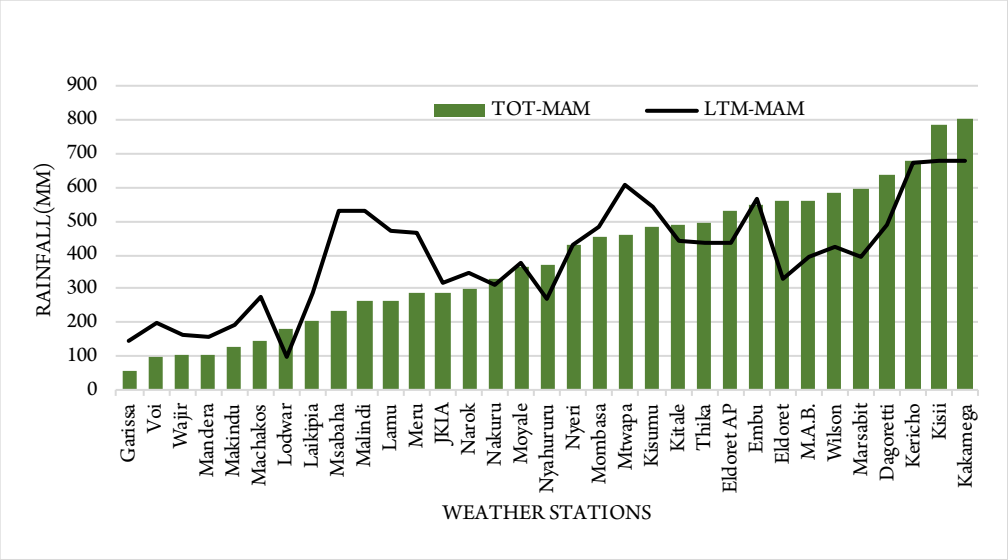
* Provisional

**Weather**

9.24. The long rains distribution pattern, both in time and space, was generally good over most parts of Western and Central Kenya as shown in Figure 9.1. Most of the rainfall was recorded in April and May 2016. The rainfall was poorly distributed both spatially and temporally in the Coastal and South-Eastern regions.

9.25. The meteorological stations that recorded well above their Long-Term Mean (LTM) during the March-April-May (MAM) include Nyahururu, Thika, Kitale, Eldoret), Moi Air Base, Wilson, Dagoretti, Marsabit, Kisii Kakamega and Lodwar. The stations that recorded rainfall equivalent to LTM include Nakuru, Moyale, Nyeri and Kericho. The rest of the stations received depressed rainfall which were well below their LTM.

**Figure 9.1: Long Rain March to May Performance, 2016**

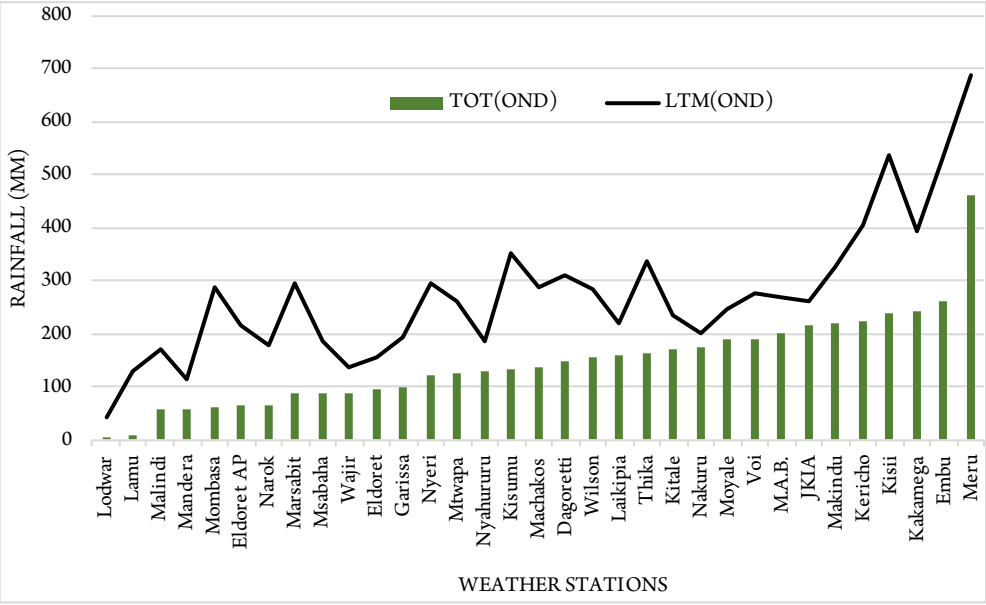



Source: Kenya Meteorological Department
TOT - Total Rainfall
LTM - Long Term Mean
M.A.B - Moi Air Base

MAM – March-April-May

9.26. The October-November-December (OND) short rains analysis indicates that the country received depressed rainfall as depicted in Figure 9.2. All meteorological stations recorded rainfall levels well below their LTM. Lodwar station received no rainfall while Meru station recorded 460 millimetres of rainfall over the OND period.

**Figure 9.2: Short Rain (October to December) Performance, 2016**




Source: Kenya Meteorological Department
TOT - Total Rainfall
LTM - Long Term Mean
OND – October-November-December

**Recent Developments in Environment and Natural Resources**

9.27. In 2016, the Government participated in the 22nd Session of the Conference of Parties (COP 22) to the United Nations Framework Convention on Climate Change, which was held in Marrakech, Morocco. The major outcome was for the countries to finalize the rules and implement the Paris Agreement by 2018. Other outcomes were on steps to address the climate change and promote sustainable development. Furthermore, the International Council for Research in Agroforestry (ICRAF) initiated a number of agroforestry development activities with a view to combating desertification through research focused on energy saving Jikos and drought resistant trees.

9.28. The government formally submitted its Intended Nationally Determined Contribution (INDC), which sets out a greenhouse gas (GHG) emissions reduction target of 30 per cent by 2030 compared to a Business-As-Usual (BAU) scenario of 143 megatons of carbon dioxide equivalent. The INDC covers all sectors, with a focus on reducing emissions of carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O).

9.29. BirdLife International and its national Partners continued working with communities in Dunga Beach to strengthen the capacity of community based Local Conservation Groups (LCGs). The goal is to conserve biodiversity and to sustain the ecosystem benefits of Lake Victoria Basin for human well-being.

9.30. The water sector undertook significant measures to ensure increased access to adequate water for human consumption country-wide. Substantial progress has been made in the implementation of the Kenya Water Security and Climate Resilience project and the Itare dam water project. The Garissa Water and Sewerage Project Phase II; Kisumu Water Supply and Sanitation Project-LTAP-Package 1 to Package 3; Migori Water Supply and Sanitation Project and; Gichugu Water Supply Project were completed.

9.31. In April 2016, Kenya burnt elephant ivory worth US$ 105 million to discourage poaching. The record-setting burn was meant to send a message to the world that ivory trade is illegal and harmful to the existence and sustainability of wildlife.

# 10 Chapter

# Energy

## Overview

In 2016, the average crude oil prices in the international markets dropped compared to 2015. Murban crude prices decreased to an average of 44.18 US dollars per barrel in 2016 from US 52.53 dollars per barrel in 2015. Supply continued to outstrip demand as a result of crude oil inventories, build up in the global market. The relatively high crude oil production and inventory levels led to reduction in international oil prices throughout the review period. Cooking gas average prices fell to an eight year low after the Government scrapped the applicable Value Added Tax (VAT) to boost uptake among poor households.

10.2. The volume of import of petroleum products increased from 4,431.7 thousand tonnes in 2015 to 4,852.4 thousand tonnes in 2016. Domestic exports of petroleum products declined from 30.4 thousand tonnes in 2015 to 26.9 thousand tonnes in 2016. During the same period, the total import bill of petroleum products decreased by 12.6 per cent to KSh 197.5 billion. Similarly, the total value of petroleum products exported declined by 28.4 per cent to KSh 42.8 billion.

10.3. Total installed electricity capacity declined marginally to 2,325.8 megawatts (MW) as at December 2016. The decline was mainly attributed to the drop in thermal capacity following the retirement of Aggreko plant in Muhoroni. Total effective capacity dropped by 8.0 per cent to 2,253.9 MW in 2016.

10.4. Domestic demand for electricity increased from 7,826.4 GWh in 2015 to 8,053.2 GWh in 2016. Total sales to large and medium commercial and industrial consumers; and domestic and small commercial increased from 7,272.7 GWh in 2015 to 7,462.0 GWh in 2016. The supply of electricity recorded a 5.7 per cent increase from 9,514.6 GWh to 10,057.7 GWh over the same period. The demand for rural electrification rose from 496.6 GWh in 2015 to 513.1 GWh in 2016. This resulted in an increase in the number of customers connected under the Rural Electrification Programme (REP) to 38.2 per cent from 703,190 in 2015 to 972,018 in 2016.

## Petroleum

10.5. Table 10.1 presents the quantity and value of imports and exports of petroleum products from 2012 to 2016. Total quantity of imports of petroleum products increased to 4,852.4 thousand tonnes in 2016. The volume of total exports of petroleum products rose by 9.3 per cent from 796.8 thousand tonnes in 2015 to 871.2 thousand tonnes in 2016. Total import bill of petroleum products declined from KSh 226.1 billion in 2015 to KSh 197.5 billion in 2016. This is mainly associated with reduced oil prices in the international market. The values of domestic exports and re-exports of petroleum products decreased by 29.7 per cent and 28.2 per cent to KSh 4.4 billion and KSh 38.5 billion, respectively, in 2016. The net balance declined by 7.0 per cent to KSh 154.7 billion in 2016 from KSh 166.3 billion in 2015.

**Table 10.1: Quantity and Value of Imports, Exports and Re-exports of Petroleum Products[1], 2012 - 2016**

| | Quantity ('000 Tonnes) | | | | | Value (KSh Million) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Year** | **2012** | **2013** | **2014** | **2015** | **2016*** | **2012** | **2013** | **2014** | **2015** | **2016*** |
| **IMPORTS** | | | | | | | | | | |
| Crude Petroleum | 997.0 | 567.4 | .. | .. | .. | 68,086.0 | 41,037.4 | .. | .. | .. |
| Petroleum Fuels | 2,803.4 | 2,985.9 | 4,400.2 | 4,418.1 | 4,841.6 | 237,699.5 | 248,687.4 | 333,779.0 | 222,940.0 | 195,216.9 |
| Lubricating Oils | 7.1 | 6.9 | 6.8 | 10.8 | 8.2 | 1,386.8 | 1,422.9 | 1,423.8 | 2,468.0 | 1,741.4 |
| Lubricating Greases | 1.8 | 2.3 | 2.4 | 2.8 | 2.6 | 383.8 | 474.9 | 468.5 | 717.7 | 570.0 |
| **TOTAL** | **3,809.3** | **3,562.5** | **4,409.4** | **4,431.7** | **4,852.4** | **307,556.1** | **291,622.6** | **335,671.3** | **226,125.7** | **197,528.3** |
| **DOMESTIC EXPORTS** | | | | | | | | | | |
| Petroleum Fuels | 11.7 | 17.0 | 39.7 | 1.3 | 2.7 | 1,093.3 | 1,384.9 | 2,567.7 | 165.5 | 210.1 |
| Lubricating Oils | 0.6 | 0.0 | 15.4 | 29.1 | 24.1 | 38.8 | 0.0 | 2,955.3 | 6,039.1 | 4,134.9 |
| Lubricating Greases | 43.7 | 11.6 | 0.1 | 0.1 | 0.2 | 2,685.0 | 734.7 | 14.8 | 19.0 | 30.8 |
| **TOTAL** | **56.0** | **28.6** | **55.2** | **30.4** | **26.9** | **3,817.1** | **2,119.6** | **5,537.7** | **6,223.6** | **4,375.9** |
| **RE-EXPORTS** | | | | | | | | | | |
| Petroleum Fuels | 55.3 | 111.1 | 561.6 | 752.8 | 842.9 | 4,824.9 | 9,395.2 | 47,134.6 | 52,939.1 | 38,163.2 |
| Lubricating Oils | - | - | 5.4 | 0.2 | 1.4 | 2.4 | - | 570.8 | 0.0 | 302.2 |
| Lubricating Greases | 71.5 | 18.2 | 7.4 | 13.5 | 0.0 | 4,732.8 | 1,108.3 | 425.6 | 646.7 | 8.1 |
| **TOTAL** | **126.8** | **129.3** | **574.4** | **766.4** | **844.3** | **9,560.1** | **10,503.5** | **48,131.0** | **53,585.8** | **38,473.5** |
| **TOTAL EXPORTS** | **182.8** | **157.9** | **629.6** | **796.8** | **871.2** | **13,377.2** | **12,623.1** | **53,668.7** | **59,809.4** | **42,849.4** |
| **NET BALANCE** | | | | | | **294,178.9** | **278,999.5** | **282,002.6** | **166,316.3** | **154,678.9** |

*Provisional

[1] Excludes other light and medium petroleum oils, preparations and residual petroleum products.

.. Insignificant

[+] Revised

10.6. The supply and demand balance for petroleum products for the period 2012 to 2016 is shown in Table 10.2. Total demand for petroleum products expanded by 6.5 per cent to 5,046.9 thousand tonnes in 2016, mainly due to growths of 11.4 and 10.9 per cent in domestic demand for light diesel oil and motor gasoline, respectively. Light diesel oil and motor gasoline, collectively accounted for 70.3 per cent of the total demand in 2016.

**Table 10.2: Petroleum Supply and Demand, 2012 - 2016**

000 Tonnes

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **DEMAND -** | | | | | |
| Liquefied petroleum gas | 93.6 | 92.9 | 149.7 | 148.6 | 151.7 |
| Motor gasoline (premium and regular)[2] | 618.5 | 774.5 | 903.8 | 1,107.0 | 1,227.2 |
| Aviation spirit | 1.8 | 2.2 | 2.3 | 18.7 | 4.8 |
| Jet/turbo fuel | 671.0 | 551.3 | 529.3 | 635.3 | 619.2 |
| Illuminating kerosene | 309.0 | 296.1 | 300.3 | 390.1 | 371.7 |
| Light diesel oil | 1,486.3 | 1,601.2 | 1,721.4 | 2,080.9 | 2,318.3 |
| Heavy diesel oil | 20.8 | 18.7 | 3.0 | 0.1 | 0.5 |
| Fuel oil | 437.0 | 371.0 | 328.1 | 357.8 | 350.9 |
| **TOTAL** | **3,638.0** | **3,707.9** | **3,937.9** | **4,738.5** | **5,044.2** |
| Refinery usage | 48.0 | 31.3 | - | - | - |
| **TOTAL DOMESTIC DEMAND** | **3,686.0** | **3,739.2** | **3,937.9** | **4,738.5** | **5,044.2** |
| Exports of petroleum fuels | 11.7 | 6.2 | 39.7 | 1.3 | 2.7 |
| **TOTAL DEMAND** | **3,697.7** | **3,745.4** | **3,977.6** | **4,739.8** | **5,046.9** |
| **SUPPLY -** | | | | | |
| Imports: | | | | | |
| Crude oil | 997.0 | 567.4 | .. | .. | .. |
| Petroleum fuels | 2,803.4 | 2,985.9 | 4,400.2 | 4,418.1 | 4,841.6 |
| **TOTAL** | **3,800.4** | **3,553.3** | **4,400.2** | **4,418.1** | **4,841.6** |
| Adjustment[1] | (102.7) | 192.1 | (422.6) | 321.7 | 205.3 |
| **TOTAL SUPPLY** | **3,697.7** | **3,745.4** | **3,977.6** | **4,739.8** | **5,046.9** |

* Provisional.

[1] Adjustment for inventory changes and losses in production.

[2]Regular Premium is no longer sold in Kenya since 2013

10.7. Table 10.3 and Figure 10.1 presents the net domestic sales of petroleum fuels by consumer category from 2012 to 2016. Net domestic sales of petroleum products increased by 6.5 per cent to 5,044.2 thousand tonnes in 2016. Rail transport; industrial, commercial and other; and retail pump outlets and road transport fuel consumption increased by 16.5, 7.7 and 8.9 per cent, respectively, during the period under review. Consumption of fuel used for power generation declined by 52.6 per cent to 15.3 thousand tonnes during the review period. The road transport, aviation, and industrial, commercial and other, as major consumers collectively accounted for 97.8 per cent of total sales in 2016. Government consumption expanded by 46.8 per cent to 11.3 thousand tonnes in 2016.

**Table 10.3: Net Domestic Sale of Petroleum Fuels by Consumer Category, 2012 - 2016**

'000 Tonnes

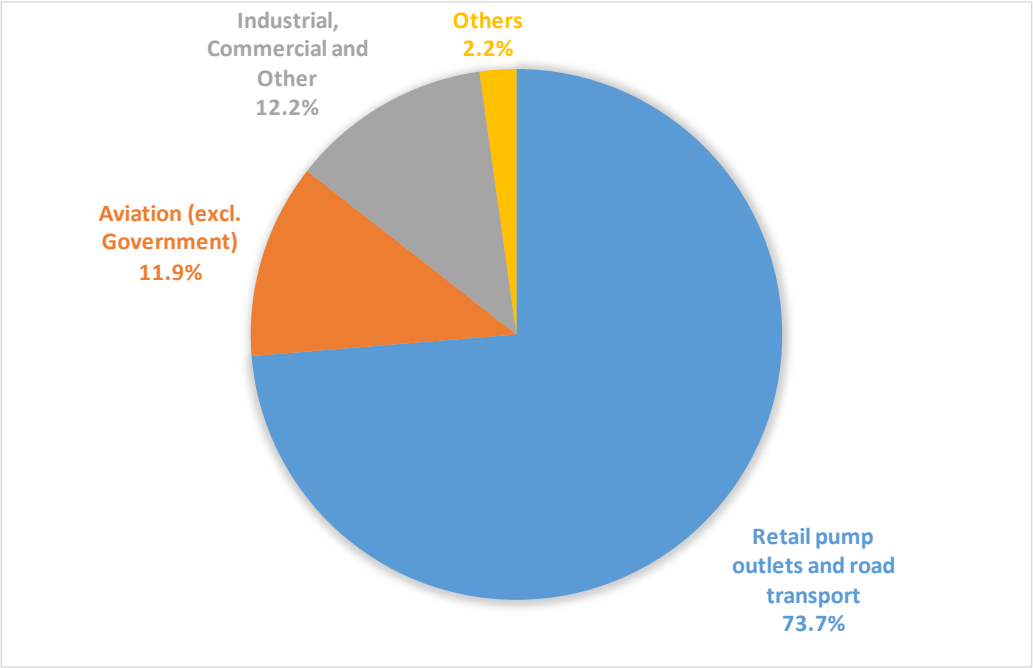
| User | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Agriculture | 22.5 | 28.5 | 36.4 | 29.7 | 35.2 |
| Retail pump outlets and road transport | 2,234.7 | 2,573.7 | 2,791.0 | 3,414.7 | 3,717.6 |
| Rail transport | 11.6 | 14.2 | 15.6 | 36.9 | 43.0 |
| Tourism[1] | 6.2 | 5.5 | 5.1 | 4.8 | 5.1 |
| Marine (excl. Naval Forces) | 13.1 | 25.4 | 18.6 | 2.9 | 2.3 |
| Aviation (excl. Government) | 665.5 | 552.4 | 530.4 | 637.7 | 598.4 |
| Power Generation | 118.7 | 64.1 | 98.9 | 32.3 | 15.3 |
| Industrial, Commercial and Other | 566.1 | 462.3 | 451.2 | 572.1 | 615.9 |
| Government | 12.6 | 7.2 | 9.3 | 7.7 | 11.3 |
| Balancing Item | -13.0 | -25.4 | -18.6 | -0.3 | 0.1 |
| **TOTAL** | **3,638.0** | **3,707.9** | **3,937.9** | **4,738.5** | **5,044.2** |

Source: Ministry of Energy and Petroleum

* Provisional

[1] Comprises sales to tour operators

**Figure 10.1: Sale of Petroleum Fuels by Major Consumer Category, 2016**




10.8. Table 10.4 presents wholesale prices of Petroleum Products in Mombasa for December 2012 to December 2016. Wholesale prices of premium motor gasoline went up by 2.0 per cent from KSh 123,644 per tonne in December 2015 to KSh 126,129 per tonne in December 2016. Similarly, illuminating kerosene prices increased by 11.0 per cent in the same period. On the other hand, liquefied petroleum gas prices decreased by 16.5 per cent to KSh 80,078 per tonne at the end of 2016. Wholesale prices for Light diesel, mainly used by vehicles, fell from KSh 94,149 per tonne in December 2015 to KSh 96,759 in December 2016.

**Table 10.4: Wholesale Prices[1] of Petroleum Products in Mombasa, 2012 - 2016**

KSh per Tonne

| PRODUCT | Dec. 2012 | Dec. 2013 | Dec. 2014 | Dec. 2015 | Dec. 2016 |
|---|---|---|---|---|---|
| Liquefied petroleum gas ..... | 130,910 | 123,803 | 110,721 | 95,920 | 80,078 |
| Motor gasoline (Premium)..... | 148,169 | 143,535 | 133,711 | 123,644 | 126,129 |
| Illuminating Kerosene..... | 105,399 | 101,153 | 86,449 | 69,282 | 76,933 |
| Light diesel oil ..... | 121,944 | 120,303 | 104,097 | 94,149 | 96,759 |
| Industrial diesel oil ..... | 81,608 | 74,238 | 73,874 | .. | .. |
| Fuel oil ..... | 70,838 | 64,950 | 58,678 | .. | .. |

Source: Energy Regulatory Commission

[1]Including duties and VAT.

.. Data not available

10.9. Details of Murban crude oil prices in the international market for the last five years is shown in Table 10.5. The price of the Murban crude oil dropped from an average of US Dollars 52.53 per barrel in 2015 to US Dollars 44.18 per barrel in 2016. This was occasioned by relatively high production and inventory levels that suppressed crude oil prices throughout most of 2016. The first quarter of 2016 recorded the lowest average price of the crude oil US Dollars 33.72. The fourth quarter of the review period recorded the highest average crude oil price of US Dollars 50.55 per barrel, peaking in December at US Dollars 54.15 per barrel.

**Table 10.5: Murban ADNOC Prices[1], 2012 - 2016**

US$/BBL

| Month/Year | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| January..... | 114.20 | 112.05 | 109.75 | 46.40 | 29.95 |
| February..... | 120.45 | 115.4 | 109.95 | 56.55 | 33.00 |
| March..... | 127.00 | 109.95 | 108.30 | 56.10 | 38.20 |
| April..... | 121.20 | 105.65 | 107.95 | 60.55 | 42.00 |
| May..... | 110.60 | 103.65 | 109.15 | 65.75 | 47.35 |
| June..... | 97.35 | 103 | 111.65 | 63.70 | 49.05 |
| July..... | 101.75 | 106.85 | 109.5 | 57.70 | 44.60 |
| August..... | 111.65 | 111.7 | 104.25 | 48.85 | 48.85 |
| September..... | 115.40 | 114.50 | 97.95 | 46.60 | 45.50 |
| October..... | 113.20 | 112.45 | 87.35 | 47.30 | 51.35 |
| November..... | 112.10 | 112.20 | 77.00 | 43.55 | 46.15 |
| December..... | 110.75 | 113.85 | 60.65 | 37.25 | 54.15 |
| **Annual average** | **112.97** | **110.10** | **99.45** | **52.53** | **44.18** |

Source : Ministry of Energy and Petroleum

* Provisional

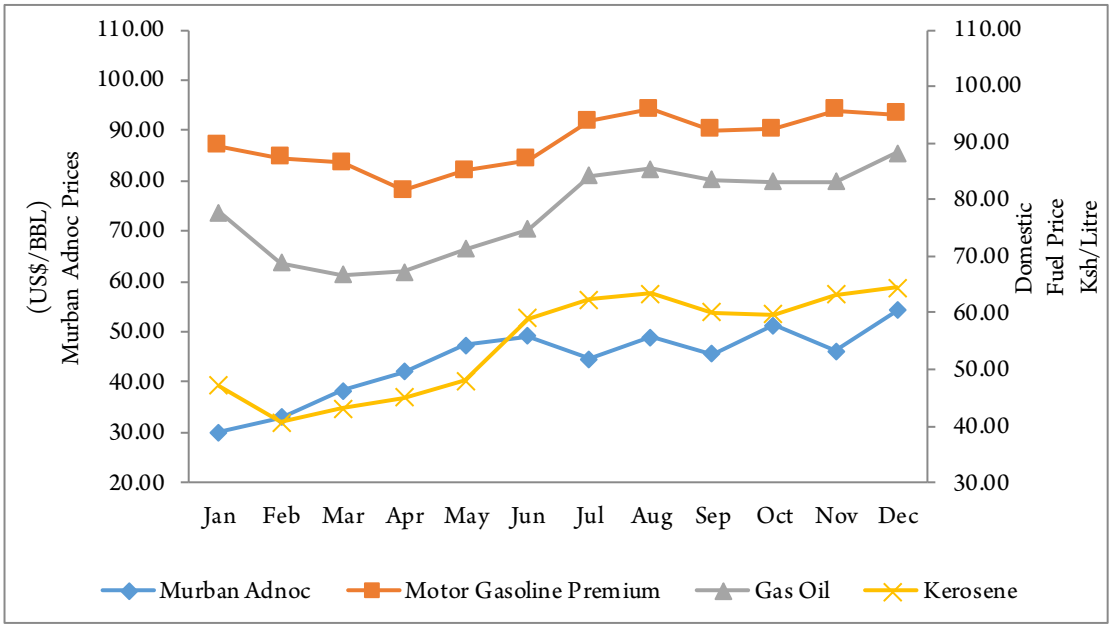
[1] Abu Dhabi free on board (fob) Prices

ADNOC : Abu Dhabi National Oil Company

US$/ BBL: US Dollars per Barrel

10.10. Figure 10.2 shows the trend of monthly prices of International crude oil and domestic fuel for 2016. International crude oil prices increased from January to June 2016 before fluctuating from July to attain the highest price in December 2016. On the other hand, domestic prices of motor gasoline premium, gas oil and kerosene fluctuated over the review period before attaining the highest prices in December 2016.

**Figure 10.2: Trends of Monthly Prices of International Crude Oil and Domestic Fuel, 2016**




10.11. Table 10.6 presents average retail price details of selected petroleum products from 2012 to 2016. The annual average prices for motor gasoline, gas oil, kerosene and Liquefied Petroleum Gas went down over the review period. The average price of Liquefied Petroleum Gas (LPG) for a 13Kg cylinder reduced by 16.3 per cent from KSh 2,369.46 in December 2015 to KSh 1,983.06 in December 2016 due to exemption of LPG from Value Added Tax (VAT). Kerosene prices increased by 19.0 per cent from KSh 54.23 in December 2015 to KSh 64.52 in December 2016. The average retail price of gas oil and motor gasoline (premium) increased by 11.0 and 4.6 per cent to KSh 88.18 and KSh 95.08, respectively, over the same period.

## Table 10.6: Average Retail Prices of Selected Petroleum Products, 2012 - 2016

| | | KSh per Litre | | | KSh per 13 Kg cylinder |
|---|---|---|---|---|---|
| Year | Month | Motor Gasoline Premium | Gas oil | Illuminating Kerosene | Liqufied Petroleum Gas (LPG) |
| 2012 | January | 112.70 | 108.74 | 87.96 | 3,149.63 |
| | March | 112.44 | 105.97 | 84.99 | 2,882.50 |
| | June | 118.40 | 106.33 | 84.05 | 2,772.94 |
| | September | 109.70 | 101.92 | 80.51 | 2,628.06 |
| | December | 113.35 | 106.64 | 87.29 | 2,604.55 |
| 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 |
| 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 average[1]** | **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 average[1]** | **94.63** | **80.99** | **57.67** | **2,465.44** |
| 2016 | January | 89.52 | 77.66 | 47.11 | 2,343.86 |
| | February | 87.38 | 68.85 | 40.6 | 2,318.03 |
| | March | 86.46 | 66.68 | 43.13 | 2,277.48 |
| | April | 81.61 | 67.21 | 44.94 | 2,268.37 |
| | May | 85.14 | 71.34 | 47.96 | 2,252.86 |
| | June | 87.07 | 74.69 | 59.1 | 2,231.38 |
| | July | 93.81 | 84.2 | 62.42 | 2,097.51 |
| | August | 96.01 | 85.47 | 63.45 | 2,078.76 |
| | September | 92.28 | 83.42 | 60.08 | 2,029.12 |
| | October | 92.44 | 83.08 | 59.68 | 1,989.54 |
| | November | 95.82 | 83.14 | 63.13 | 1,987.69 |
| | December | 95.08 | 88.18 | 64.52 | 1,983.06 |
| | **Annual average** | **90.22** | **77.83** | **54.68** | **2,154.81** |

[1] Twelve months average

**Electricity**

10.12. Details of installed and effective capacity of electricity is shown in Table 10.7a. Total installed capacity declined from 2,333.6 MW in 2015 to 2,325.8 MW in 2016. Geothermal installed capacity increased from 627.0 MW in 2015 to 652.0 MW in 2016. This increase is attributable to commissioning of geothermal projects namely Olkaria 11, Olkaria 12 Olkaria 13, Olkaria 14 and Olkaria 15, which contributed 25 MW. Thermal installed capacity declined from 833.8 MW recorded in 2015 to 803.5 MW in 2016.

10.13. Total effective capacity contracted marginally from 2,263.2 MW in 2015 to 2,253.9 MW in 2016. Geothermal effective capacity increased from 619.0 MW in 2015 to 644.0 MW in 2016. On the other hand, Thermal capacity declined from 797.1 MW recorded in 2015 to 764.9 MW in 2016, partly attributed to the retirement of Aggreko Muhoroni thermal plant (30MW) in June 2016. During the review period, Garissa and Lamu towns were connected to the national grid.

**Table 10.7a: Installed and Effective Capacity of Electricity, 2012 – 2016**

| | INSTALLED CAPACITY MW | | | | | | EFFECTIVE CAPACITY MW | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Hydro | Thermal Oil | Geo thermal | Wind | Cogeneration | Total | Hydro | Thermal Oil | Geo thermal | Wind | Cogeneration | Total |
| 2012..... | 788.4 | 660.6 | 209.5 | 5.4 | 26.0 | **1,689.9** | 769.9 | 610.6 | 199.6 | 5.3 | 26.0 | **1,611.4** |
| 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..... | 820.7 | 833.8 | 627.0 | 26.1 | 26.0 | **2,333.6** | 799.5 | 797.1 | 619.0 | 26.1 | 21.5 | **2,263.2** |
| 2016*..... | 818.2 | 803.5 | 652.0 | 26.1 | 26.0 | **2,325.8** | 797.5 | 764.9 | 644.0 | 26.0 | 21.5 | **2,253.9** |

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

* Provisional

Notes:

1 Megawatt = million watts = 1,000 kilowatts.

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.

10.14. Information on generation and imports of electricity from 2012 to 2016 is presented in Table 10.7b and Figure 10.3. Total electricity generation increased from 9,514.9 GWh in 2015 to 10,057.7 GWh in 2016. Hydro generation expanded from 3,463.3 GWh to 3,959.9 GWh in 2016. The increase is mainly attributed to increased hydrology at the end of 2015 and the long rains of 2016. Generation from geothermal plants dropped to 4,484.2 GWh in 2016 from 4,520.7 GWh in 2015. The reduced geothermal generation relative to the capacity installed is due to the scheduled maintenance of geothermal plants in the months of September to December 2016. Thermal generation rose from 1,412.1 GWh to 1,470.9 GWh during the same period. Overall, hydro and geothermal power accounted for the bulk of power with a total share of 84.0 per cent in 2016.

**Table 10.7b: Generation and imports of Electricity[1], 2012 - 2016**

GWh

| Year | GENERATION | | | | | | | | Imports | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | Hydro | Thermal oil | | | | Geo thermal | Cogeneration | Wind | | |
| | | KenGen | IPP | EPP | Total | | | | | |
| 2012 | 3,976.8 | 682.5 | 1,208.9 | 309.0 | 2,200.4 | 1,515.9 | 104.7 | 14.4 | 39.1 | **7,851.3** |
| 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** |

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

* Provisional

[1] Includes generation for industrial establishment with generation capacity of over 100KVA plus

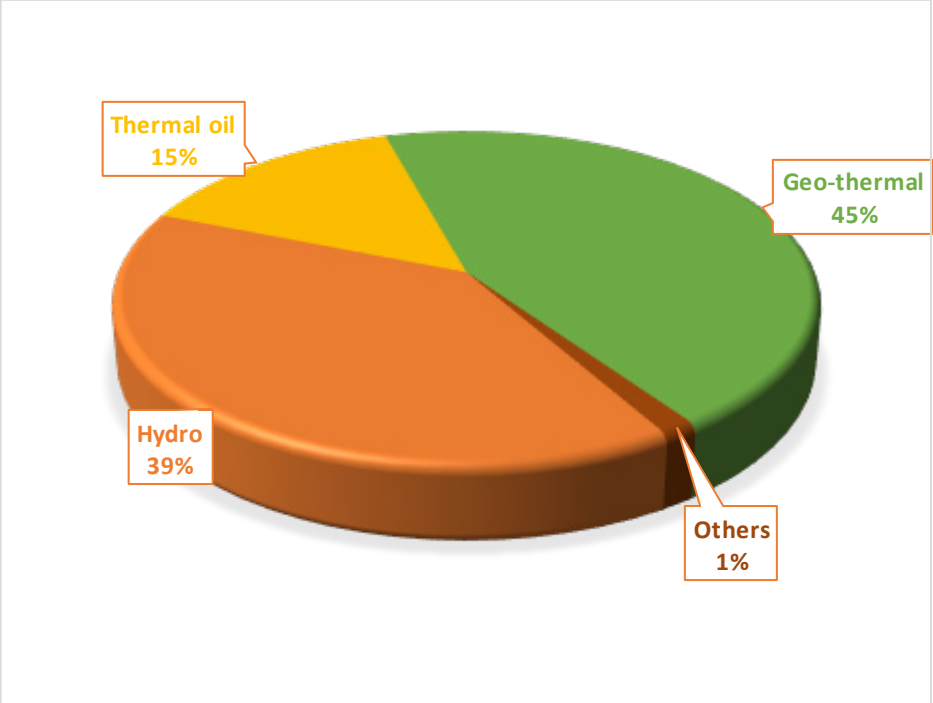
Notes:

IPP: Independent Power Producers

EPP: Emergency Power Producers

1 GWh = 1,000,000 KWh

**Figure 10.3: Proportion of Electricity Generation by Source, 2016**




10.15. Demand and supply balance of electricity are shown in Table 10.8 for the period 2012 to 2016. Total domestic demand for electricity recorded an increase of 2.9 per cent from 7,826.4 GWh in 2015 to 8,053.2 GWh in 2016. Sales to large and medium commercial and industrial consumers increased by 3.2 per cent, accounting for 51.5 per cent of total demand in 2016. Similarly, domestic and small commercial consumption went up by 1.9 per cent to account for 41.2 per cent of the total demand.

10.16. Demand for rural electrification expanded by 3.3 per cent to 513.1 GWh in 2016. Total electricity imports from Uganda and Tanzania increased from 58.8 GWh in 2015 to 86.3 million GWh in 2016. In contrast, exports to Uganda and Tanzania fell to stand at 39.1 GWh during the same period. Transmission losses and unallocated demand increased by 19.7 per cent. Similarly, local generation rose by 5.5 per cent to 9,971.4 GWh in the same period under review.

**Table 10.8: Electricity Demand and Supply, 2012 - 2016**

GWh

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Domestic and Small Commercial | 2,568.5 | 2,866.1 | 2,963.1 | 3,254.9 | 3,315.7 |
| Large & Medium (Commercial and Industrial) | 3,409.2 | 3,585.3 | 3,891.4 | 4,017.8 | 4,146.3 |
| Off-peak | 36.0 | 32.7 | 33.7 | 25.7 | 31.8 |
| Street Lighting | 20.6 | 17.2 | 22.5 | 31.4 | 46.3 |
| Rural Electrification | 380.1 | 426.8 | 504.7 | 496.6 | 513.1 |
| **TOTAL DOMESTIC DEMAND** | **6,414.4** | **6,928.1** | **7,415.4** | **7,826.4** | **8,053.2** |
| **Exports to Uganda & Tanzania** | **32.7** | **43.7** | **30.8** | **46.7** | 39.1 |
| Transmission losses[1] and Unallocated demand | 1,404.2 | 1,476.1 | 1,692.5 | 1,641.5 | 1,965.4 |
| **TOTAL DEMAND = TOTAL SUPPLY[2]** | **7,851.3** | **8,447.9** | **9,138.7** | **9,514.6** | **10,057.7** |
| Less imports from Uganda and Tanzania | 39.1 | 49.0 | 158.4 | 58.8 | 86.3 |
| **Local generation** | **7,812.2** | **8,398.9** | **8,980.3** | **9,455.8** | **9,971.4** |

Source: Kenya Power and Lighting Company Ltd

*Provisional

[1] Voltage losses in power transmission lines

[2] Total supply equals Total generation

10.17. Details of demand and supply of commercial energy expressed in terms of primary source is presented in Table 10.9. Consumption of coal and coke dropped by 1.5 per cent to 343.5 thousand tonnes of oil equivalent realized in 2016. Total consumption of hydro and geothermal energy rose by 5.3 per cent from 696.6 thousand tonnes of oil equivalent in 2015 to 733.5 thousand tonnes in 2016. This was mainly due to increased local production of hydro power by 14.3 per cent during the period. Total energy consumption increased by 5.8 per cent to 6,121.2 thousand tonnes of oil equivalent in 2016. Local production of energy as a percentage of total energy consumption remained constant at 11.9 per cent in 2016.

**Table 10.9: Production, Trade and Consumption of Energy[1] by Primary Sources, 2012 - 2016**

000 Tonnes of Oil Equivalent

| | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| **COAL AND COKE** | **211.3** | **208.9** | **328.7** | **348.6** | **343.5** |
| **LIQUID FUELS** | **3,638.6** | **3,707.9** | **3,937.9** | **4,738.5** | **5,044.2** |
| Imports of crude oil | 997.1 | 567.4 | 0.0 | 0.0 | 0.0 |
| Imported Petroleum | 2,803.4 | 2,985.9 | 4,400.2 | 4,418.1 | 4,841.6 |
| Exports of Petroleum Fuels | 11.7 | 6.2 | 39.7 | 1.3 | 2.7 |
| Stock changes and balancing item | -102.7 | 192.1 | -422.6 | 321.7 | 205.3 |
| **HYDRO AND GEOTHERMAL ENERGY:-** | **475.6** | **538.6** | **571.4** | **696.6** | **733.5** |
| Total Local Energy Production | 472.2 | 530.2 | 544.2 | 686.5 | 726.1 |
| Local production of hydro power | 341.9 | 377.1 | 293.3 | 297.8 | 340.5 |
| Local production of geothermal power | 130.3 | 153.1 | 250.9 | 388.7 | 385.6 |
| Imports of hydro power | 3.4 | 4.2 | 13.6 | 5.1 | 7.4 |
| **TOTAL ENERGY CONSUMPTION** | **4,328.9** | **4,455.4** | **4,838.0** | **5,783.7** | **6,121.2** |
| LOCAL PRODUCTION AS PERCENTAGE OF TOTAL | 10.9 | 11.9 | 11.2 | 11.9 | 11.9 |
| PER CAPITA CONSUMPTION IN TERMS OF KILOGRAMME OF OIL EQUIVALENT | 106.4 | 106.6 | 112.5 | 130.9 | 134.8 |

* Provisional.

[1] Excludes wood fuel and charcoal.

.. Insignificant

**Developments in the Energy Sector**

10.18. The number of customers connected under the rural electrification programme expanded by 38.2 per cent to 972,018 customers as at July 2016 from 703,190 customers in 2014/2015 financial year. As a result, the units of electricity sold increased by 2.3 per cent from 525 million units to 537 million units, over the same period. Consequently, revenue realised grew by 2.8 per cent from KSh 8,051 million in 2014/15 to KSh 8,279 million in 2015/16.

10.19. During the review period, Rural Electrification Authority (REA) completed and commissioned 15 isolated diesel (genset) stations namely: Takaba, Rhamu, El Wak, Masalani, Lokichoggio, Eldas, Laisamis, North Horr, Lokitaung Kamoliriban, Kotulo, Khorondile, Maikona, Lokiriama and Kakuma

10.20. A total of sixty-three (63) oil exploration blocks have been gazetted, out of which thirty-seven (37) are licensed to International Oil Companies (IOCs) and one to the National Oil Corporation of Kenya (NOCK). Twenty-five (25) blocks are open for licensing. A total of seventy eight (78) wells have been drilled, of which Twelve (12) were discoveries out of which 9 with crude oil in Block 10BB and Block 13T; two with natural gas discoveries in Block L8 and Block 9; one with both crude oil and natural gas in Block L10A. Crude oil recoverable reserves stands at approximately 750 million barrels.

# Manufacturing

11 Chapter

## Overview

The real output of the manufacturing sector grew by 3.5 per cent in 2016 compared to a revised growth of 3.6 per cent in 2015. The growth was as a result of reduced cost of production and increased volume output. The volume of output of the manufacturing sector grew by 4.9 per cent in 2016 on account of increased production of tea, wearing apparel, pharmaceutical products and basic metals. Credit to the manufacturing sector decreased by 4.6 per cent to KSh 277.4 billion in 2016. Kenya Industrial Estates, which plays a major role in promoting local entrepreneurship by financing and developing small scale and micro enterprises, approved 325 projects and advanced loans worth KSh 165.3 million in 2016. Formal employment in the manufacturing sector went up marginally by 1.8 per cent to 300.9 thousand persons in 2016 accounting for 11.8 per cent of the total formal employment.

11.2. Producer Price Index (PPI) which measures change in prices of goods sold by producers at basic prices increased by 0.2 per cent to 113.67 in 2016. The marginal increase was due to stability of the prices of imported raw materials. The PPI of manufactured beverages and manufacture of wood and products of wood and cork increased by 3.4 per cent and 6.3 per cent, respectively. The index of food products and other non-metallic mineral products dropped in 2016.

11.3. Total capital investment of Export Processing Zones (EPZ) enterprises increased from KSh 48.1 billion in 2015 to KSh 51.2 billion in 2016 while number of local employees engaged by EPZ enterprises increased by 3.4 per cent to 52,019. Exports increased by 3.7 per cent to KSh 63.1 billion in 2016.

## Manufacturing Output

11.4. Value of output, intermediate consumption, value added and compensation of employees in the manufacturing sector is shown in Table 11.1. The value of output grew by 7.9 per cent from KSh 1,976.8 billion in 2015 to KSh 2,132.3 billion while value added increased by 11.6 per cent to KSh 658.0 billion in 2016. Compensation of employees increased by 7.2 per cent to KSh 175.2 billion in 2016.

**Table 11.1: Manufacturing Output, Compensation of Employees and Value Added, 2012-2016**

Current Prices - KSh Million

| YEAR | Value of Output | Intermediate Consumption | Value Added | Compensation of Employees |
|---|---|---|---|---|
| 2012 | 1,619,622 | 1,150,518 | 469,104 | 105,714 |
| 2013 | 1,735,699 | 1,231,087 | 506,612 | 127,186 |
| 2014 | 1,820,369 | 1,282,369 | 537,999 | 147,453 |
| 2015 | 1,976,793 | 1,387,196 | 589,597 | 163,395 |
| 2016* | 2,132,259 | 1,474,309 | 657,950 | 175,235 |

* Provisional.

**Quantum Indices**

11.5. Quantum indices and production of selected commodities of the manufacturing sector from 2012 to 2016 are presented in Tables 11.2, 11.3, and 11.4. Volume of output in the manufacturing sector grew by 4.9 per cent in 2016 compared to 5.4 per cent recorded in 2015. The growth was on account of increased production of wearing apparel, pharmaceutical products, other food products mainly tea and basic metals. On the other hand, assembly of motor vehicles, production of rubber products, tobacco products, wood and wood products; and fish processing contracted.

**Table 11.2: Quantum Indices of Manufacturing Production, 2012-2016**

Base: 2009=100

| Industry Divisions and Groups Descriptions | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Meat and Meat Products | 109.2 | 109.4 | 108.3 | 118.3 | 131.2 |
| Processing and preserving of fish | 87.8 | 85.0 | 86.7 | 67.8 | 61.0 |
| Prepared and Preserved Fruits and Vegetables | 102.9 | 120.0 | 100.9 | 103.6 | 112.7 |
| Animal and Vegetable Fats and Oils | 98.9 | 111.4 | 128.2 | 133.6 | 135.5 |
| Dairy Products | 144.9 | 147.4 | 156.8 | 169.7 | 175.1 |
| Grain Mill Products | 130.3 | 137.4 | 148.5 | 159.7 | 165.4 |
| Bakery Products | 133.7 | 141.7 | 152.3 | 164.6 | 163.1 |
| Sugar | 90.1 | 109.5 | 108.2 | 115.3 | 116.5 |
| Cocoa, Chocolate and Sugar Confectionery | 133.4 | 131.6 | 137.4 | 166.3 | 173.9 |
| Food Products not elsewhere classified | 117.1 | 129.6 | 136.2 | 121.5 | 139.4 |
| Animal Feed | 122.6 | 131.0 | 132.2 | 138.2 | 140.7 |
| **Total Food Products** | **116.6** | **126.3** | **132.5** | **134.5** | **143.2** |
| Beverages | 122.9 | 112.5 | 110.8 | 138.7 | 146.4 |
| Tobacco Products | 128.2 | 119.6 | 144.0 | 137.6 | 115.4 |
| **Beverages and Tobacco** | **123.8** | **113.7** | **116.5** | **138.5** | **141.1** |
| Textiles | 117.7 | 112.1 | 113.9 | 129.9 | 130.3 |
| Wearing Apparel | 140.7 | 154.4 | 172.9 | 196.8 | 230.6 |
| Leather and Related Products | 130.9 | 135.4 | 118.6 | 103.5 | 111.2 |
| Wood and Products of Wood | 107.0 | 113.9 | 132.4 | 138.5 | 121.9 |
| Paper and Paper Products | 135.2 | 144.9 | 140.1 | 140.3 | 152.6 |
| Printing and Production of Recorded Media | 100.2 | 102.3 | 99.3 | 99.2 | 99.2 |
| Refined Petroleum Products | 91.4 | 47.0 | 0.0 | 0.0 | 0.0 |
| Chemical and Chemical Products | 116.1 | 112.6 | 125.3 | 134.6 | 136.5 |
| Pharmaceutical Products | 189.4 | 250.0 | 295.9 | 362.8 | 416.0 |
| Rubber Products | 82.1 | 100.2 | 93.1 | 78.4 | 59.3 |
| Plastic Products | 116.5 | 114.1 | 123.6 | 140.9 | 152.8 |
| **Rubber and Plastic Products** | **110.9** | **111.8** | **118.6** | **130.7** | **137.6** |
| Other Non-metallic Mineral Products | 125.3 | 135.1 | 156.1 | 169.9 | 179.5 |
| Basic Metals | 124.2 | 149.8 | 152.7 | 150.9 | 169.7 |
| Fabricated Metal Products | 131.7 | 154.3 | 175.1 | 163.8 | 147.8 |
| Electrical Equipment | 124.8 | 133.3 | 145.1 | 154.6 | 159.9 |
| Machinery and Equipment nec | 89.7 | 90.8 | 77.1 | 42.6 | 37.7 |
| Motor Vehicle, Trailers and Semi Trailers | 123.8 | 131.0 | 161.4 | 171.0 | 125.2 |
| Manufacture of furniture | 164.2 | 183.8 | 211.0 | 258.5 | 259.8 |
| Other Manufacturing nec | 134.7 | 139.5 | 174.6 | 210.1 | 211.8 |
| Repair and Installation of Machinery and Equipment | 106.8 | 110.2 | 117.8 | 122.0 | 122.0 |
| **Total Manufacturing** | **122.2** | **130.6** | **139.0** | **146.5** | **153.7** |

* Provisional

## Table 11.3: Percentage change in Quantum Indices of Manufacturing Production, 2012-2016

| Industry Divisions and Groups Descriptions | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Meat and Meat Products | 3.9 | 0.2 | -1.0 | 9.3 | 10.9 |
| Processing and preserving of fish | -20.7 | -3.2 | 2.0 | -21.8 | -10.0 |
| Prepared and Preserved Fruits and Vegetables | -6.2 | 16.7 | -15.9 | 2.7 | 8.8 |
| Animal and Vegetable Fats and Oils | -2.2 | 12.7 | 15.0 | 4.3 | 1.4 |
| Dairy Products | -2.7 | 1.7 | 6.4 | 8.2 | 3.1 |
| Grain Mill Products | 3.1 | 5.5 | 8.1 | 7.6 | 3.6 |
| Bakery Products | 22.2 | 6.0 | 7.5 | 8.1 | -0.9 |
| Sugar | 0.7 | 21.5 | -1.3 | 6.6 | 1.0 |
| Cocoa, Chocolate and Sugar Confectionery | 9.6 | -1.4 | 4.4 | 21.0 | 4.5 |
| Food Products not elsewhere classified | 1.9 | 10.7 | 5.1 | -10.8 | 14.7 |
| Animal Feed | 6.7 | 6.8 | 1.0 | 4.5 | 1.8 |
| **Total Food Products** | 2.6 | **8.3** | **5.0** | **1.5** | **6.5** |
| Beverages | 8.2 | -8.4 | -1.5 | 25.2 | 5.6 |
| Tobacco Products | 9.0 | -6.8 | 20.5 | -4.4 | -16.2 |
| **Beverages and Tobacco** | 8.3 | **-8.1** | **2.5** | **18.9** | **1.8** |
| Textiles | 6.6 | -4.7 | 1.6 | 14.1 | 0.3 |
| Wearing Apparel | 12.4 | 9.7 | 12.0 | 13.8 | 17.2 |
| Leather and Related Products | -1.4 | 3.5 | -12.4 | -12.8 | 7.5 |
| Wood and Products of Wood | 5.2 | 6.5 | 16.2 | 4.6 | -12.0 |
| Paper and Paper Products | 7.0 | 7.2 | -3.3 | 0.2 | 8.7 |
| Printing and Production of Recorded Media | -0.3 | 2.1 | -2.9 | -0.1 | 0.0 |
| Refined Petroleum Products | -19.8 | -48.6 | 0.0 | 0.0 | 0.0 |
| Chemical and Chemical Products | 0.1 | -3.0 | 11.2 | 7.5 | 1.4 |
| Pharmaceutical Products | 39.2 | 32.0 | 18.3 | 22.6 | 14.7 |
| Rubber Products | 14.0 | 22.1 | -7.1 | -15.8 | -24.4 |
| Plastic Products | 5.9 | -2.1 | 8.4 | 14.0 | 8.4 |
| **Rubber and Plastic Products** | 6.9 | **0.8** | **6.1** | **10.2** | **5.2** |
| Other Non-metallic Mineral Products | 5.1 | 7.8 | 15.5 | 8.9 | 5.7 |
| Basic Metals | 3.3 | 20.7 | 1.9 | -1.2 | 12.5 |
| Fabricated Metal Products | 7.0 | 17.2 | 13.4 | -6.4 | -9.8 |
| Electrical Equipment | -1.8 | 6.8 | 8.8 | 6.5 | 3.5 |
| Machinery and Equipment nec | -4.1 | 1.2 | -15.1 | -44.7 | -11.6 |
| Motor Vehicle, Trailers and Semi Trailers | 4.6 | 5.9 | 23.1 | 6.0 | -26.7 |
| Manufacture of furniture | 9.3 | 12.0 | 14.8 | 22.5 | 0.5 |
| Other Manufacturing nec | -3.4 | 3.5 | 25.1 | 20.4 | 0.8 |
| Repair and Installation of Machinery and Equipment. | 0.0 | 3.2 | 6.9 | 3.6 | 0.0 |
| **Total Manufacturing** | **4.7** | **6.9** | **6.4** | **5.4** | **4.9** |

* Provisional

**Table 11.4: Production of Selected Commodities 2012-2016**

| Commodity | Unit | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| Processed Milk | Million litres | 325.4 | 350.4 | 419.1 | 437.5 | 452.2 |
| Wheat flour[1] | '000 Tonnes | 844.8 | 884.2 | 988.7 | 1,103.8 | 1,131.0 |
| Maize flour[1] | „ | 524.0 | 562.5 | 571.2 | 570.7 | 609.7 |
| Biscuits | „ | 11.9 | 12.3 | 10.6 | 12.2 | 11.1 |
| Cooking oil | „ | 143.6 | 162.8 | 186.1 | 209.0 | 206.5 |
| Edible fats and magarine | „ | 214.1 | 235.6 | 265.2 | 255.6 | 260.1 |
| Sugar | „ | 493.9 | 600.2 | 592.7 | 635.7 | 639.7 |
| Coffee - milled | „ | 50.0 | 39.8 | 49.5 | 41.6 | 39.7 |
| Tea | „ | 369.6 | 432.5 | 445.1 | 399.2 | 471.2 |
| Soft drinks | Million litres | 365.4 | 407.4 | 462.1 | 551.4 | 502.5 |
| Blankets | '000 Number | 1,214.6 | 2,048.4 | 2,339.1 | 2,611.7 | 2,822.1 |
| Assembled vehicles | Number | 6,000.0 | 7,026.0 | 9,514.0 | 10,181.0 | 6,577.0 |
| Galvanized sheets | 000 Tonnes | 254.8 | 305.2 | 284.5 | 256.8 | 261.5 |

* Provisional

[1] Produced by formal Millers

11.6. Manufacture of food products recorded a growth of 6.5 per cent in the year under review. Production of meat and meat products rose by 10.9 per cent on account of increased production of processed chicken. Processing and preserving of fish contracted in 2016. This is corroborated by a decrease of 44.4 per cent in the quantities of exported fish and fish preparations. Processed and preserved fruits and vegetables rose by 8.8 per cent in 2016, mainly attributed to an increase in preserved and processed fruits.

11.7. Processed animal and vegetable fats and oils increased marginally by 1.4 per cent in the review period. This was as a result of marginal increase in both quantities of manufactured vegetable fats and processed vegetable oils.

11.8. In the dairy sub-sector, production of processed milk increased by 3.4 per cent from 437.5 million litres in 2015 to 452.2 million litres in 2016. Similarly, production of yoghurt and other fermented milk increased by 2.5 per cent. Overall, dairy products grew by 3.1 per cent in 2016.

11.9. Grain mill products registered a growth of 3.6 per cent in 2016 due to increased production of maize and wheat flour, which grew by 6.8 per cent and 2.5 per cent, respectively. Quantity of maize flour milled in the formal sector increased from 570.7 thousand tonnes in 2015 to 609.7 thousand tonnes in 2016 while production of wheat flour increased from 1,103.8 thousand tonnes to 1,131.0 thousand tonnes in the same period.

11.10. Manufacture of bakery products contracted by 0.9 per cent in 2016 with production of biscuits declining by 8.9 per cent. Production of animal feed increased by 1.8 per cent in 2016. Production of sugar increased by 4.1 per cent to stand at 639.7 thousand tonnes while that of cocoa, chocolate and sugar confectionery grew by 4.5 per cent in 2016.

11.11. The category of manufacture of other food products, which includes tea and coffee expanded by 14.7 per cent. Processed tea increased by 18.0 per cent while production of semi-processed coffee dropped by 4.6 per cent. Production of roasted coffee increased though at a slower rate of 1.2 per cent in 2016 compared to a 7.8 per cent rise in 2015. The amount of processed refined salt increased by 6.9 per cent during the review period.

11.12. The beverages sub-sector grew by 5.6 per cent in 2016 mainly driven by production of beer and spirits, which went up by 11.8 per cent and 3.8 per cent, respectively. The growth in beer production was attributed to a 90 per cent remission of excise duty for beer made from domestically grown sorghum, millet or cassava. However, exports of beer in 2016 reduced by half from 65,073.3 thousand litres to 32,564.0 thousand litres, indicating that most of the beer produced was consumed locally.

11.13. Production of tobacco and cigarettes products dropped by 16.2 per cent and 16.4 per cent, respectively in 2016 while production of other manufactured tobacco products went down by 2.2 per cent.

11.14. Manufacture of textiles expanded marginally by 0.3 per cent in 2016. Production of twine, cordage and rope grew by 14.4 per cent while manufacture of blankets increased by 1.5 per cent in 2016. However, production of woven fabrics and knitting wool dropped by 7.4 per cent and 10.2 per cent, respectively. Manufacture of wearing apparel grew by 17.2 per cent in 2016 as a result of increased production of shirts and T-shirts by 17.4 and 20.9 per cent, respectively.

11.15. Leather and related products grew by 7.5 per cent in 2016. Finished leather recorded a 17.2 per cent growth in 2016 after registering a drop in 2015. Volume of exported leather dropped by 7.2 per cent in 2016, mainly attributed to the existing 80 per cent export tariff on raw hides and skin. Production of shoes with uppers of leather and shoes with uppers of plastic dropped by 21.6 and 3.5 per cent, respectively in 2016. This is partly attributed to competition from imports of low cost leather and non-leather footwear.

11.16. Manufacture of wood and products of wood, mainly consisting of plywood and block boards declined by 12.0 per cent in 2016. Manufacture of toilet paper and exercise books went up by 17.3 per cent and 6.6 per cent, respectively. Similarly, production of corrugated cartons registered a growth of 1.9 per cent. Overall, production of paper and paper products increased by 8.7 per cent in 2016.

11.17. Production of industrial gases declined by 12.2 per cent while that of industrial spirits increased by 6.1 per cent in 2016. Production of paints increased by 6.5 per cent while production of detergents and soaps went up by 2.5 per cent and 1.2 per cent, respectively. However, manufacture of shoe polish went down by 10.3 per cent. Overall, the chemical and chemical products sub-sector registered a marginal growth of 1.4 per cent in 2016.

11.18. Production of pharmaceutical products increased by 14.7 per cent in 2016 attributed to the increase in the production of capsules, tablets and syrups, which went up by 15.3, 14.9 and 11.8 per cent, respectively. Manufacture of rubber products, mainly the motor vehicle tyres, dropped by 24.4 per cent in 2016. On the other hand, manufacture of plastic products recorded a growth of 8.4 per cent driven by increased production of plastic tanks that recorded a significant growth of 17.0 per cent. The production of plastic pipes and plastic bags, recorded growths of 3.0 per cent and 0.7 per cent, respectively.

11.19. Basic metals sub-sector recorded a growth of 12.5 per cent in 2016. The quantity of iron sheets produced in 2016 went up marginally by 1.6 per cent, to 261.5 thousand metric tonnes, while its imports increased slightly by 0.7 per cent. This slow growth is an indication that the construction industry is adopting the use of alternative roofing materials to meet the increased demand in the construction sector. Production of iron bars and angles grew by 29.2 per cent during the same period. Manufacture of fabricated metal products dropped by 9.8 per cent in

2016 mainly attributed to a decline in production of metal structures.

11.20. Production of electrical equipment registered a 3.5 per cent growth in 2016 mainly due to a 4.7 per cent rise in copper and aluminium cables. Manufacture of primary car batteries recorded an increase of 1.7 per cent in the period under review. Motor vehicles assembly, trailers and semi-trailers declined significantly by 26.7 per cent.

11.21. Manufacture of furniture grew marginally by 0.5 per cent in 2016 with production of mattresses increasing by 0.9 per cent. Other manufacturing not elsewhere classified, which include manufacture of pens registered a growth of 0.8 per cent. The manufacture of other non-metallic mineral such as cement, glass, ceramic tiles and clay products registered a growth of 5.7 per cent in 2016.

**Cement Production and Utilisation**

11.22. Table 11.5 shows cement consumption and utilisation for the period 2012 to 2016. Cement production increased by 5.6 per cent in 2016, compared to a growth of 8.0 per cent recorded in 2015. The quantities of cement produced went up from 6,352.9 thousand tonnes in 2015 to 6,707.2 thousand tonnes in 2016. Cement consumption and stock increased from 5,708.8 thousand tonnes in 2015 to 6,302.0 thousand tonnes in 2016. Total cement exports dropped by 38.3 per cent to 420.4 thousand tonnes in 2016, which was the lowest export in the last four years. Cement export to Uganda and Tanzania declined to 325.0 thousand tonnes in 2016 from 487.4 thousand tonnes in 2015. Imports of cement dropped from 37.6 thousand tonnes in 2015 to 15.1 thousand tonnes in 2016.

**Table 11.5: Cement Production and Utilisation, 2012 - 2016**

'000 Tonnes

| Year | Production | Imports | Consumption and Stocks | Exports to | |
|---|---|---|---|---|---|
| | | | | Uganda and Tanzania | All Other Countries |
| 2012..... | 4,693.7 | 35.3 | 3,990.7 | 561.7 | 176.7 |
| 2013..... | 5,059.1 | 34.4 | 4,265.6 | 594.0 | 233.9 |
| 2014..... | 5,882.5 | 36.4 | 5,196.0 | 547.7 | 175.2 |
| 2015..... | 6,352.9 | 37.6 | 5,708.8 | 487.4 | 194.2 |
| 2016*... | 6,707.2 | 15.1 | 6,302.0 | 325.0 | 95.4 |

*Provisional

**Producer Price Indices**

11.23. Table 11.6 shows Producer Price Indices (PPI) by industrial classification from 2012 to 2016. Overall PPI increased marginally by 0.2 per cent from 113.44 in 2015 to 113.67 in 2016. The change in PPI was influenced by manufacture of beverages, manufacture of wood and products of wood and cork. In addition, the marginal increase was partly due to stability of the prices of imported raw materials and lower cost of electricity. Producer prices of chemical and chemical products and other non-metallic mineral products declined during the year under review. The electricity index decreased by 0.27 per cent due to reduction in fuel adjustment costs in 2016.

**Table 11.6: Producer Price Indices and Percentage Changes, 2012 to 2016**

June 2011 = 100

| ISIC Division | Description | Weights | 2012 | 2013 | 2014 | 2015 | 2016 | % Change |
|---|---|---|---|---|---|---|---|---|
| 08 | Mining and Quarrying | 1.60 | 107.63 | 111.40 | 123.09 | 131.67 | 138.10 | 4.9 |
| 10 | Manufacture of food products | 34.24 | 109.79 | 109.84 | 107.52 | 114.17 | 113.22 | -0.8 |
| 11 | Manufacture of beverages | 6.54 | 107.41 | 111.16 | 124.25 | 132.36 | 136.83 | 3.4 |
| 12 | Manufacture of tobacco products | 1.38 | 114.98 | 117.31 | 117.96 | 121.74 | 125.10 | 2.8 |
| 13 | Manufacture of textiles | 2.29 | 106.43 | 108.19 | 109.96 | 122.72 | 126.70 | 3.2 |
| 14 | Manufacture of wearing apparel | 2.91 | 99.67 | 99.88 | 100.27 | 101.64 | 102.08 | 0.4 |
| 15 | Manufacture of leather and related products | 0.90 | 101.41 | 101.79 | 102.19 | 103.77 | 104.23 | 0.4 |
| 16 | Manufacture of wood and products of wood and cork except furniture | 2.19 | 102.90 | 104.69 | 105.40 | 106.91 | 113.60 | 6.2 |
| 17 | Manufacture of paper and paper products | 3.15 | 104.68 | 102.28 | 106.15 | 109.64 | 112.55 | 2.7 |
| 18 | Printing and reproduction of recorded media | 5.66 | 100.00 | 102.33 | 104.66 | 104.66 | 104.66 | 0.0 |
| 19 | Manufacture of lubricating petroleum oils | 0.01 | 112.45 | 117.13 | 132.83 | 114.76 | 114.76 | 0.0 |
| 20 | Manufacture of chemicals and chemical products | 5.97 | 106.97 | 106.67 | 113.24 | 119.61 | 118.35 | -1.1 |
| 22 | Manufacture of rubber and plastics products | 5.47 | 103.81 | 105.07 | 107.66 | 110.01 | 111.51 | 1.4 |
| 23 | Manufacture of other non-metallic mineral products | 4.32 | 111.37 | 113.59 | 116.00 | 117.36 | 113.06 | -3.7 |
| 24 | Manufacture of basic metals | 6.51 | 102.01 | 98.69 | 97.11 | 93.68 | 92.96 | -0.8 |
| 25 | Manufacture of fabricated metal products except machinery and equipment | 3.31 | 101.12 | 94.11 | 96.62 | 94.35 | 93.10 | -1.3 |
| 29 | Manufacture of motor vehicles | 1.20 | 107.82 | 112.60 | 117.28 | 121.17 | 122.95 | 1.5 |
| 31 | Manufacture of Furniture | 1.83 | 102.45 | 102.45 | 102.17 | 132.88 | 131.29 | -1.2 |
| 33 | Repair and installation of machinery and equipment | 1.42 | 100.00 | 99.78 | 100.16 | 102.92 | 103.76 | 0.8 |
| 35 | Electricity | 8.63 | 99.20 | 98.34 | 118.41 | 116.52 | 116.21 | -0.3 |
| 36 | Water | 0.46 | 103.08 | 114.44 | 124.54 | 131.68 | 143.63 | 9.1 |
| | **Total** | **100.00** | **105.47** | **105.96** | **109.17** | **113.44** | **113.67** | 0.2 |
| | Overall percentage change | | **3.3** | **0.5** | **3.0** | **3.9** | **0.2** | |

**Credit to Manufacturing Sector**

11.24. Table 11.7 shows number of manufacturing projects approved by industrial financial institutions and commercial banks from 2012 to 2016. Total loans advanced decreased for the first time in five years, from KSh 290.9 billion in 2015 to KSh 277.4 billion in 2016. The number of manufacturing projects approved by industrial financial institutions increased from 251 in 2015 to 365 in 2016, mainly due to the rise in the number of micro and small enterprises financed by Kenya Industrial Estates (KIE). However, the financing of projects approved by industrial financial institutions decreased by 4.6 per cent from KSh 1,135.0 million in 2015 to KSh 1,083.0 million in 2016.

**Table 11.7: Manufacturing Projects Approved by Financial Institutions and Other Commercial Banks, 2012 -2016**

| | Number of Projects | | | | | Loans Advanced (KSh Million) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Institution** | **2012** | **2013** | **2014** | **2015** | **2016*** | **2012** | **2013** | **2014** | **2015** | **2016*** |
| IDB Capital limited | 3 | 5 | 3 | 5 | 3 | 95.5 | 339.1 | 74.2 | 252.0 | 129.8 |
| Development Bank of Kenya | 5 | 4 | 2 | 6 | 6 | 182.3 | 230.0 | 66.6 | 341.0 | 292.3 |
| Kenya Industrial Estates Limited | 109 | 257 | 543 | 233 | 325 | 68.5 | 104.5 | 194.3 | 120.8 | 165.3 |
| Industrial and Commercial Development Corporation . | 2 | 2 | 1 | 7 | 4 | 126.0 | 431.6 | 234.0 | 421.2 | 495.6 |
| **Sub - total** | **119** | **268** | **549** | **251** | **338** | **472.3** | **1,105.2** | **569.1** | **1,135.0** | **1,083.0** |
| All other commercial banks1 | .. | .. | .. | .. | .. | 169,080.0 | 181,457.1 | 237,355.8 | 289,727.8 | 276,359.0 |
| **TOTAL** | **119** | **268** | **549** | **251** | **365** | **169,552.3** | **182,562.3** | **237,924.9** | **290,862.8** | **277,441.9** |

Source: Central Bank of Kenya and Industrial Financial Institutions

* Provisional

[1] Excludes Development Bank of Kenya (DBK)

11.25. Industrial Development Bank (IDB) Capital Limited approved KSh 129.8 million in 2016 compared to KSh 252.0 million in 2015. The loans advanced to manufacturing projects in 2016 were for expansion of existing projects and one start-up.

11.26. Development Bank of Kenya (DBK) approved six manufacturing projects in food, textiles, plastics and polythene bags activities. The value of the approved projects reduced from KSh 341.0 million in 2015 to KSh 292.3 million in 2016. Industrial and Commercial Development Corporation (ICDC) approved loans and equity worth KSh 495.6 million for four manufacturing projects.

11.27. Manufacturing projects approved by Kenya Industrial Estates (KIE) for the period 2012 to 2016 are as shown in Table 11.8. Micro and small entrepreneurs in the manufacturing sector received loans worth KSh 165.3 billion in 2016, an increase from KSh 120.8 billion in 2015. Similarly, the number of projects approved increased from 233 in 2015 to 325 in 2016. Manufacture of food products accounted for most of these projects.

**Table 11.8: Industrial Projects Approved by Kenya Industrial Estates, 2012-2016**

| | Number of Projects | | | | | Loans Advanced (KSh '000) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Descriptions | 2012 | 2013 | 2014 | 2015 | 2016* | 2012 | 2013 | 2014 | 2015 | 2016* |
| Manufacture of food products | 48 | 83 | 193 | 75 | 107 | 30,330 | 36,545 | 64,855 | 28,092 | 66,133 |
| 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 | 3 | 4 | 3 | 37 | 65 | 3,000 | 1,360 | 1,900 | 12,813 | 19,958 |
| Manufacture of wearing Apparel | 24 | 46 | 139 | 1 | 1 | 7,922 | 18,319 | 29,891 | 500 | 1,700 |
| Manufacture of leather and related products | - | 2 | 1 | 2 | 2 | - | 550 | 840 | 1,000 | 5,350 |
| Manufacture of wood and Products of wood and cork except furniture | - | 7 | 17 | 5 | 22 | - | 3,905 | 9,693 | 3,355 | 12,621 |
| Manufacture of paper and paper products | - | - | 1 | | - | - | - | 10,000 | - | - |
| Printing and reproduction of recorded media | 2 | 13 | 20 | | 16 | 450 | 6,400 | 10,700 | - | 9,836 |
| Manufacture of Chemicals and chemical products | - | - | - | 2 | 3 | - | - | - | 18,059 | 1,115 |
| Manufacture of other non-metallic mineral products | 3 | 7 | 7 | 7 | 5 | 14,995 | 1,720 | 1,510 | 7,630 | 1,700 |
| manufacture of fabricated metal products except machinery and equipment | 19 | 53 | 105 | 53 | 81 | 7,656 | 20,085 | 35,005 | 25,295 | 39,260 |
| Manufacture of furniture | 8 | 34 | 48 | 27 | 13 | 3,600 | 12,470 | 17,606 | 13,690 | 3,810 |
| Other manufacturing n.e.c. | 2 | 3 | 2 | 2 | 6 | 550 | 1,400 | 700 | 2,315 | 2,725 |
| Repair and installation of machinery and equipment | - | 2 | - | | 1 | - | 350 | - | - | 325 |
| **TOTAL** | **109** | **257** | **543** | **233** | **325** | **68,503** | **104,501** | **194,316** | **120,849** | **165,292** |

Source: Kenya Industrial Estates Ltd

* Provisional

11.28. Table 11.9. shows industrial projects approved by Kenya Investment Authority. The Authority approved 43 manufacturing projects worth KSh 11.1 billion in 2016 a reduction from 48 projects worth KSh 8.8 billion approved in 2015. Local financing accounted for 71.6 per cent of the total capital investments in 2016.

**Table 11.9: Industrial Projects Approved by Kenya Investment Authority, 2012-2016**

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Number of Projects ..... | 32 | 42 | 19 | 48 | 43 |
| Loans advanced (KSh billion)..... | 10.3 | 42.1 | 7.4 | 8.8 | 11.1 |

* Provisional

**Export Processing Zones**

11.29. During the year under review, most performance indicators for the Export Processing Zones (EPZ) improved. The number of gazetted zones increased to 65 in 2016 from 56 in 2015. Private enterprises owned and operated 62 zones while 3 zones were public. The number of operational enterprises within the EPZ increased from 89 in 2015 to 91 in 2016. Total capital investment of EPZ enterprises increased from KSh 48.1 billion in 2015 to KSh 51.2 billion in 2016. The number of local employees engaged by EPZ enterprises increased by 3.4 per cent to 52,019 persons in 2016 as shown in Table 11.10.

**Table 11.10: Selected EPZ Performance Indicators, 2012-2016**

| | Unit | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| Gazetted Zones ... ... ... ... ... ... ... ... ... ... ... | Number | 47 | 50 | 52 | 56 | 65 |
| Enterprises Operating ... ... ... ... ... ... ... ... | " | 82 | 85 | 86 | 89 | 91 |
| Employment - Locals ... ... ... ... ... ... ... ... .. | " | 35,501 | 39,961 | 46,221 | 50,302 | 52,019 |
| - Expatriates ... ... ... ... ... ... ... .. | " | 428 | 472 | 517 | 597 | 551 |
| **Total Workers ... ... ... ... ... ... ... ... ... ..** | | **35,929** | **40,433** | **46,738** | **50,899** | **52,570** |
| Export Sales ... ... ... ... ... ... ... ... ... ... .... | KSh Million | 39,963 | 44,427 | 51,377 | 60,879 | 63,116 |
| Domestic Sales[1] ... ... ... ... ... ... ... ... ... .. | " | 4,310 | 5,867 | 5,815 | 4,018 | 5,566 |
| **Total Sales ... ... ... ... ... ... ... ... ... ....** | | **44,273** | **50,294** | **57,192** | **64,897** | **68,682** |
| Imports ... ... ... ... ... ... ... ... ... ... ..... ... . | " | 24, 973 | 27,413 | 29,461 | 31,370 | 28,116 |
| Local Purchases of Goods and Services .... ... | " | 8,027 | 7,721 | 8,170 | 8,815 | 10,253 |
| Investment (cumulative) ... ... ... ... ... ... ... | " | 38,535 | 48,004 | 44,218 | 48,128 | 51,246 |

Source: Export Processing Zones Authority (EPZA)

* Provisional

[1] Includes sales to duty free shops and agencies

11.30. Total sales by the EPZ enterprises increased by 5.8 per cent to KSh 68.7 billion in 2016. Exports from EPZ increased by 3.7 per cent to KSh 63.1 billion and accounted for 91.9 per cent of the total sales. Domestic sales increased from KSh 4.0 billion in 2015 to KSh 5.6 billion in 2016. Imports declined by 9.0 per cent to KSh 28.1 billion in the year under review. Local purchases increased by 16.3 per cent to KSh 10.3 billion.

**African Growth and Opportunity Act**

11.31. The African Growth and Opportunity Act (AGOA) initiative was extended to September 2025. Selected indicators for the EPZ garment/apparel sub-sector under AGOA initiative are shown in Table 11.11. The quantity of apparels exported declined by 12.1 per cent to 74.4 million pieces in 2016 while value of exports increased to KSh 35.2 billion. Direct employment generated by AGOA increased by 2.5 per cent to 42,645 persons in 2016. Capital investment declined by 8.2 per cent to KSh 14.4 billion in 2016.

**Table 11.11: Selected EPZ Garment / Apparel Performance Indicators under AGOA, 2012-2016**

| | 2012 | 2013 | 2014 | 2015 | 2016* | % Change |
|---|---|---|---|---|---|---|
| Number of Enterprises ... ... ... ... ... | 22 | 22 | 21 | 21 | 21 | 0.0 |
| Employment ... ... ... ... ... ... ... ... ... | 28,298 | 32,932 | 37,785 | 41,597 | 42,645 | 2.5 |
| Capital Investment (KSh Million) .... | 10,732 | 13,465 | 15,051 | 15,708 | 14,413 | -8.2 |
| Exports (KSh Million) ... ... ... ... ... ... ... | 22,308 | 24,246 | 30,244 | 35,224 | 35,245 | 0.1 |

Source: Export Processing Zones Authority

*Provisional

# Building and Construction

12 Chapter

**Overview**

The Government has continued in its efforts to develop efficient and effective infrastructure, which is a key enabler for other sectors as envisaged in Kenya Vision 2030. An improved road network enhances connectivity, mobility and promotes trade and investments by reducing cost of doing business. Significant progress has been made in the construction of the Standard Gauge Railway (SGR). In addition, the construction of roads across major towns such as Nairobi and Kisumu gives impetus to the Government's commitment to developing infrastructure to promote business. The construction industry grew by 9.2 per cent in 2016 from an expansion of 13.9 per cent registered in 2015. Increased activity in the construction of roads and development of housing also translated to an increase in employment in the sector from 148.6 thousand jobs in 2015 to 163.0 thousand jobs in 2016.

12.2. Overall expenditure on roads is expected to increase by 38.3 per cent from KSh 113.2 billion in 2015/16 to KSh 156.5 billion in 2016/17. Total development expenditure is expected to grow by 31.7 per cent from KSh 87.8 billion in 2015/16 to KSh 115.6 billion in 2016/17. Development expenditure on trunk and primary roads is expected to grow by 36.2 per cent from KSh 51.6 billion in 2015/16 to KSh 70.3 billion in 2016/17. Disbursement of funds from the Roads Maintenance Levy Fund (RMLF) by Kenya Roads Board (KRB) to various road agencies and county governments is expected to increase significantly to KSh 40.9 billion in 2016/17 from KSh 25.4 billion in 2015/16. Cumulative expenditure on SGR stood at KSh 295.7 billion as end of 2016. The government spent KSh 180.7 billion in 2016 compared to KSh 106.5 billion spent in 2015.

12.3. On development of housing, the National Housing Corporation (NHC), undertook a number of housing activities in three counties; Nairobi, Kisumu and Kisii in 2016, at a cost of KSh 328.7 million, KSh 439.7 million and KSh 109.5 million, respectively. The value of reported new buildings completed in Nairobi registered a growth of 7.6 per cent to stand at KSh 76.2 billion in 2016. The value of reported building plans approved increased by 43.3 per cent from KSh 215.2 billion in 2015 to KSh 308.4 billion in 2016. The value of reported building works completed was 24.7 per cent of the approved building plans in 2016, compared to 32.9 per cent in 2015. The value of public buildings completed increased significantly from KSh 61.5 million in 2015 to KSh 3.8 billion in 2016. The value of new private buildings in Nairobi City County went up by 7.5 per cent from KSh 70.9 billion in 2015 to KSh 76.2 billion in 2016, on account of continued increase in construction of both residential and non-residential buildings.

**Key Economic Indicators**

12.4. Table 12.1 presents selected key economic indicators in the building and construction sector for the period 2012 to 2016. The index of Government expenditure on roads increased from 350.3 in 2015 to 461.0 in 2016 following an increase in road construction projects. The index of reported private building works completed in Nairobi City County rose from 369.4 in 2015 to 407.1 in 2016. Similarly, the index of reported public building works completed in major towns registered an increase from 112.6 in 2015 to 138.9 in 2016. Consumption of cement, a major input in construction of buildings and civil works, rose further by 10.5 per cent from 5,708.8 thousand tonnes in 2015 to 6,302.0 thousand tonnes in 2016. Credit to the construction industry went down marginally from KSh 106.3 billion in 2015 to KSh 104.8

billion in 2016. Employment in the sector grew by 10.1 per cent from 148.1 thousand persons recorded in 2015 to 163.0 thousand persons in 2016.

**Table 12.1 Selected Key Economic Indicators in Building and Construction, 2012 – 2016**

1982=100

| Indicator/Year | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Index of reported private building works completed in Nairobi City County | 300.6 | 321.3 | 341.4 | 369.4 | 407.1 |
| Index of reported public building works completed in Major Towns | 86.9 | 103.7 | 106.1 | 112.6 | 138.9 |
| Index of government expenditure on roads | 449.8 | 313.9 | 263.4 | 350.3 | 461.0 |
| Index of Employment | 175.3 | 197.8 | 220.0 | 245.0 | 269.9 |
| Cement consumption ('000 tonnes) | 3,991.2 | 4,266.5 | 5,196.7 | 5,708.8 | 6,302.0 |
| Private Employment ('000 persons) | 98.7 | 112.0 | 125.3 | 140.2 | 155.0 |
| Public Employment ('000 persons) | 7.2 | 7.5 | 7.6 | 7.9 | 8.0 |
| Loans and Advances from Commercial Banks to the sector (KSh Mn) | 69,183.0 | 70,770.0 | 80,406.0 | 106,307.0 | 104,826.0 |

* Provisional.

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

**Construction Price Indices:**

12.5. Table 12.2 shows the annual percentage changes in construction input price indices for the period 2014 to 2016. Overall, the total cost index grew by 4.1 per cent in 2016 compared to a 4.9 per cent increase in 2015. This may be attributed to a slowed rate of increase in compensation of employees in 2016. Stability of prices of inputs in construction occasioned by the relative stability of the Kenya Shilling against other currencies also contributed to a lower increase in the construction cost index. However, other material inputs such as timber, hydrated lime and structural steel recorded increases in prices in 2016. The rate of change of the total cost index of residential buildings and other construction was 3.4 per cent and 5.0 per cent, respectively, in 2016. Wages in the Building and Construction sector increased by 7.9 per cent in 2016 compared to 10.0 per cent increase in 2015.

**Table 12.2: Annual Average Percentage Changes in Construction Input Price Indices, 2014 – 2016**

| | Materials | | | Labour[2] | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2014+ | 2015 | 2016* | 2014 | 2015 | 2016* | 2014 | 2015 | 2016* |
| Residential Buildings | 8.7 | 2.0 | 1.5 | 7.9 | 10.0 | 7.9 | 11.2 | 4.3 | 3.4 |
| Non-Residential Buildings | 7.6 | 1.9 | 1.4 | 7.9 | 10.0 | 7.9 | 9.4 | 4.7 | 3.6 |
| All Buildings | 8.2 | 1.9 | 1.5 | 7.9 | 10.0 | 7.9 | 10.4 | 4.5 | 3.5 |
| Other Construction[1] | 6.7 | 0.7 | 1.2 | 7.9 | 10.0 | 7.9 | 9.6 | 5.6 | 5.0 |
| **Overall Cost Index** | **7.7** | **1.5** | **1.4** | **7.9** | **10.0** | **7.9** | **10.1** | **4.9** | **4.1** |

Source: KNBS and Ministry of EAC, Labour and Social Protection

* Provisional.

+Revised

[1] Refers mainly to road construction and includes bridges, dams

[2] Cost of labour varies by skill level and does not depend on the kind of construction work

12.6. The average annual basic wages for skilled, semi-skilled and unskilled workers in the building and construction industry have been increasing for the last five years as highlighted in Table 12.3. Basic wages for the skilled, semi-skilled and unskilled workers, increased by 8.2, 7.9 and 7.5 per cent, respectively in 2016 compared to 9.7, 10.1 and 10.5 per cent, respectively, in 2015.

**Table 12.3: Annual Average Basic Wages in Building and Construction Industry, 2012 - 2016**

KSh

| Year | Unskilled | Semi-Skilled | Skilled |
|---|---|---|---|
| 2012 | 14,342 | 19,812 | 28,514 |
| 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 |

Source: Ministry of EAC, Labour and Social Protection

12.7. Table 12.4 highlights the value of building plans approved and new completed buildings in Nairobi City County for the period 2012 to 2016. The value of reported new buildings completed in Nairobi registered a growth of 7.6 per cent to amount to KSh 76.2 billion in 2016. The value of reported building plans approved increased significantly from KSh 215.2 billion in 2015 to KSh 308.4 billion in 2016, representing an increase of 43.3 per cent.

**Table 12.4: Value of Private Building Plans Approved and Building Works Completed in Nairobi City County, 2012– 2016**

KSh Million

| Year | Plans Approved | Building Works Completed[1] |
|---|---|---|
| 2012..... | 135,128.2 | 43,574.2 |
| 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 | 76,242.8 |

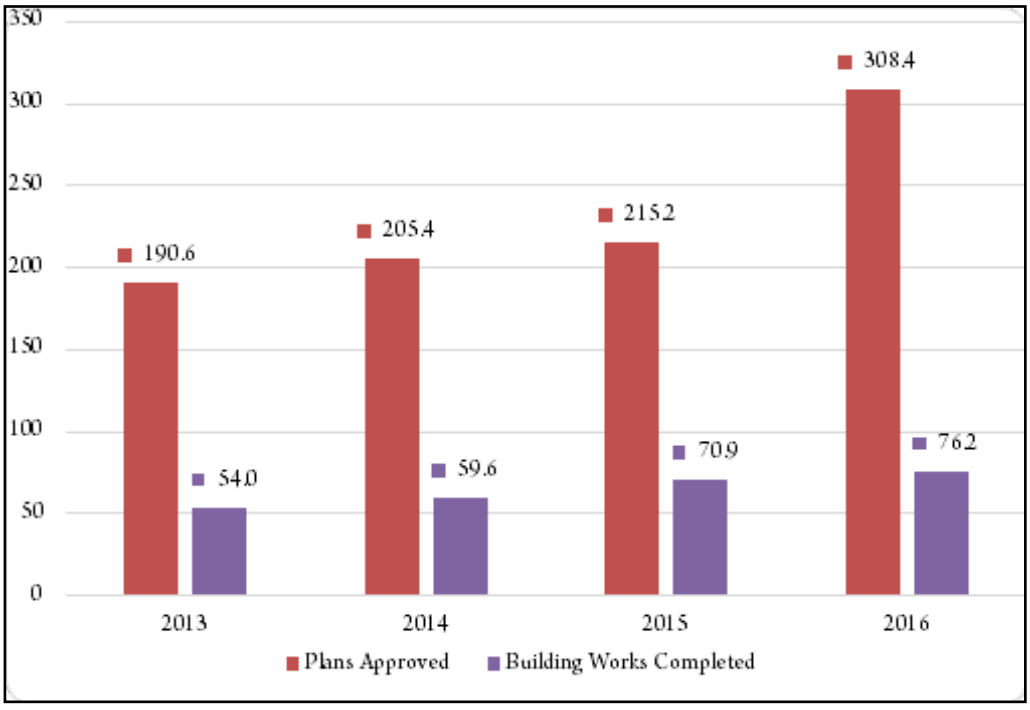
Source: Nairobi City County

*Provisional

[1] Excluding extensions

12.8. Figure 12.1 illustrates the comparison in the value of private plans approved and reported new private building works completed for Nairobi City County in the last five years. In 2016, the value of reported building works completed was 24.7 per cent of the approvals, compared to 32.9 per cent in 2015. The value of both approved plans and building works completed continued to show an upward trend since 2013.

**Figure 12.1: Comparison of Value of Private Plans Approved and Reported New Private Buildings Works Completed in Nairobi, 2013-2016**




12.9. Table 12.5 shows the number of private buildings reported as completed in Nairobi City County and public buildings completed across the country. The State Department for Housing completed 822 residential units in Kibera Soweto Zone A. The National Housing Corporation completed 240 residential units in Nairobi, Kisumu and Kisii counties. The total number of reported private buildings completed increased by 10.5 per cent from 9,054 units in 2015 to

10,002 units in 2016 with residential buildings accounting for 86.2 per cent of the completed private buildings during the review period. This shows that the private sector has continued to play a key role in the provision of both residential and non-residential houses.

**Table 12.5: Reported Number of Completions of New Private and Public Buildings, 2012 – 2016**

Number

| | Private (Nairobi City County) | | | Public (Nationwide) | | |
|---|---|---|---|---|---|---|
| Year | Residential | Non-Residential | Total | Residential | Non-Residential | Total |
| 2012..... | 4,824 | 637 | **5,461** | 2,015 | 20 | **2,035** |
| 2013..... | 5,447 | 876 | **6,323** | 376 | - | **376** |
| 2014..... | 6,538 | 985 | **7,523** | 243 | - | **243** |
| 2015..... | 7,834 | 1,220 | **9,054** | 45 | | **45** |
| 2016*..... | 8,623 | 1,379 | **10,002** | 1,062 | - | **1,062** |

Source: National Housing Corporation & The State Department for Housing and Urban Development

* Provisional

12.10. Table 12.6 shows the analysis of the reported value of new private buildings in Nairobi City County and that of public buildings countrywide. The value of public buildings completed increased significantly from KSh 61.5 million in 2015 to KSh 3.8 billion in 2016. The substantial increase in the value of completed buildings can partly be attributed to the increase in the number of completed public residential buildings in 2016. The value of new private buildings grew by 7.5 per cent from KSh 70.9 billion in 2015 to KSh 76.2 billion in 2016, on account of an increase in the value of residential buildings.

**Table 12.6: Reported Value of New Private and Public Buildings, 2012 – 2016**

KSh Million

| | Private (Nairobi City County) | | | Public (Nationwide) | | |
|---|---|---|---|---|---|---|
| Year | Residential | Non-Residential | Total | Residential | Non-Residential | Total |
| 2012..... | 37,373.4 | 6,200.8 | **43,574.2** | 4,629.5 | 70.0 | **4,699.5** |
| 2013..... | 45,236.4 | 7,039.6 | **52,276.0** | 1,725.4 | - | **1,725.4** |
| 2014..... | 50,952.2 | 8,567.5 | **59,519.7** | 502.1 | - | **502.1** |
| 2015..... | 61,556.4 | 9,311.0 | **70,867.4** | 61.5 | - | **61.5** |
| 2016*..... | 66,284.7 | 9,958.1 | **76,242.8** | 3,786.4 | - | **3,786.4** |

Source: NHC & The State Department for Housing and Urban Development

* Provisional

## Housing

12.11. Actual expenditure on housing increased from KSh 5.9 billion in 2014/15 to KSh 6.0 billion in 2015/16, representing 82.2 per cent utilization as shown in Table 12.7. This increased utilization could be attributed to increased credit to the real estate sector. In addition, the government announced plans to provide both financial and non-financial incentives to the private sector to help bridge the gap in housing especially in the lower end market. Among the proposed incentives is the provision of serviced land to developers, access to affordable financing and reforms of land-related laws. Approved Government expenditure on housing is expected to decrease to KSh 4.3 billion in 2016/17.

**Table 12.7: Approved and Actual Government Expenditure on Housing, 2012/13 – 2015/16**

| Year | Expenditure in KSh Million | | Actual Expenditure as Percentage of Approved |
|---|---|---|---|
| | Approved | Actual | |
| 2012/13..... | 5,208.2 | 3,452.9 | 66.3 |
| 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**..... | 4,300.2 | | |

Source: State Department for Housing and Urban Development

* Provisional

**Estimates

12.12. As the principal Government agency tasked with implementing housing policies and programmes, National Housing Corporation (NHC) purposed to leverage on its Expanded Polystyrene (EPS) building technology to deliver low cost housing. In 2016, the Corporation completed a number of housing activities in three counties; Nairobi, Kisumu and Kisii. These comprised of 100 units in Nairobi at a cost of KSh 328.7 million; 100 units in Kisumu at a cost of KSh 439.7 million and 40 units in Kisii at a cost of KSh 109.5 million. The ongoing projects as at 31st December 2016 were; Stony Athi Phase 1 and an Economy Block in Machakos with 120 units at an estimated cost of KSh 633.9 million and 60 units at an estimated cost of KSh 96.4 million, respectively. The Corporation advanced housing loans amounting to KSh 36.7 million to 12 counties as shown in Table 12.8.

**Table 12.8: Housing Loans Advanced by National Housing Corporation to the Counties; 2015/2016**

| County | Number of Loans | Amount (KSh 000) |
|---|---|---|
| Bomet | 1 | 1,500 |
| Busia | 1 | 2,400 |
| Kericho | 2 | 1,000 |
| Kiambu | 2 | 2,500 |
| Kisii | 3 | 4,900 |
| Machakos | 7 | 13,860 |
| Nakuru | 1 | 1,400 |
| Nairobi | 1 | 2,000 |
| Nyeri | 1 | 3,000 |
| Taita Taveta | 1 | 900 |
| Uasin Gishu | 1 | 900 |
| Vihiga | 2 | 2,300 |
| **Total** | **23** | **36,660** |

Source: National Housing Corporation

## Roads

12.13. The principal mandate of the State Department of Infrastructure is to provide a regulatory framework, coordination, oversight and supervision of the smooth functioning of the road sub-sector. Infrastructure is recognised as one of the key priority areas to be addressed under the Second Medium Term Plan 2013-2017, which states that new investments will be made on the road network to provide safe, efficient and cost effective transport. The road infrastructure offers a high level of service to road users to ensure safe, efficient and economic movement of people. The department, various road agencies and county governments have continued to work together in enhancing investment in road construction, upgrading and rehabilitation of existing roads.

12.14. Total expenditure on roads for the period 2012/13 to 2016/17 is presented in Table 12.9. Total development expenditure is expected to rise by 31.7 per cent from KSh 87.8 billion in 2015/16 to KSh 115.6 billion in 2016/17. Development expenditure on trunk and primary roads is projected to increase by 36.2 per cent from KSh 51.6 billion in 2015/16 to KSh 70.3 billion in 2016/17. Disbursement of funds from the Roads Maintenance Levy Fund by KRB to various road agencies and county governments is expected to increase significantly from

KSh 25.4 billion in 2015/16 to KSh 40.9 billion in 2016/17. This will further accelerate the growth of the sector. The overall expenditure on roads is expected to increase by 38.3 per cent from KSh 113.2 billion in 2015/16 to KSh 156.5 billion in 2016/17.

**Table 12.9: Total Expenditure on Roads, 2012/13 - 2016/17**

KSh Million

| | 2012/13 | 2013/14 | 2014/15 | 2015/16* | 2016/17** |
|---|---|---|---|---|---|
| **Development:** | | | | | |
| Trunk and primary Roads (A,B and C) ... ... ... | 65,152.3 | 43,763.4 | 37,792.0 | 51,600.0 | 70,300.0 |
| Secondary and Minor Roads (D and E) ... ... ... | 14,215.6 | 16,784.0 | 12,343.5 | 20,492.1 | 45,295.2 |
| Miscellaneous Roads (Including Urban) ... ... ... | 5,125.8 | 3,853.0 | 4,698.4 | 15,694.5 | - |
| **Sub-total** | **84,493.7** | **64,400.4** | **54,833.9** | **87,786.6** | **115,595.2** |
| **Recurrent:** | | | | | |
| Maintenance & Repair ... ... ... ... ... ... ... ... ... | 24,370.5 | 23,228.9 | 25,792.0 | 25,395.9 | 40,879.6 |
| **Total** | **108,864.2** | **87,629.3** | **80,625.9** | **113,182.5** | **156,474.8** |

Source: State Department of Infrastructure & Kenya Roads Board

*Provisional

**Estimates

12.15. The adoption of the low volume seal roads technology, coupled with increased financing though Public Private Partnerships (PPP) has led to faster and cheaper construction, maintenance, and gravelling of rural roads. There was a significant increase in the number of roads constructed across counties as at December 2016, as shown in Table 12.10. Twenty seven counties benefited from the Roads 2000 Programme, with a total of 1,416.9 kilometers, earmarked for construction under this programme by December 2016 at an estimated cost of KSh 57.6 billion.

**Table 12.10: Status of On-going Roads 2000 Programme, December 2016**

| County | Length in Km | Percentage Completion | Estimated Project Cost (KSh Million) |
|---|---|---|---|
| Baringo | 70.0 | 35.2 | 818.4 |
| Bomet | - | 97.0 | 126.8 |
| Bungoma | 40.6 | 93.0 | 95.1 |
| Busia | 28.0 | 72.0 | 1,488.3 |
| Elgeyo Markwet | 95.5 | 68.0 | 5,204.6 |
| Embu | 33.0 | 66.0 | 1,464.3 |
| Kakamega | 63.7 | 54.0 | 1,870.3 |
| Kericho | 45.5 | 96.0 | 3,331.8 |
| Kiambu | 190.8 | 100.0 | 4,471.8 |
| Kirinyaga | 26.2 | 100.0 | 279.0 |
| Kisii | 25.0 | 25.0 | 1,724.6 |
| Laikipia | 58.9 | 100.0 | 1,379.9 |
| Machakos | 59.0 | 63.5 | 2,285.3 |
| Makueni | 20.0 | 6.5 | 362.0 |
| Meru | 72.0 | 24.0 | 4,535.6 |
| Migori | 7.0 | 46.6 | 346.0 |
| Murang'a | 65.0 | 100.0 | 3,629.3 |
| Nairobi | 8.0 | 41.2 | 721.0 |
| Nakuru | 64.0 | 98.0 | 2,898.6 |
| Nandi | 22.0 | 92.0 | 1,593.1 |
| Nyamira | 37.0 | 54.7 | 1,760.5 |
| Nyandarua | 20.8 | 100.0 | 564.6 |
| Nyeri | 185.6 | 100.0 | 8,843.1 |
| Siaya | 25.0 | 39.3 | 1,486.1 |
| Tharaka/ Nithi | 30.0 | 10.0 | 537.3 |
| Uasin Gishu | 69.5 | 34.8 | 3,509.0 |
| Trans Nzoia | 55.0 | 34.8 | 2,288.2 |
| **Total** | **1,416.9** | | **57,614.8** |

Source: Kenya Rural Roads Authority

12.16. The current road classification system has six road classes from A to E and a Special Purpose Roads class. Each class is defined by the functional criteria related to administrative level of centres the roads connect. Analysis of the classified road network is presented in Table 12.11. During the period under review, the length of bitumen road network went up by 4.3 per cent from 13.9 thousand kilometres in 2015 to 14.5 thousand kilometres in 2016. The development on the bitumen roads has increased due to increased budgetary allocation in the current financial year. In 2016, there was a reclassification of roads which were subsequently devolved to county governments. This led to an increase in the total roadwork under earth/ gravel from 65.6 thousand kilometres in 2015 to 72.5 thousand kilometres in 2016.

**Table 12.11: Kilometres of Road as at 30th June by Type and Classification**

'000 Km

| Type of Road | 2014 | | 2015 | | 2016* | |
|---|---|---|---|---|---|---|
| | Bitumen | Earth/Gravel | Bitumen | Earth/Gravel | Bitumen | Earth/Gravel |
| Trunk and Primary Roads (A, B and C) | 7.9 | 6.3 | 8.2 | 6.5 | 8.5 | 5.7 |
| Secondary, Minor & Special Purpose[1] Roads (D, E and F) | 3.0 | 46.3 | 3.2 | 47.8 | 3.3 | 56.3 |
| Urban Roads in Cities and Municipalities | 2.1 | 10.8 | 2.5 | 11.3 | 2.7 | 10.5 |
| **Total** | **13.0** | **63.4** | **13.9** | **65.6** | **14.5** | **72.5** |

Source: State Department of Infrastructure

*Provisional

[1] include Government access, roads to settlement, rural access, sugar, tea and wheat roads

12.17. Data on selected major road works being constructed, maintained and rehabilitated during 2016 is presented in Table 12.12. Overall, a total of KSh 221.4 billion is expected to be used to construct 1,931.9 kilometres of road. A total of KSh 140.2 billion is earmarked for construction of 1,247 kilometres of road while KSh 81.3 billion is expected to be utilised in rehabilitation and upgrading of 684.9 kilometres of road.

## Table 12.12 - Major Road Works in Progress in 2016

| Activity | Length (Km) | Contract Amount (KSh Million) |
|---|---|---|
| **Road construction** | | |
| Nairobi Outering Road Improvement Project | 13.0 | 7,395.18 |
| Mwatate – Taveta Road Project (A23) | 99.0 | 7,288.78 |
| Marsabit-Turbi (A2) | 121.0 | 13,000.57 |
| Loruk – Barpelo (B4) | 62.0 | 6,040.88 |
| Merille River –Marsabit (A2) | 121.0 | 13,718.69 |
| Turbi – Moyale (A2) | 123.0 | 12,061.53 |
| Nairobi Southern Bypass | 38.8 | 17,653.89 |
| Homa Bay-Mbita (C19) | 43.0 | 3,888.34 |
| Londiani –Fortenan (C35) | 63.0 | 5,228.23 |
| KCC(Sotik)-Ndanai-Gorgor (C15) Phase 2 | 29.0 | 1,733.91 |
| Enjinja-Bumala (C30) | 37.0 | 1,944.93 |
| Modika – Nuno (C81) | 12.0 | 1,090.19 |
| Kaloleni – Kilifi (C107) | 35.0 | 2,299.78 |
| Chebilat–Ikonge– Chabera (C22) | 38.0 | 3,109.76 |
| Chepterit–Kimondi (Baraton) (C37) | 14.0 | 1,335.71 |
| Kangema–Gacharage (C70) | 35.0 | 4,112.18 |
| Chiakariga – Meru (C92) | 56.0 | 4,667.64 |
| Nuno- Modangashe | 135.0 | 8,362.95 |
| OljoOrok - Dundori (C83) Road | 35.0 | 1,911.07 |
| Rumuruti – Maralal Road (C77) | 35.0 | 2,740.82 |
| Siaya - Ruambwa Road (C29) | 26.0 | 1,908.49 |
| Masara-Suna-Kehancha (C13) and Reinstatement of Awendo -Mariwa (D202) | 60.0 | 4,561.45 |
| Mombasa Southern Bypass Road (Miritini - Mwache) Package 1 | 9.8 | 11,317.48 |
| Port Reitz/Moi International Airport (C110) | 6.4 | 2,797.80 |
| **Sub-Total** | **1,247.0** | **140,170.3** |
| **Roads Rehabilitation & Upgrading** | | |
| Voi-Mwatate – Wundanyi (A23) | 45.0 | 996.83 |
| Timboroa-Eldoret (A104) | 73.0 | 5,213.92 |
| Eldoret – Webuye (A104) | 60.0 | 5,388.94 |
| Webuye – Malaba (A104) | 59.0 | 5,955.05 |
| Mau Summit - Kericho Road (B1/A1) | 58.0 | 6,835.48 |
| Kericho - Nyamasaria Road (A1) | 76.0 | 8,069.53 |
| Nyamasaria – Kisumu Airport | 24.0 | 7,313.85 |
| Ngong Road Phase I (KNLS Nairobi-Dagoretti Corner) | 2.5 | 1,454.90 |
| Mlolongo – Kware – Katani Link Road (Phase I) | 6.0 | 1,629.49 |
| UpperHill Roads, Phase I | 5.0 | 2,002.89 |
| Ngong Road – Kibera – Kungu Karumba – Langata Road (Missing Link No. 12) | 4.2 | 2,097.52 |
| Meru Bypass Roads | 23.0 | 2,391.76 |
| Waiyaki Way – Redhill Link Road | 5.0 | 3,012.21 |
| Nairobi Eastern Missing Link Roads and Non-Motorised Transport (NMT) Facilities | 17.2 | 4,578.16 |
| Nairobi Outering Road Improvement Project | 13.0 | 7,395.18 |
| Kisumu – Kakamega | 61.0 | 4,452.05 |
| Kakamega – Webuye | 40.0 | 4,168.69 |
| Webuye – Kitale | 59.0 | 3,315.34 |
| Bachuma Gate – Maji ya Chumvi | 54.0 | 4,986.22 |
| **Sub-Total** | **684.9** | **81,258.0** |
| **Total** | **1,931.9** | **221,428.3** |

Source: KeNHA & KURA

# Tourism

13 Chapter

## Overview

Tourism is a major source of foreign exchange, job and wealth creation in the country. For the first time since 2012, earnings from the tourism sector improved by 17.8 per cent from KSh 84.6 billion in 2015 to KSh 99.7 billion in 2016. Similarly, the number of international visitor arrivals rose by 13.5 per cent to 1,339.7 thousand in 2016. The sector's rebound was partly due to the improvement in security andsuccessful high profile conferences. In addition, the sector benefited from aggressive marketing in the domestic and international markets.

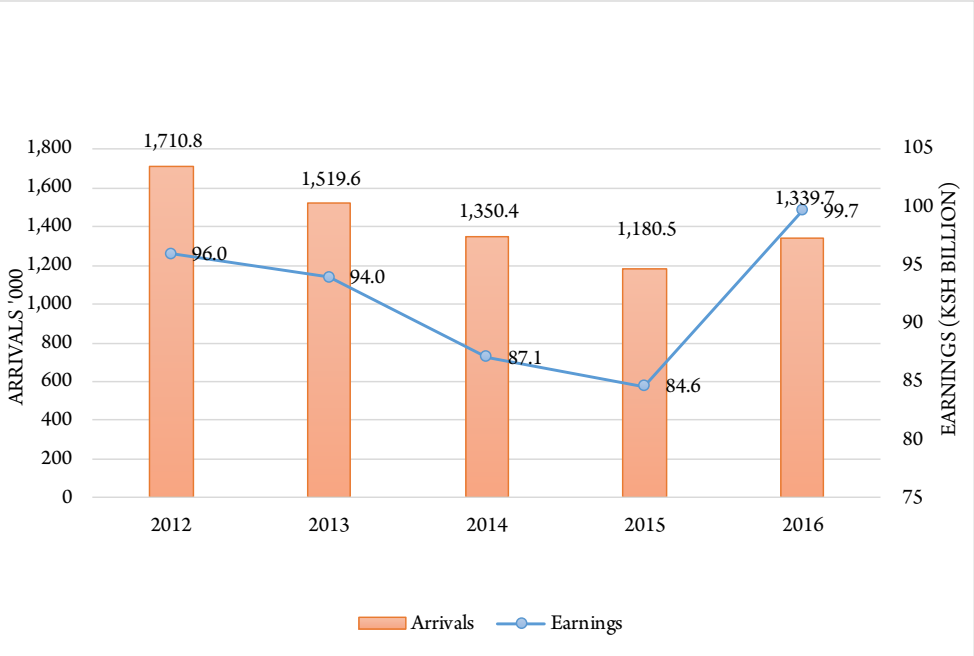
13.2. The number of hotel bed-nights occupancy rose by 9.7 per cent from 5,878.6 thousand in 2015 to 6,448.5 thousand in 2016. Local conferences held increased by 17.4 per cent from 3,199 in 2015 to 3,755 in 2016. Likewise, the number of international conferences held expanded by 4.1 per cent from 218 in 2015 to 227 in 2016. This may be attributed to the high profile international conferences hosted in the country during the year under review.

13.3. Museums, snake parks and historical sites reported a 15.7 per cent increase in the number of visitors, recording 923.1 thousand in 2016 compared to 797.5 thousand in 2015. Visitors to national parks and game reserves rose by 17.0 per cent to 2,284.7 thousand in 2016.

## Arrivals and Departures

13.4. The trend in the number of international visitor arrivals and tourism earnings from 2012 to 2016 is shown in Figure 13.1. In the year under review, the sector's performance recovered, reversing the downward trend observed since 2012. This is reflected in the tourism sector earnings, which increased significantly by 17.8 per cent from KSh 84.6 billion in 2015 to KSh 99.7 billion in 2016. In addition, the number of tourist arrivals went up by 13.5 per cent from 1,180.5 thousand in 2015 to 1,339.7 thousand in 2016.

**Figure 13.1: International Visitor Arrivals and Tourism Earnings, 2012 – 2016**



13.5. Monthly visitor arrivals through Moi International Airport (MIA) and Jomo Kenyatta International Airport (JKIA) for 2015 and 2016 are shown in Figures 13.2(a) and 13.2(b), respectively. The number of tourists who arrived through MIA and JKIA grew by 22.2 and 16.2 per cent, respectively, in 2016. Monthly visitor arrivals through MIA were higher in 2016 compared to 2015 for all the months except in January and April. Similarly, arrivals through JKIA were higher in most months of 2016 compared to 2015 except inMarch and October.

**Figure 13.2(a): Monthly Visitor Arrivals through MIA, 2015 -2016**

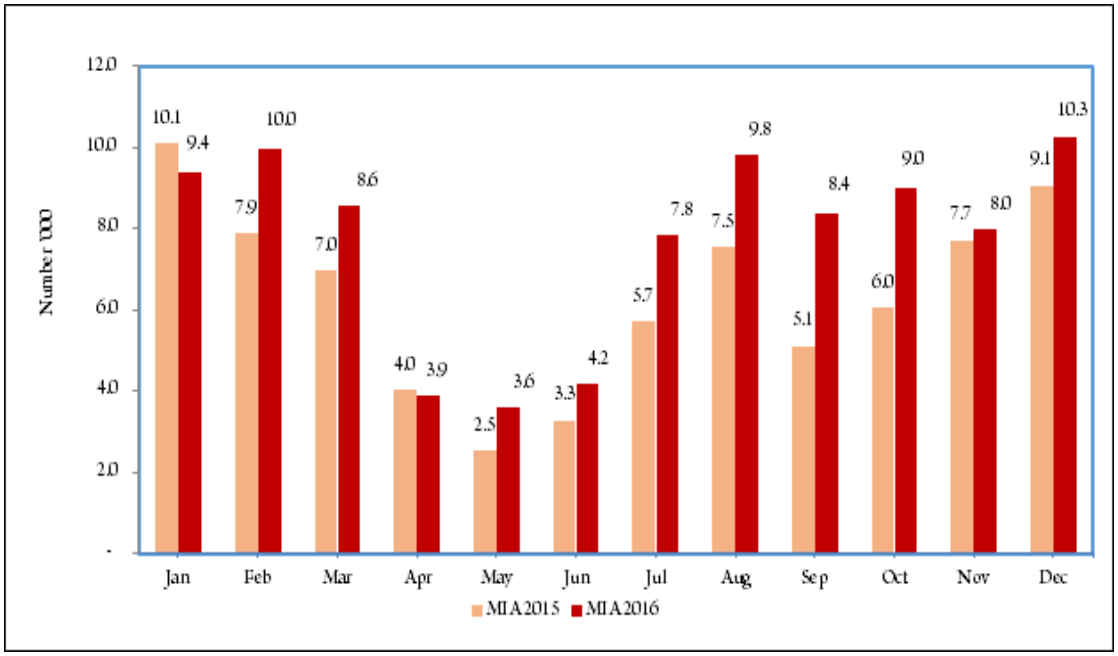
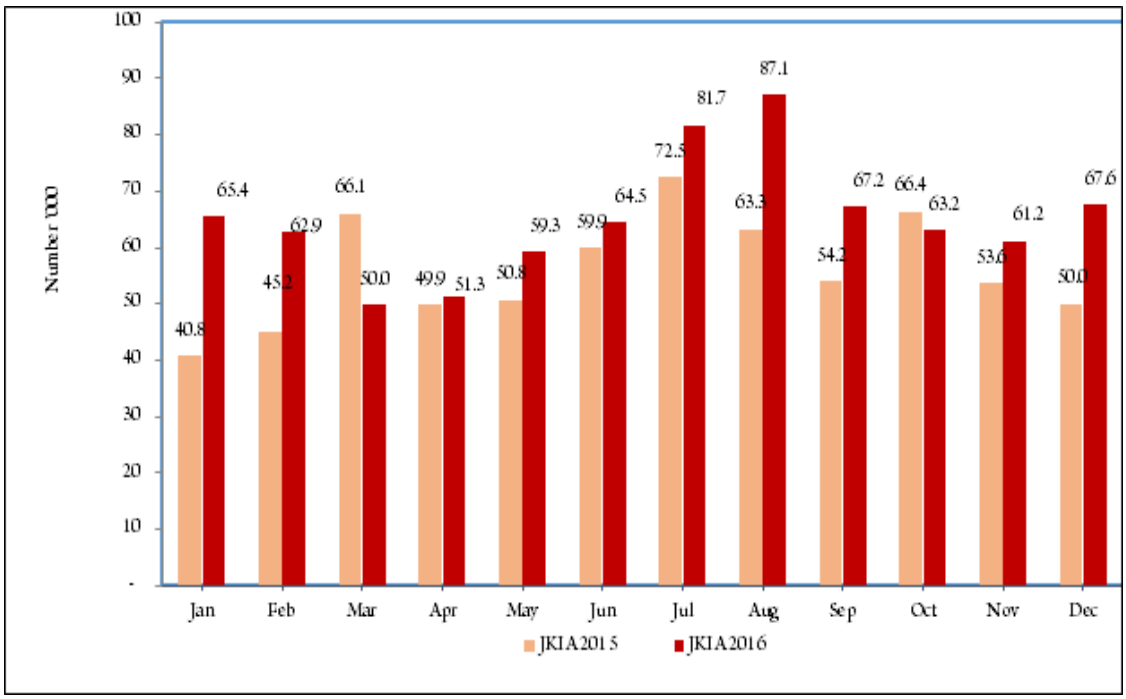
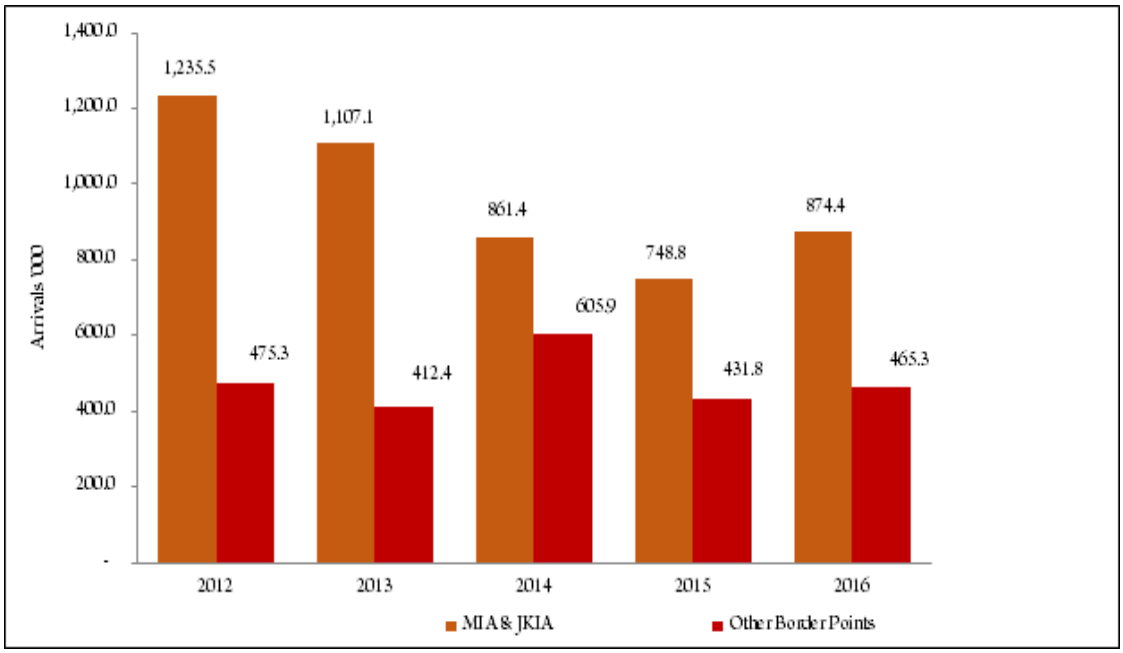



**Figure 13.2(b): Monthly Visitor Arrivals through JKIA, 2015 -2016**



13.6. The trend of international visitor arrivals through MIA and JKIA compared to other border points from 2012 to 2016 is shown in Figure 13.2(c). Visitor arrivals through MIA and JKIA grew by 16.8 per cent in 2016 compared to a decline of 13.1 per cent in 2015. Similarly, arrivals through the other border stations grew by 7.8 per cent to 465.3 thousand visitors in the year under review.

**Figure 13.2(c): Number of Visitor Arrivals through the two Major International Airports and other Border Points, 2012 -2016**




13.7. The number of international arrivals by purpose of visit and by quarter from 2012 to 2016 is shown in Table 13.1. The number of international arrivals went up by various margins across all the quarters in 2016. The growth in international arrivals was more pronounced in the third quarter, expanding from 322.1 thousand in third quarter of 2015 to 384.6 thousand over the same period in 2016. This may be attributed to the country hosting a number of high profile international conferences, including; the fourteenth session of the United Nations Conference on Trade and Development (UNCTAD 14) and the sixth Tokyo International Conference on African Development (TICAD VI). These developments led to an overall growth of 13.5 per cent in international visitor arrivals to 1,339.7 thousand in 2016. The number of visitor arrivals on holiday accounted for 71.9 per cent of all international arrivals, followed by business at 13.4 per cent as depicted in Figure 13.2(d).

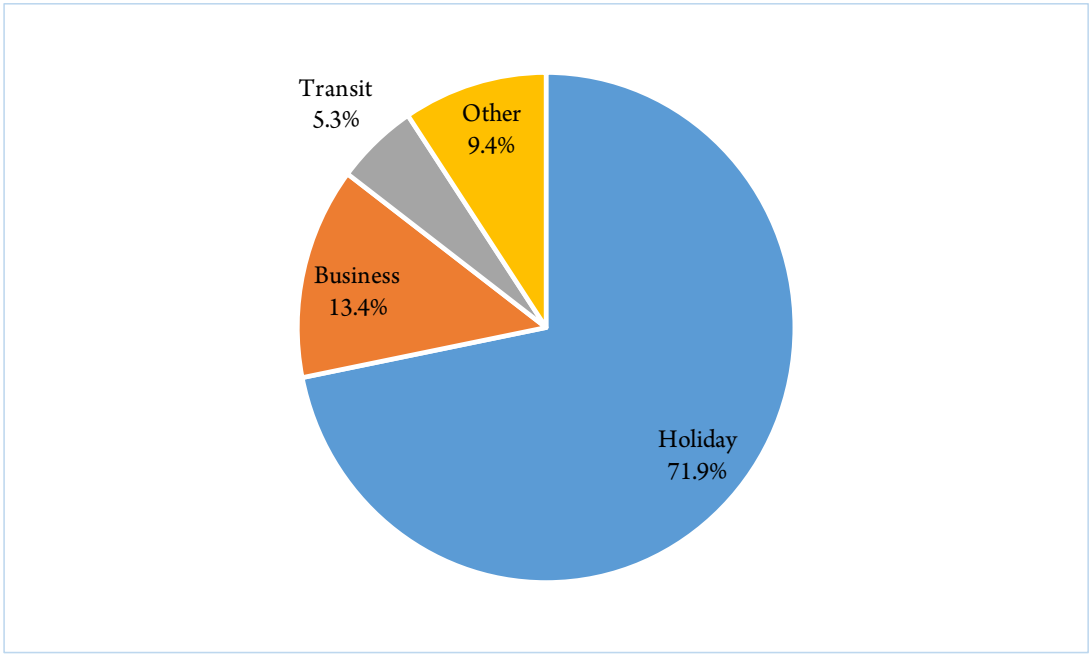
## Table 13.1: International Visitor Arrivals by Purpose of Visit, 2012-2016

'000

| Quarter | Purpose | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| 1st Qtr. | Holiday ... ... . | 317.0 | 257.6 | 266.2 | 210.1 | 231.3 |
| | Business ... ... | 68.4 | 45.9 | 50.1 | 41.3 | 41.5 |
| | Transit ... ... .. | 21.4 | 22.5 | 28.5 | 18.2 | 16.9 |
| | Other ... ... ... | 35.4 | 30.5 | 37.1 | 23.5 | 27.3 |
| | **TOTAL ... ...** | **442.2** | **356.4** | **382.0** | **293.1** | **317.0** |
| 2nd Qtr. | Holiday ... ... . | 240.1 | 222.0 | 207.0 | 171.8 | 199.4 |
| | Business ... ... | 58.8 | 47.3 | 38.5 | 42.5 | 45.1 |
| | Transit ... ... .. | 22.6 | 21.8 | 22.9 | 14.3 | 18.4 |
| | Other ... ... ... | 45.0 | 39.5 | 24.2 | 30.7 | 31.9 |
| | **TOTAL ... ...** | **366.5** | **330.6** | **292.5** | **259.3** | **294.8** |
| 3rd Qtr. | Holiday ... ... . | 323.6 | 284.2 | 267.9 | 231.4 | 278.3 |
| | Business ... ... | 55.7 | 41.7 | 43.0 | 37.2 | 53.4 |
| | Transit ... ... .. | 27.0 | 20.8 | 22.2 | 19.6 | 17.4 |
| | Other ... ... ... | 52.8 | 35.5 | 36.7 | 34.0 | 35.6 |
| | **TOTAL ... ...** | **459.1** | **382.2** | **369.8** | **322.1** | **384.6** |
| 4th Qtr. | Holiday ... ... . | 338.5 | 340.1 | 235.7 | 231.5 | 253.6 |
| | Business ... ... | 53.2 | 55.3 | 35.3 | 37.5 | 40.0 |
| | Transit ... ... .. | 20.9 | 21.1 | 15.5 | 14.3 | 18.8 |
| | Other ... ... ... | 30.6 | 34.0 | 19.5 | 22.6 | 30.8 |
| | **TOTAL ... ...** | **443.1** | **450.4** | **306.1** | **306.0** | **343.3** |
| Annual | Holiday ... ... . | 1,219.1 | 1,103.8 | 976.9 | 844.8 | 962.6 |
| | Business ... ... | 236.1 | 190.2 | 166.9 | 158.6 | 180.0 |
| | Transit ... ... .. | 91.8 | 86.1 | 89.2 | 66.4 | 71.5 |
| | Other ... ... ... | 163.8 | 139.5 | 117.5 | 110.7 | 125.6 |
| | **TOTAL ... ...** | **1,710.8** | **1,519.6** | **1,350.4** | **1,180.5** | **1,339.7** |

*Provisional

## Figure 13.2(d): The share of International Arrivals by Purpose of Visit, 2016



13.8. Table 13.2 shows that the total number of international departures declined marginally from 1,347.6 thousand in 2015 to 1,341.2 thousand in 2016. Departures in the first and fourth quarters of 2016 went up by 3.6 per cent and 4.8 per cent, respectively. On the contrary, the second and third quarters recorded declines of 2.5 per cent and 6.5 per cent in visitor departures, respectively, in 2016.

**Table 13.2: International Visitor Departures by Purpose of Visit, 2012 - 2016**

'000

| Period | Purpose | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| 1st Quarter | Holiday ... ... ... ... .. | 281.7 | 264.0 | 234.6 | 222.9 | 215.1 |
| | Business ... ... ... ... .. | 54.1 | 51.7 | 53.6 | 43.8 | 51.2 |
| | Transit ... ... ... ... ... | 25.2 | 21.4 | 33.7 | 19.3 | 23.2 |
| | Other ... ... ... ... ... . | 29.2 | 33.8 | 40.1 | 24.9 | 32.7 |
| | **TOTAL ... ... ... ... .** | **390.1** | **370.9** | **362.0** | **310.9** | **322.2** |
| 2nd Quarter | Holiday ... ... ... ... .. | 216.0 | 206.8 | 205.6 | 211.4 | 210.3 |
| | Business ... ... ... ... .. | 53.7 | 57.1 | 45.6 | 52.3 | 47.6 |
| | Transit ... ... ... ... ... | 18.4 | 17.3 | 23.7 | 17.6 | 19.4 |
| | Other ... ... ... ... ... . | 37.0 | 26.8 | 37.0 | 37.7 | 33.6 |
| | **TOTAL ... ... ... ... .** | **325.1** | **308.0** | **312.0** | **319.1** | **311.0** |
| 3rd Quarter | Holiday ... ... ... ... .. | 297.6 | 265.7 | 244.9 | 257.9 | 251.7 |
| | Business ... ... ... ... .. | 46.0 | 40.5 | 45.7 | 44.7 | 50.2 |
| | Transit ... ... ... ... ... | 23.0 | 20.2 | 24.4 | 23.5 | 16.3 |
| | Other ... ... ... ... ... . | 49.9 | 44.4 | 40.4 | 60.8 | 43.5 |
| | **TOTAL ... ... ... ... .** | **416.4** | **370.7** | **355.4** | **386.9** | **361.7** |
| 4th Quarter | Holiday ... ... ... ... .. | 289.4 | 323.3 | 260.3 | 250.1 | 260.8 |
| | Business ... ... ... ... .. | 47.8 | 53.0 | 48.1 | 40.6 | 40.4 |
| | Transit ... ... ... ... ... | 18.4 | 23.2 | 25.7 | 15.5 | 19.0 |
| | Other ... ... ... ... ... . | 28.5 | 32.6 | 40.1 | 24.4 | 26.1 |
| | **TOTAL ... ... ... ... .** | **384.1** | **432.1** | **374.3** | **330.6** | **346.3** |
| Annual | Holiday ... ... ... ... .. | 1,084.6 | 1,059.8 | 945.5 | 942.4 | 937.9 |
| | Business ... ... ... ... .. | 201.5 | 202.3 | 193.0 | 181.4 | 189.3 |
| | Transit ... ... ... ... ... | 85.1 | 82.1 | 107.6 | 75.9 | 78.0 |
| | Other ... ... ... ... ... . | 144.6 | 137.6 | 157.6 | 147.9 | 136.0 |
| | **TOTAL ... ... ... ... .** | **1,515.7** | **1,481.8** | **1,403.7** | **1,347.6** | **1,341.2** |

*Provisional

13.9. The number of departing visitors by country of residence and purpose of visit is presented in Table 13.3. Departures destined for France and Other European countries recorded the highest growths of 10.1 per cent and 8.2 per cent, respectively. On the contrary, departures to Canada and Switzerland declined by 13.5 per cent and 9.8 per cent, respectively, in 2016. Departures to African destinations excluding Tanzania and Uganda decreased by 7.1 per cent to 225.0 thousand in 2016.

## Table 13.3: Departing Visitors by Country of Residence and Purpose of Visit[1], 2014-2016

'000

| Country of Residence | Holiday | | | Business | | | Transit | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2014 | 2015 | 2016* | 2014 | 2015 | 2016* | 2014 | 2015 | 2016* | 2014 | 2015 | 2016* |
| Germany | 99.1 | 79.3 | 81.0 | 10.9 | 9.1 | 9.3 | 6.1 | 4.8 | 5.0 | 116.1 | 93.3 | 95.2 |
| United Kingdom | 128.6 | 132.2 | 129.6 | 26.3 | 28.0 | 25.8 | 14.6 | 10.0 | 11.3 | 169.5 | 170.1 | 166.7 |
| Switzerland | 10.7 | 11.3 | 9.3 | 2.2 | 2.1 | 1.8 | 1.2 | 0.9 | 1.9 | 14.1 | 14.3 | 12.9 |
| Italy | 56.1 | 40.4 | 42.3 | 11.4 | 7.5 | 7.4 | 6.4 | 3.1 | 4.0 | 73.9 | 51.1 | 53.7 |
| France | 20.8 | 21.3 | 23.2 | 4.2 | 4.0 | 4.3 | 2.4 | 1.7 | 2.2 | 27.4 | 27.0 | 29.8 |
| Scandinavia | 52.4 | 31.3 | 33.1 | 10.7 | 5.8 | 6.0 | 6.0 | 2.4 | 3.0 | 69.0 | 39.5 | 42.1 |
| Other Europe | 69.4 | 65.6 | 70.3 | 14.2 | 14.0 | 16.1 | 7.9 | 5.9 | 6.0 | 91.5 | 85.5 | 92.5 |
| **TOTAL EUROPE** | **437.1** | **381.5** | **388.7** | **79.9** | **70.5** | **70.7** | **44.6** | **28.8** | **33.4** | **561.6** | **480.7** | **492.8** |
| USA | 104.0 | 116.8 | 118.3 | 21.2 | 15.5 | 17.4 | 11.8 | 8.4 | 8.6 | 137.0 | 140.8 | 144.4 |
| Canada | 23.8 | 22.5 | 19.4 | 4.9 | 4.7 | 4.3 | 2.7 | 1.7 | 1.2 | 31.4 | 28.9 | 25.0 |
| **TOTAL NORTH AMERICA** | **127.8** | **139.3** | **137.7** | **26.1** | **20.2** | **21.8** | **14.5** | **10.1** | **9.9** | **168.4** | **169.6** | **169.3** |
| Uganda | 34.7 | 37.5 | 39.3 | 7.1 | 9.4 | 9.6 | 3.9 | 3.0 | 4.0 | 45.7 | 49.8 | 53.0 |
| Tanzania | 23.6 | 23.1 | 26.0 | 4.8 | 4.4 | 5.0 | 2.7 | 1.8 | 2.0 | 31.0 | 29.3 | 33.0 |
| Other Africa | 165.5 | 191.0 | 177.1 | 33.8 | 36.0 | 39.8 | 18.8 | 15.1 | 8.1 | 218.1 | 242.1 | 225.0 |
| **TOTAL AFRICA** | **223.7** | **251.7** | **242.5** | **45.7** | **49.7** | **54.5** | **25.5** | **19.8** | **14.1** | **294.9** | **321.2** | **311.1** |
| India | 60.3 | 63.6 | 65.3 | 12.3 | 12.0 | 13.9 | 6.9 | 5.0 | 5.2 | 79.5 | 80.6 | 84.4 |
| Japan | 9.8 | 8.3 | 8.5 | 2.0 | 1.6 | 1.7 | 1.1 | 0.7 | 1.2 | 12.9 | 10.5 | 11.4 |
| Israel | 3.1 | 3.0 | 2.7 | 0.6 | 2.6 | 2.3 | 0.4 | 0.2 | 1.0 | 4.1 | 5.8 | 5.9 |
| Other Asia | 53.5 | 62.3 | 60.7 | 20.2 | 17.7 | 17.3 | 11.3 | 4.9 | 7.7 | 85.0 | 84.9 | 85.8 |
| **TOTAL ASIA** | **126.7** | **137.2** | **137.2** | **35.2** | **33.9** | **35.2** | **19.6** | **10.8** | **15.1** | **181.5** | **181.9** | **187.5** |
| Australia and New Zealand | 21.7 | 18.3 | 20.2 | 4.4 | 3.4 | 3.2 | 2.5 | 1.4 | 2.5 | 28.6 | 23.2 | 25.9 |
| All Other Countries | 8.5 | 14.4 | 11.7 | 1.7 | 3.7 | 3.9 | 1.0 | 4.9 | 3.0 | 11.1 | 23.0 | 18.6 |
| **TOTAL** | **945.5** | **942.4** | **937.9** | **193.0** | **181.4** | **189.3** | **107.6** | **75.9** | **78.0** | **1,246.1** | **1,199.7** | **1,205.2** |

* Provisional

[1]Excludes visitors whose purpose of visit is "Other"

13.10. Table 13.4 presents the number of visitor-days stayed by purpose of visit together with average length of stay. The total number of days stayed by all categories of departing visitors excluding other visitors expanded marginally from 15,837.0 thousand in 2015 to 15,884.6 thousand in 2016 mainly due to an increase in the number of holiday and business visitors. The average length of stay remained unchanged in 2016 compared to the previous year.

## Table 13.4: Number of Visitor-Days Stayed[1] by Purpose of Visit, 2012 -2016

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| Purpose | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Holiday | 15,229.7 | 14,881.8 | 13,276.2 | 13,232.9 | 13,170.5 |
| Business | 2,681.1 | 2,691.6 | 2,568.1 | 2,413.7 | 2,518.6 |
| Transit | 213.4 | 205.9 | 270.0 | 190.3 | 195.5 |
| **TOTAL** | **18,124.2** | **17,779.3** | **16,114.3** | **15,837.0** | **15,884.6** |
| Average length of stay in days | 13.2 | 13.2 | 12.9 | 13.2 | 13.2 |

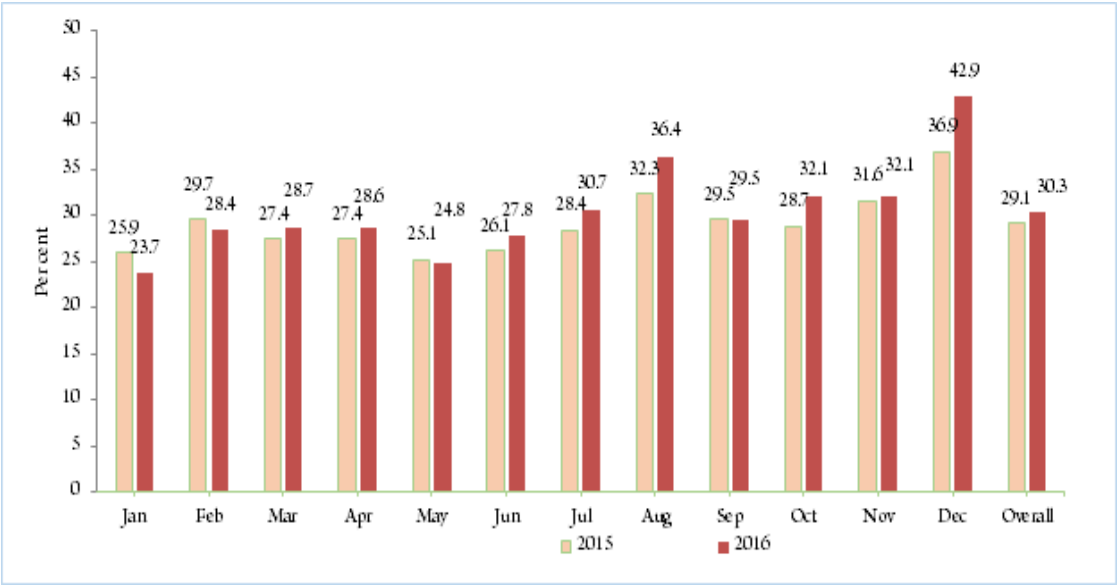
* Provisional

[1]Excludes visitors whose purpose of visit is "Other"

**Hotel Occupancy by Country of Residence**

13.11. Figure13.3 illustrates monthly bed occupancy rates for 2015 and 2016. Annual average bed occupancy increased from 29.1 per cent in 2015 to 30.3 percent in 2016. Bed occupancy rate was higher in 2016 compared to 2015 in most months except January, February and May. It was noted that bed occupancy rates remained unchanged in the month of September in 2016 compared to 2015.

**Figure 13.3: Monthly Bed Occupancy Rates, 2015- 2016**




13.12. The details of the number of hotel bed-nights occupancy by country of residence for the period 2012 to 2016 is shown in Table 13.5. Occupancy in hotels, lodges and other rooming houses grew by 9.7 per cent to 6,448.5 thousand in 2016. Bed occupancy by residents of Europe went up by 13.3 per cent in 2016. The highest rise of 43.3 per cent was witnessed for residents of "Other Europe" from 240.4 thousand in 2015 to 344.4 thousand in 2016. Growth in bed occupancy by residents of France followed at 34.0 per cent from 67.1 thousand in 2015 to 89.9 thousand in year under review. Africa accounted for 61.2 per cent of the total occupancy in hotels, lodges and other rooming houses, during the review period. The bed occupancy of residents from Africa grew by 9.1 per cent to 3,948.5 thousand in 2016 with the highest increase of 10.8 per cent in the number of Kenya residents. However, residents of West Africa, South Africa and Other Africa dropped in number of hotel bed-nights occupancy. The number of Asian residents grew by 16.3 per cent from 332.1 thousand in 2015 to 386.2 thousand in 2016 with Chinese bed-occupancy increasing from 82.6 thousand in 2015 to 131.9 thousand in 2016. The number of hotel bed-nights capacity grew by 5.3 per cent from 20,187.2 thousand in 2015 to 21,258.5 thousand in 2016 mainly due to completion of new hotels in the period under review.

**Table 13.5: Hotel Bed - Nights Occupancy by Country of Residence, 2012-2016**

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| Country of Residence | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Permanent Occupants[1] | 46.3 | 57.6 | 98.7 | 102.3 | 87.0 |
| Germany | 748.9 | 751.1 | 751.7 | 617.9 | 685.4 |
| Switzerland | 98.2 | 96.9 | 82.1 | 80.2 | 63.2 |
| United Kingdom | 521.6 | 498.3 | 275.0 | 224.5 | 211.6 |
| Italy | 415.5 | 234.8 | 156.2 | 74.1 | 88.3 |
| France | 160.0 | 113.9 | 75.6 | 67.1 | 89.9 |
| Scandinavia | 154.5 | 143.5 | 120.0 | 71.9 | 76.5 |
| Other Europe | 448.5 | 482.2 | 341.5 | 240.4 | 344.4 |
| **EUROPE** | **2,547.2** | **2,320.6** | **1,802.2** | **1,376.1** | **1,559.3** |
| Kenya Residents | 2,787.7 | 2,699.1 | 2,948.7 | 3,154.1 | 3,495.9 |
| Uganda | 81.8 | 110.2 | 67.7 | 76.0 | 77.4 |
| Tanzania | 69.2 | 64.5 | 62.0 | 55.7 | 58.3 |
| East and Central Africa | 115.9 | 104.3 | 101.3 | 102.3 | 105.3 |
| West Africa | 55.9 | 63.3 | 68.0 | 60.7 | 59.3 |
| North Africa | 23.9 | 29.0 | 37.3 | 24.9 | 32.0 |
| South Africa | 88.2 | 91.1 | 75.2 | 88.0 | 70.6 |
| Other Africa | 40.7 | 37.5 | 37.0 | 57.7 | 49.8 |
| **AFRICA** | **3,263.3** | **3,199.0** | **3,397.2** | **3,619.3** | **3,948.5** |
| U.S.A | 291.5 | 294.6 | 293.9 | 248.5 | 254.3 |
| Canada | 55.9 | 61.8 | 59.9 | 46.4 | 43.3 |
| Other America | 40.1 | 36.8 | 35.2 | 37.0 | 25.6 |
| **AMERICA** | **387.4** | **393.3** | **389.0** | **331.9** | **323.2** |
| Japan | 41.9 | 48.1 | 38.9 | 33.3 | 39.1 |
| India | 110.3 | 101.1 | 110.3 | 115.1 | 120.3 |
| Middle East | 50.2 | 50.6 | 57.4 | 55.8 | 49.4 |
| China | 114.0 | 105.9 | 92.1 | 82.6 | 131.9 |
| Other Asia | 68.2 | 54.4 | 49.4 | 45.2 | 45.5 |
| **ASIA** | **384.5** | **360.1** | **348.1** | **332.1** | **386.2** |
| Australia and New Zealand | 56.9 | 62.3 | 58.4 | 44.3 | 46.9 |
| All Other Countries | 175.2 | 203.9 | 188.0 | 72.6 | 97.5 |
| **TOTAL OCCUPIED** | **6,860.8** | **6,596.7** | **6,281.6** | **5,878.6** | **6,448.5** |
| **TOTAL AVAILABLE** | **18,849.6** | **18,292.2** | **19,877.2** | **20,187.2** | **21,258.5** |
| **Occupancy rate %** | **36.4** | **36.1** | **31.6** | **29.1** | **30.3** |

*Provisional

[1]Persons staying one month or more in one hotel, including some block bookings for air crew

13.13. Hotel bed-nights occupancy by zone for the period 2012 to 2016 is shown in Table 13.6. The number of hotel bed-nights spent in the coastal beach zone experienced a slower growth of 8.2 per cent from 2,113.8 thousand in 2015 to 2,286.3 thousand in 2016 compared with coastal other and coastal hinterland that grew by 69.1 and 63.8 per cent, respectively, over the same period. Similarly, occupancy in Nairobi-high class also registered a 6.0 per cent growth from 1,014.9 thousand in 2015 to 1,076.3 thousand in 2016. This is attributable to the growth in the number of conferences that were held in the City. Decreases in hotel bed-nights were recorded in Nyanza Basin and Northern zones.

**Table 13.6: Hotel Bed-Nights by Zone, 2012-2016**

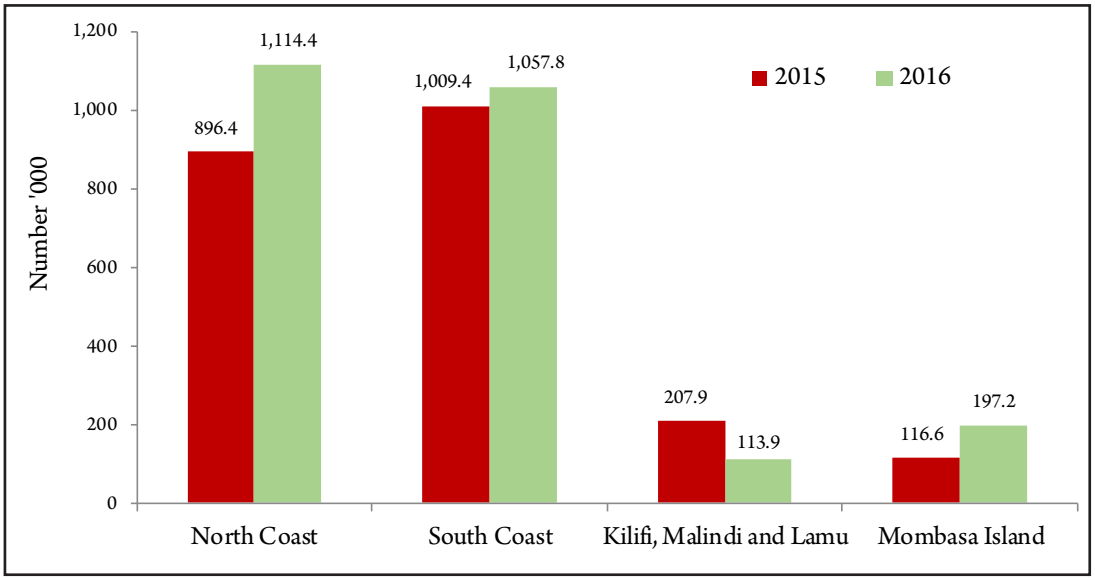
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| Zone | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Coastal-Beach | 3,132.6 | 2,750.3 | 2,527.7 | 2,113.8 | 2,286.3 |
| Coastal-Other | 260.0 | 124.0 | 95.9 | 116.6 | 197.2 |
| Coastal Hinterland | 88.7 | 125.5 | 133.2 | 108.4 | 177.5 |
| Nairobi-High Class | 1,145.0 | 1,175.3 | 1,119.1 | 1,014.9 | 1,076.3 |
| Nairobi-Other | 490.5 | 455.7 | 388.0 | 378.0 | 445.1 |
| Central | 526.0 | 622.2 | 686.3 | 583.6 | 691.6 |
| Masailand | 443.7 | 473.0 | 479.5 | 491.6 | 655.5 |
| Nyanza Basin | 252.1 | 345.3 | 357.7 | 487.8 | 325.4 |
| Western | 464.3 | 454.1 | 433.3 | 448.8 | 493.6 |
| Northern | 57.8 | 71.2 | 60.9 | 135.1 | 100.0 |
| **TOTAL OCCUPIED** | **6,860.8** | **6,596.7** | **6,281.6** | **5,878.6** | **6,448.5** |
| **TOTAL AVAILABLE** | **18,849.6** | **18,292.2** | **19,877.2** | **20,187.2** | **21,258.5** |

*Provisional

13.14. Figure 13.4 presents the number of bed-nights occupied at the coast by zone in 2015 and 2016. The North Coast was the most preferred destination compared with the South Coast in 2016, in contrast to the previous year. The bed-nights occupancy in the North Coast rose from 896.4 thousand in 2015 to 1,114.4 thousand in 2016. Likewise, the bed-nights occupancy in the South Coast rose from 1,009.4 thousand in 2015 to 1,057.8 thousand in 2016. Similarly, Mombasa Island improved from 116.6 thousand in 2015 to 197.2 thousand bed-nights occupancy in 2016. However, bed-nights occupancy in Kilifi, Malindi and Lamu shrank, due to security concerns.

**Figure 13.4: Bed-Nights Occupancy at the Coast, 2015 – 2016**




13.15. A summary of bed-nights occupied by area and country of residence is presented in Table 13.7. The share of hotel bed-nights occupied in lodges expanded from 10.7 per cent in 2015 to 11.7 per cent in 2016. The number of bed-nights occupied by United States of America residents in the lodges increased from 66.2 thousand in 2015 to 82.1 thousand in 2016. Similarly, the number of bed-nights occupied by Chinese residents in the lodges increased from 34.1 thousand in 2015 to 70.2 thousand in 2016. A notable improvement was recorded in the Coast region with residents from Kenya and Germany continuing to lead, at 1,364.6 thousand and 615.2 thousand, respectively, in 2016. The percentage share of Nairobi bed-nights occupied declined marginally from 23.7 to 23.6 per cent in 2016. The importance

of domestic tourism is underscored by the fact that Kenyan residents occupied more than a half of the total bed-nights, in 2016.

**Table 13.7: Hotel Bed-Nights Occupancy by Area and Country of Residence, 2015-2016**

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| Country of Residence | Nairobi | | Coast | | Lodges | | Others | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2015 | 2016* | 2015 | 2016* | 2015 | 2016* | 2015 | 2016* | 2015 | 2016* |
| Permanent Occupants[1] | 3.6 | 10.7 | 41.8 | 12.0 | 1.6 | 2.1 | 55.3 | 62.2 | 102.3 | 87.0 |
| Germany | 24.1 | 31.4 | 562.2 | 615.2 | 18.7 | 29.8 | 12.9 | 9.0 | 617.9 | 685.4 |
| Switzerland | 11.6 | 8.4 | 58.2 | 45.8 | 5.2 | 5.9 | 5.1 | 3.1 | 80.2 | 63.2 |
| United Kingdom | 89.0 | 69.3 | 84.6 | 90.1 | 24.8 | 38.4 | 26.0 | 13.8 | 224.5 | 211.6 |
| Italy | 12.8 | 10.0 | 47.8 | 68.0 | 6.5 | 7.9 | 7.1 | 2.4 | 74.1 | 88.3 |
| France | 23.2 | 22.3 | 24.6 | 51.5 | 9.9 | 11.2 | 9.5 | 4.8 | 67.1 | 89.9 |
| Scandinavia | 24.6 | 20.6 | 25.4 | 35.0 | 12.3 | 13.5 | 9.7 | 7.5 | 71.9 | 76.5 |
| Other Europe | 66.6 | 84.9 | 125.3 | 199.7 | 36.3 | 48.7 | 12.3 | 11.1 | 240.4 | 344.4 |
| Kenya | 476.7 | 574.8 | 1,191.3 | 1,364.6 | 300.9 | 300.7 | 1,185.1 | 1,255.9 | 3,154.1 | 3,495.9 |
| Uganda | 36.4 | 46.5 | 15.8 | 14.4 | 1.1 | 1.5 | 22.6 | 15.0 | 76.0 | 77.4 |
| Tanzania | 31.4 | 38.3 | 11.1 | 10.7 | 1.6 | 2.2 | 11.6 | 7.0 | 55.7 | 58.3 |
| East & Central Africa | 79.0 | 86.9 | 11.1 | 12.8 | 2.1 | 0.9 | 10.2 | 4.6 | 102.3 | 105.3 |
| West Africa | 43.3 | 50.4 | 9.2 | 5.1 | 1.4 | 1.5 | 6.9 | 2.2 | 60.7 | 59.3 |
| North Africa | 15.4 | 26.1 | 4.1 | 2.6 | 1.2 | 1.3 | 4.3 | 1.9 | 24.9 | 32.0 |
| South Africa | 64.7 | 53.8 | 10.7 | 7.2 | 2.8 | 3.6 | 9.8 | 6.0 | 88.0 | 70.6 |
| Other Africa | 39.5 | 35.8 | 8.7 | 4.3 | 2.2 | 3.9 | 7.2 | 5.7 | 57.7 | 49.8 |
| USA | 128.4 | 127.5 | 19.1 | 21.3 | 66.2 | 82.1 | 34.9 | 23.4 | 248.5 | 254.3 |
| Canada | 21.0 | 18.6 | 6.2 | 6.9 | 11.6 | 14.3 | 7.6 | 3.6 | 46.4 | 43.3 |
| Other America | 18.4 | 10.4 | 4.1 | 3.3 | 4.9 | 8.3 | 9.6 | 3.5 | 37.0 | 25.6 |
| Japan | 12.1 | 19.4 | 5.2 | 2.9 | 5.2 | 9.5 | 10.7 | 7.4 | 33.3 | 39.1 |
| India | 53.7 | 44.0 | 13.6 | 19.0 | 33.6 | 41.9 | 14.2 | 15.3 | 115.1 | 120.3 |
| Middle East | 26.9 | 24.2 | 14.7 | 11.1 | 5.0 | 8.4 | 9.2 | 5.7 | 55.8 | 49.4 |
| China | 21.6 | 24.3 | 13.5 | 14.9 | 34.1 | 70.2 | 13.5 | 22.4 | 82.6 | 131.9 |
| Other Asia | 21.0 | 21.4 | 8.8 | 6.8 | 7.5 | 13.0 | 8.0 | 4.4 | 45.2 | 45.5 |
| Australia & New Zealand | 16.2 | 18.3 | 7.0 | 7.0 | 14.5 | 17.0 | 6.5 | 4.6 | 44.3 | 46.9 |
| All Other Countries | 31.8 | 42.9 | 15.0 | 28.9 | 15.5 | 17.7 | 10.4 | 8.0 | 72.6 | 97.5 |
| **TOTAL** | **1,393.0** | **1,521.4** | **2,338.8** | **2,661.1** | **626.7** | **755.4** | **1,520.2** | **1,510.6** | **5,878.6** | **6,448.5** |
| **PERCENTAGE SHARE** | **23.7** | **23.6** | **39.8** | **41.3** | **10.7** | **11.7** | **25.9** | **23.4** | **100.0** | **100.0** |

* Provisional

[1]Persons staying one month or more in one hotel, including some block bookings for air crew

13.16. The number of bed-nights occupancy in game lodges and type of catering offered to foreign and East African residents is presented in Table 13.8. Occupancy in hotel establishments located in these areas improved significantly from 626.7 thousand in 2015 to 755.4 thousand in 2016, representing 20.5 per cent rise. This was occasioned by the increase in the number of visitors to national parks and game reserves. The number of bed-nights occupied by foreign residents grew by 39.6 per cent to 451.1 thousand in 2016. Similarly, bed-nights occupied by East African residents grew marginally from 303.7 thousand in 2015 to 304.4 thousand in 2016. The number of foreign residents that opted for full catering services went up from 304.6 thousand in 2015 to 382.3 thousand in 2016.

**Table 13.8: Game Lodges[1] Occupancy, 2014 – 2016**

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| | Bed-Nights Occupied | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Foreign Residents | | | E.A. Residents | | | Total | | |
| | 2014 | 2015 | 2016* | 2014 | 2015 | 2016* | 2014 | 2015 | 2016* |
| Game Reserves ... ... ... ... ... | 106.2 | 117.3 | 176.5 | 69.9 | 175.7 | 187.7 | 176.1 | 293.0 | 364.2 |
| National Parks ... ... ... ... ... .. | 260.3 | 205.8 | 274.6 | 104.0 | 128.0 | 116.6 | 364.3 | 333.7 | 391.2 |
| **TOTAL ... ... ... ... ... ... ... ...** | **366.5** | **323.1** | **451.1** | **173.9** | **303.7** | **304.4** | **540.4** | **626.7** | **755.4** |
| Of which full Catering ... ... ... | 311.5 | 304.6 | 382.3 | 132.6 | 230.8 | 217.2 | 444.1 | 535.4 | 599.5 |
| Self Service ... ... ... ... ... ... .. | 55.0 | 18.5 | 68.7 | 41.3 | 72.8 | 87.2 | 96.3 | 91.3 | 155.9 |

*Provisional

[1]Lodges in National Parks and Game Reserves

**National Parks and Game Reserves**

13.17. The number of visitors to national parks and game reserves from 2012 to 2016 is presented in Table 13.9. Nairobi Mini Orphanage, Impala Sanctuary, Lake Nakuru, Nairobi Park, Nairobi Safari Walk and Masai Mara jointly accounted for 57.4 per cent of the total number of visitors to national parks and game reserves, in 2016. The number of visitors rose by 17.0 per cent to 2,284.7 thousand in 2016, partly due to increased arrivals in the year under review. All the national parks and game reserves recorded increases in number of visitors except in the Masai Mara game reserve. Tsavo West and Watamu marine national parks recorded major recoveries from their long term trend increasing by 58.2 per cent and 39.9 per cent, respectively, in 2016. Kisite/Mpunguti and Amboseli national parks followed by 38.7 and 31.9 per cent, respectively, in the year under review.

**Table 13.9: Number of Visitors to National Parks and Game Reserves, 2012-2016**

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| Park/Reserve | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Nairobi | 151.1 | 154.7 | 131.8 | 133.1 | 153.1 |
| Nairobi Safari Walk | 147.2 | 136.0 | 133.0 | 139.2 | 149.3 |
| Nairobi Mini Orphanage | 474.6 | 407.4 | 361.3 | 328.2 | 390.4 |
| Amboseli | 141.4 | 141.2 | 117.1 | 86.9 | 114.6 |
| Tsavo (West) | 70.9 | 68.8 | 51.0 | 31.8 | 50.2 |
| Tsavo (East) | 176.7 | 153.2 | 103.2 | 75.2 | 84.8 |
| Aberdare | 44.3 | 50.1 | 43.8 | 34.7 | 41.3 |
| Lake Nakuru | 253.5 | 262.5 | 226.0 | 188.9 | 214.7 |
| Masai Mara | 102.0 | 103.8 | 166.0 | 146.9 | 146.3 |
| Haller's Park | 125.5 | 121.5 | 116.2 | 115.4 | 121.1 |
| Malindi Marine | 40.8 | 41.9 | 28.9 | 29.3 | 31.5 |
| Lake Bogoria | 114.6 | 91.5 | 80.5 | 71.4 | 90.8 |
| Meru | 17.8 | 14.7 | 19.2 | 17.3 | 19.8 |
| Shimba Hills | 26.1 | 23.2 | 17.6 | 17.2 | 21.2 |
| Mt. Kenya | 27.5 | 24.6 | 20.2 | 18.5 | 19.1 |
| Samburu | 15.0 | 13.5 | 15.4 | 8.5 | 10.8 |
| Kisite/Mpunguti | 48.4 | 44.7 | 29.7 | 24.8 | 34.4 |
| Mombasa Marine | 34.6 | 36.8 | 27.4 | 26.2 | 29.5 |
| Watamu Marine | 36.3 | 35.1 | 31.3 | 24.3 | 33.9 |
| Hell's Gate | 95.4 | 89.0 | 114.1 | 120.2 | 154.4 |
| Impala Sanctuary (Kisumu) | 247.0 | 222.3 | 227.6 | 212.1 | 256.5 |
| Mt. Longonot | 44.1 | 43.6 | 50.7 | 53.3 | 64.5 |
| Other[1] | 57.5 | 57.5 | 52.6 | 49.5 | 52.6 |
| **TOTAL** | **2,492.2** | **2,337.7** | **2,164.6** | **1,952.8** | **2,284.7** |

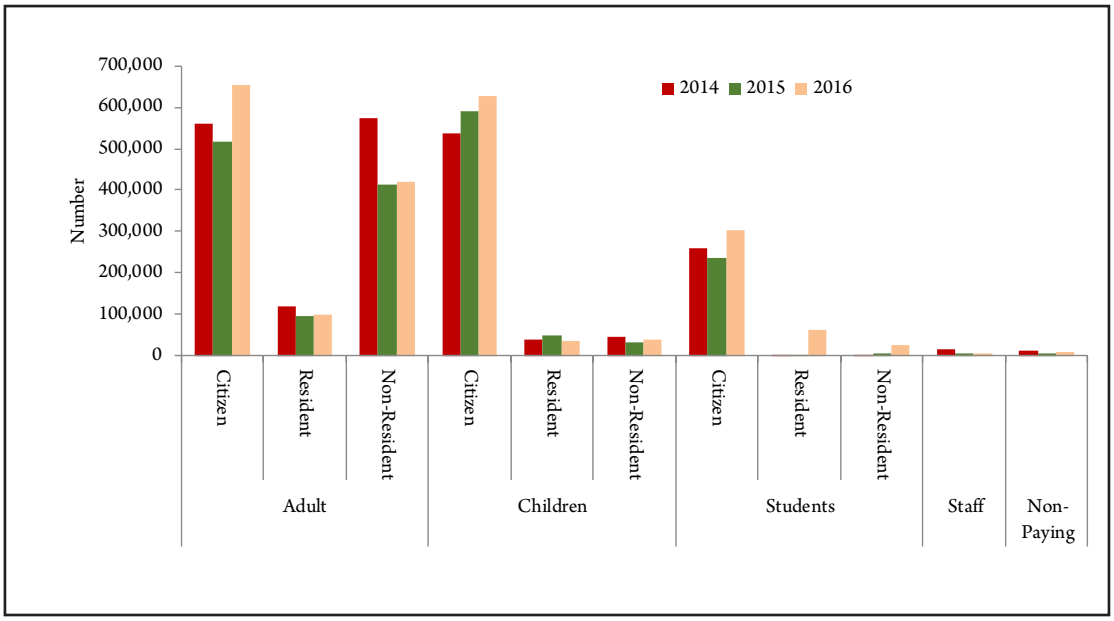
Source: Kenya Wildlife Services

* Provisional

[1]Other 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.

13.18. Citizen adults and children continued to dominate the number of visitors to in the adults and children categories respectively, in 2016 as depicted in Figure 13.5. Among the non-resident, citizen adults are more likely to visit national parks and game reserves.

**Figure 13.5: Visitors to National Parks and Game Reserves, 2014-2016**




***Note: Residents refers to foreign residents who are non-residents expecting and/or have stayed in Kenya for more than 12 months***

**Museums, Snake Parks and Historical Sites**

13.19. Table 13.10 presents the number of visitors to museums, snake parks and historical sites. The number of visitors to these facilities increased from 797.5 thousand in 2015 to 923.1 thousand in 2016, representing a rise of 15.7 per cent. The Fort Jesus recorded a remarkable performance of 24.1 per cent to record 150.5 thousand visitors in 2016 returning to 2013 levels. Similarly, visitors to Kitale museum increased by 66.6 per cent from 33.5 thousand in 2015 to 55.8 thousand in 2016. However, visitors to Kisumu and Meru museums continued to drop during the year under review. The months of July and August recorded the highest number of visitors to museums, snake parks and historical sites while January, February and May registered the lowest as shown in Figure 13.6.

## Table 13.10: Number of Visitors to Museums, Snake Parks and Historical Sites, 2012-2016

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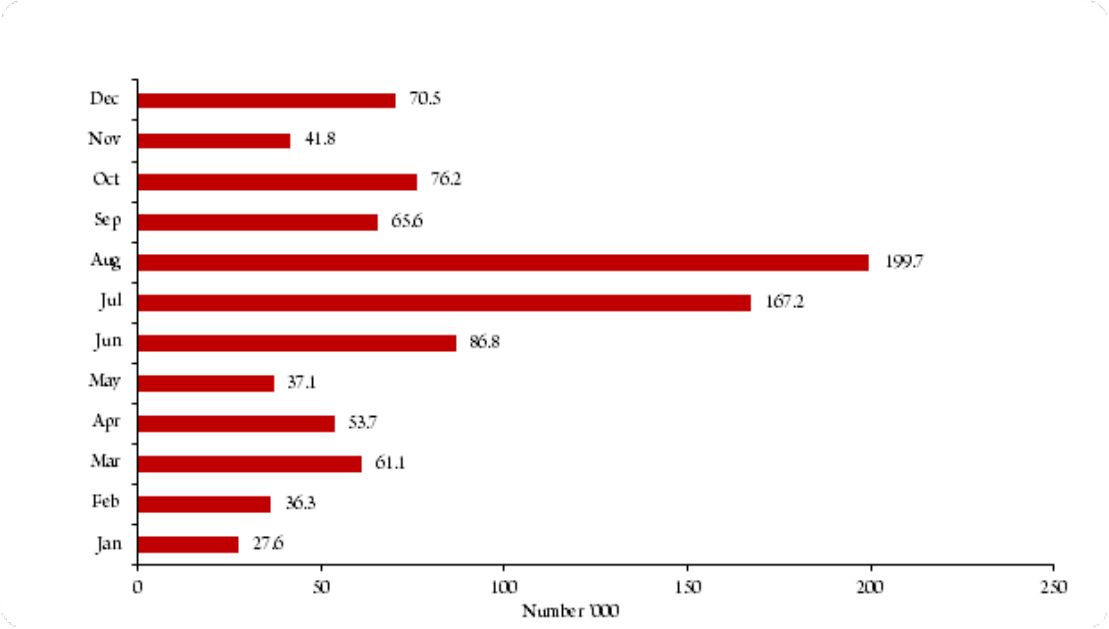
| Name of Museums | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Nairobi National ... ... ... ... . | 184.7 | 130.9 | 52.5 | 264.0 | 278.7 |
| Nairobi Snake Park ... ... ... .. | 146.4 | 94.8 | 33.0 | 24.0 | 26.1 |
| Fort Jesus ... ... ... ... ... ... ... | 127.6 | 152.1 | 113.4 | 121.3 | 150.5 |
| Kisumu ... ... ... ... ... ... ... ... | 144.9 | 151.2 | 219.4 | 210.6 | 199.2 |
| Kitale ... ... ... ... ... ... ... ... . | 41.8 | 54.3 | 64.8 | 33.5 | 55.8 |
| Gede ... ... ... ... ... ... ... ... ... | 43.1 | 54.6 | 47.5 | 39.9 | 55.6 |
| Meru ... ... ... ... ... ... ... ... .. | 24.2 | 26.3 | 32.8 | 23.7 | 19.9 |
| Lamu ... ... ... ... ... ... ... ... ... | 2.6 | 2.8 | 1.7 | 1.5 | 2.7 |
| Jumba la Mtwana ... ... ... ... .. | 5.7 | 7.4 | 5.7 | 4.3 | 7.3 |
| Olorgessaile ... ... ... ... ... ... | .. | .. | 2.7 | 1.1 | 0.4 |
| Kariandusi ... ... ... ... ... ... ... | 10.2 | 4.3 | 24.2 | 11.4 | 12.3 |
| Hyrax Hill ... ... ... ... ... ... ... | 8.9 | 5.9 | 11.6 | 8.7 | 29.1 |
| Karen Blixen ... ... ... ... ... ... | 54.9 | 44.7 | 45.2 | 25.9 | 35.8 |
| Malindi ... ... ... ... ... ... ... .. | 17.9 | 26.1 | 21.0 | 14.7 | 31.8 |
| Kilifi Mnarani ... ... ... ... ... . | 1.6 | 0.8 | 2.5 | 1.2 | 0.8 |
| Kabarnet ... ... ... ... ... ... ... . | 1.3 | 1.6 | 1.7 | 1.4 | 3.4 |
| Kapenguria ... ... ... ... ... ... .. | 7.6 | 8.7 | 9.7 | 7.3 | 12.4 |
| Pete Sites ... ... ... ... ... ... ... | 0.0 | 0.0 | 0.0 | - | - |
| Swahili House ... ... ... ... ... .. | 0.3 | 0.3 | 0.3 | 0.0 | 0.1 |
| Narok ... ... ... ... ... ... ... ... .. | 0.2 | 0.6 | 0.6 | 0.5 | 0.9 |
| German Post ... ... ... ... ... ... | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 |
| Takwa Ruins ... ... ... ... ... ... | 0.7 | 0.6 | 0.6 | 0.2 | 0.4 |
| Koobi Fora ... ... ... ... ... ... .. | .. | 0.0 | .. | .. | .. |
| Rabai ... ... ... ... ... ... ... ... ... | .. | 2.7 | .. | 2.4 | .. |
| Thimlich Ohinga ... ... ... ... . | .. | 0.1 | .. | .. | .. |
| Lamu Port ... ... ... ... ... ... ... | | | | | 0.4 |
| **TOTAL ... ... ... ... ... ... ... ..** | **824.6** | **770.8** | **690.9** | **797.5** | **923.1** |

**Source:** National Museums of Kenya

* Provisional

.. not available

Figure 13.6: Monthly Number of Visitors to the Museums, Snake Parks and Historical Sites, 2016




**Conference Tourism**

13.20. The Meetings, Incentives, Conferences and Exhibitions (MICE) sector is on a major growth path globally and there is no doubt that the country has begun to enjoy the benefits from this market, enhancing its brand equity. The number of international conferences and delegates rose by 4.1 and 41.9 per cent, respectively, in 2016 as presented in Table 13.11. Similarly, local conferences and delegates increased by 17.4 per cent and 14.5 per cent, respectively in 2016. The overall conference percentage occupancy rose from 11.1 per cent in 2015 to 11.6 per cent in 2016. The growth in the conference tourism indicates the huge potential this segment has in its overall contribution to economy.

Table 13.11: Indicators on Conference Tourism, 2014-2016

Number

| | 2014 | | 2015 | | 2016* | |
|---|---|---|---|---|---|---|
| | Local | International | Local | International | Local | International |
| No.of conferences ... ... ... ... ... | 3,077 | 241 | 3,199 | 218 | 3,755 | 227 |
| No.of delegates ... ... ... ... ... ... | 432,998 | 77,848 | 465,116 | 71,620 | 532,674 | 101,599 |
| No.of delegate days ... ... ... ... ... .. | 547,262 | 131,193 | 561,374 | 124,633 | 634,234 | 166,802 |
| No.of delegate days available ... | 5,925,801 | 5,925,801 | 6,168,945 | 6,168,945 | 6,859,714 | 6,859,714 |
| Percentage Occupancy ... ... ... . | 9.2 | 2.2 | 9.1 | 2.0 | 9.2 | 2.4 |

*Provisional

**Training**

13.21. The Kenya Utalii College (KUC) continue to develop highly qualified and globally competitive human resource for the hospitality industry. The number of graduates who pursued various courses at KUC rose from 2,324 in 2015 to 2,664 in 2016 as shown in Table 13.12. This was mainly attributed to the increase in the number of graduates who pursued refresher courses that grew by 37.8 per cent to 1,120. Similarly, graduates who pursued short courses rose by 13.5 per cent from 736 in 2015 to 835 in the review period.

**Table 13.12: Kenya Utalii College Graduates, 2012-2016**

Number

| Year | Pioneer Course[1] | In- Service | | Professional Courses | | | Grand Total |
|---|---|---|---|---|---|---|---|
| | | Refresher | MDP[2] | Regular Courses | Short Courses | Sub-Total | |
| 2012 | 458 | 1,644 | 224 | 627 | 17 | 644 | 2,970 |
| 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 |

**Source:** Kenya Utalii College

* Provisional

.. not available

[1]Pioneer is a 3 month course

[2]MDP - Management Development Programmes

**Developments in the Tourism Sector**

13.22. The Government unveiled a KSh 1.2 billion Charter Incentive Programme (CIP) aimed at reducing tourist travel costs and recovering lost business from tourist charter companies. This was done by scrapping landing fees at Mombasa and Malindi international airports for chartered planes from January 2016 till June 2018. Furthermore, a subsidy of US$ 30 was provided for each passenger who disembarked in the country . The tourist subsidy is aimed at boosting and stimulating charter airlines to fly to the Coastal region.

13.23. In April 2016, ivory worth US$ 105 million was destroyed to discourage poaching in Kenya. This was meant to send a message to the world that ivory trade is illegal and harmful to the existence and sustainability of wildlife.

14 Chapter

# Transport and Storage

## Overview

The Government places strong emphasis on the improvement of the transport sector in the country. The Government has undertaken implementation and management of various activities in the sector through the Ministry of Transport and Infrastructure. This includes formulation of appropriate policies for all modes of transport, namely; road, air, rail, pipeline and water transport.

14.2. Total cargo throughput handled at the Port of Mombasa rose by 2.4 per cent to 27,364 thousand tonnes in 2016. Container traffic recorded a growth of 1.4 per cent to 1.1 million Twenty-foot Equivalent Units (TEUs). Total pipeline throughput of white petroleum products expanded by 2.8 per cent to 5,872.9 thousand cubic metres in 2016. The volume of white petroleum products transported through the pipeline for domestic consumption expanded by 9.0 per cent to 4,018.6 thousand cubic metres in 2016.

14.3. The performance of the air transport sub-sector improved during the review period, with the total commercial passengers handled increasing by 11.7 per cent to 10.0 million in 2016. Total passengers handled at Jomo Kenyatta International Airport (JKIA) and Moi International Airport (MIA) rose by 9.7 per cent to 7.1 million and 7.6 per cent to 1.3 million in 2016, respectively.

14.4. The number of road transport licenses issued increased by 2.8 per cent to 123,386 in 2016 with the number of Public Service Vehicle (PSV) licenses issued increasing by 9.3 per cent from 30,506 in 2015 to 33,349 in 2016. The number of reported traffic accidents dropped marginally from 5,310 in 2015 to 5,296 in 2016. Total reported casualties from accidents however, rose by 8.4 per cent to 13,159 in 2016. Newly registered motor vehicles and motor cycles dropped by 13.5 per cent to 213,715 in 2016.

## Value of Output

14.6. Table 14.1 presents the value of output for the transport and storage sector from 2012 to 2016. Overall, the value of output for the sector increased by 7.0 per cent from KSh 956.3 billion in 2015 to KSh 1,022.9 billion in 2016. Road transport sub-sector output grew by 6.1 per cent to KSh 667.1 billion and accounted for 65.2 per cent of the total output in the sector in 2016. There was a notable increase in the value of output from services incidental to transport from KSh 68.3 billion in 2015 to KSh 84.0 billion in the review period. Output from the railway transport sub-sector however declined by 9.9 per cent to KSh 5.7 billion during the review period.

**Table 14.1: Transport and Storage - Value of Output, 2012 – 2016**

KSh Million

| | 2012 | 2013 | 2014 | 2015+ | 2016* |
|---|---|---|---|---|---|
| Road Transport | 474,251 | 520,539 | 595,726 | 628,986 | 667,051 |
| Railway Transport | 5,731 | 4,849 | 5,357 | 6,282 | 5,662 |
| Water Transport | 26,294 | 36,537 | 49,840 | 55,712 | 58,807 |
| Air Transport | 114,595 | 131,456 | 139,912 | 146,896 | 156,185 |
| Services Incidental to Transport | 57,042 | 51,930 | 54,097 | 68,246 | 83,996 |
| Pipeline Transport | 17,938 | 19,861 | 21,030 | 22,210 | 22,982 |
| Postal & Courier Services | 10,177 | 10,654 | 27,179 | 27,925 | 28,185 |
| **Total** | **706,028** | **775,826** | **893,141** | **956,257** | **1,022,868** |

* Provisional.

+Revised

**Road Transport**

14.7. Details of funds approved by the Kenya Roads Board (KRB) from the Roads Maintenance Levy Fund (RMLF) for maintenance and rehabilitation of roads in the country are presented in Table 14.2. Disbursement of funds from the KRB to various road agencies is expected to increase by 61.0 per cent from KSh 25.4 billion in 2015/16 to KSh 40.9 billion in 2016/17. The fuel levy and transit toll collections are projected to grow by 61.9 per cent and 5.6 per cent to KSh 40.4 billion and KSh 0.5 billion, respectively, in 2016/17.

**Table 14.2: Road Maintenance Funds, 2012/13 - 2016/17**

KSh Million

| | 2012/13 | 2013/14 | 2014/15 | 2015/16* | 2016/17** |
|---|---|---|---|---|---|
| Fuel Levy | 23,978 | 22,822 | 25,338 | 24,966 | 40,426 |
| Transit Toll | 392 | 407 | 454 | 430 | 454 |
| **Total** | **24,370** | **23,229** | **25,792** | **25,396** | **40,880** |

Source: Kenya Roads Board

* Provisional.

** Estimates

14.8. Overall, earnings from road traffic increased by 6.1 per cent from KSh 629.0 billion in 2015 to KSh 667.1 billion in 2016 as presented in Table 14.3. Income from freight traffic grew by 8.8 per cent to KSh 333.9 billion while that from passenger freight increased by 3.4 per cent to KSh 333.1 billion in 2016.

**Table 14.3: Earnings from Road Traffic, 2012 – 2016**

KSh Million

| | 2012 | 2013 | 2014 | 2015+ | 2016* |
|---|---|---|---|---|---|
| Passenger Traffic | 254,149 | 274,863 | 313,031 | 322,161 | 333,114 |
| Freight Traffic | 220,309 | 244,998 | 274,223 | 306,825 | 333,937 |
| **Total Road Traffic Earnings** | **474,458** | **519,861** | **587,254** | **628,986** | **667,051** |

* Provisional.

+ Revised

**New Registration of Motor Vehicles and Motor cycles**

14.9. The number of newly registered road motor vehicles and motor cycles is presented in Table 14.4 and Figure 14.1. The total units registered dropped by 13.5 per cent from 247,181 in 2015 to 213,715 in 2016.

14.10. **Motor vehicles:** The total number of newly registered motor vehicles declined by 16.3 per cent from 107,761 units in 2015 to 90,176 units in 2016. This was occasioned by a decline

in the number of newly registered motor vehicles in all categories except wheeled tractors that increased from 2,259 units in 2015 to 2,478 units in 2016. Registration of saloon cars declined by 13.1 per cent from 14,369 units in 2015 to 12,490 units in 2016. Similarly, newly registered station wagons decreased by 14.8 per cent from 54,120 to 46,123 units during the review period.

14.11. **Lorries, Trucks, Trailers, Buses and Coaches:** Registration of lorries/trucks declined by 30.1 per cent from 13,785 units in 2015 to 9,632 units in 2016. Similarly, new registration of buses and coaches decreased by 24.6 per cent from 2,342 units to 1,765 units during the review period. Number of newly registered trailers reduced by 27.6 per cent to 2,829 units while those of other vehicles reduced by 35.8 per cent from 2,522 units to 1,618 units during the review period. In addition, newly registered mini buses/matatus dropped by 10.7 per cent from 581 units in 2015 to 519 units in 2016.

14.12. **Motor cycles:** The number of motor cycles registered dropped by 11.4 per cent from 139,420 units in 2015 to 123,539 units in 2016. New registration of motor and auto cycles dropped by 11.1 per cent from 134,645 units to 119,724 units while that of three wheelers dropped by 20.1 per cent from 4,775 units to 3,815 units in 2016.

14.13. The drop in new registration of motor vehicles may be attributed to higher import taxes imposed on used cars in 2015/16 while the decline in the registration of motorcycles may be partly attributed to reduction in local demand.

**Table 14.4: New Registration of Road Motor Vehicles and Motor Cycles, 2012 – 2016**

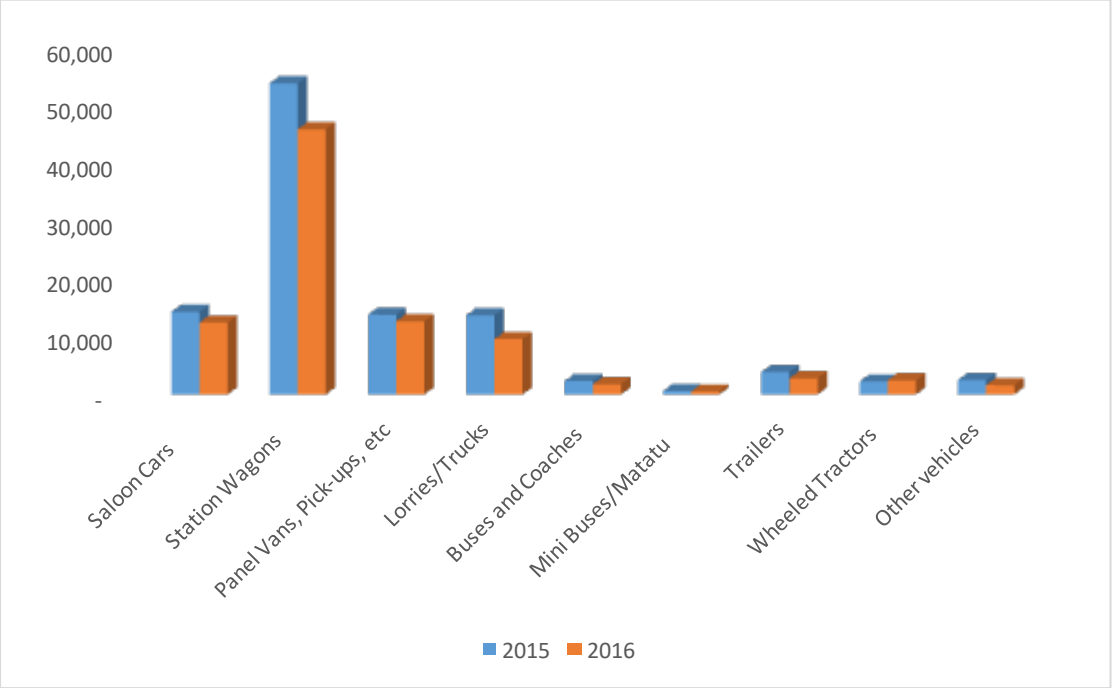
Number

| Type of Vehicle/Motor Cycle | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Saloon Cars | 12,985 | 16,343 | 15,902 | 14,369 | 12,490 |
| Station Wagons | 39,862 | 48,662 | 53,542 | 54,120 | 46,123 |
| Panel Vans, Pick-ups, etc | 7,945 | 9,819 | 12,568 | 13,878 | 12,722 |
| Lorries/Trucks | 7,821 | 9,570 | 10,681 | 13,785 | 9,632 |
| Buses and Coaches | 1,638 | 2,062 | 2,210 | 2,342 | 1,765 |
| Mini Buses/Matatu | 78 | 235 | 213 | 581 | 519 |
| Trailers | 3,761 | 3,973 | 2,925 | 3,905 | 2,829 |
| Wheeled Tractors | 1,386 | 1,902 | 2,032 | 2,259 | 2,478 |
| Other vehicles | 1,753 | 1,451 | 2,533 | 2,522 | 1,618 |
| **Total Motor Vehicles** | **77,229** | **94,017** | **102,606** | **107,761** | **90,176** |
| Motor and Auto Cycles | 93,970 | 125,058 | 111,124 | 134,645 | 119,724 |
| Three Wheelers | 1,845 | 3,103 | 4,327 | 4,775 | 3,815 |
| **Total Motor Cycles** | **95,815** | **128,161** | **115,451** | **139,420** | **123,539** |
| **Total Units Registered** | **173,044** | **222,178** | **218,057** | **247,181** | **213,715** |

Source: National Transport and Safety Authority

* Provisional.

**Figure 14.1: Number of New Motor Vehicles registered by Type, 2015 and 2016**




**Road Licenses**

14.14. Table 14.5 presents the number of PSV and driving licenses issued by National Transport and Safety Authority (NTSA) for the period 2012 to 2016. The number of PSV licenses issued increased by 9.3 per cent from 30,506 in 2015 to 33,349 in 2016. Licenses issued for buses, mini buses and *matatus* rose by 16.6 per cent, 14.3 per cent and 4.6 per cent, respectively, in 2016. Licenses for *matatus* accounted for the largest proportion of PSV licenses issued in the review period at 53.8 per cent.

14.15. The number of driving licenses issued increased by 2.8 per cent from 120,016 in 2015 to 123,386 in 2016 with original driving licenses issued increasing by 2.4 per cent to 93,528 in the review period. Duplicate and foreign licenses issued increased by 4.3 per cent and 2.7 per cent to 26,956 and 2,902 respectively, during the same period. Original driving licenses accounted for 75.8 per cent of total driving licenses issued in 2016.

**Table 14.5: Road Transport Licenses Issued, 2012 – 2016**

Number

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **PSV Licenses** | | | | | |
| *Matatus* | 15,394 | 9,545 | 15,936 | 17,138 | 17,926 |
| Buses | 4,169 | 3,792 | 5,155 | 6,182 | 7,210 |
| Mini Buses[1] | 2,489 | 3,350 | 6,062 | 7,186 | 8,213 |
| **Total** | **22,052** | **16,687** | **27,153** | **30,506** | **33,349** |
| **Driving Licenses** | | | | | |
| Original | 160,719 | 90,519 | 88,666 | 91,336 | 93,528 |
| Duplicate | 29,065 | 23,069 | 24,563 | 25,854 | 26,956 |
| Foreign | 2,768 | 2,671 | 2,737 | 2,826 | 2,902 |
| **Total** | **192,552** | **116,259** | **115,966** | **120,016** | **123,386** |

Source: Kenya Revenue Authority/National Transport and Safety Authority

* Provisional

[1] Includes Tour Vans

**Road Traffic Accidents**

14.16. Details of reported road traffic accidents for the period 2012 to 2016 are presented in Table 14.6. The number of reported traffic accidents declined marginally from 5,310 in 2015 to 5,296 in 2016. Total reported casualties however, rose by 8.4 per cent from 12,138 in 2015 to 13,159 in 2016. This was mainly as a result of a 27.2 per cent increase in number of persons that were slightly injured from 4,350 in 2015 to 5,533 in 2016. The number of persons reported killed and seriously injured declined by 3.0 per cent and 1.5 per cent, respectively, in 2016. The decline in reported accidents and fatalities is partly attributed to enhanced enforcement of road traffic rules.

**Table 14.6: Reported Road Traffic Accidents, 2012 – 2016**

Number

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Total Number of Reported Traffic Accidents | 6,917 | 6,205 | 5,672 | 5,310 | 5,296 |
| Persons Killed or Injured:- | **15,612** | **14,324** | **12,018** | **12,138** | **13,159** |
| *of which:* | | | | | |
| Killed | 3,141 | 3,191 | 2,907 | 3,057 | 2,965 |
| Seriously Injured | 7,434 | 6,299 | 5,140 | 4,731 | 4,661 |
| Slightly Injured | 5,037 | 4,834 | 3,971 | 4,350 | 5,533 |

Source: Kenya Police Service, Traffic Department/National Transport & Safety Authority

* Provisional.

**Railway Transport**

14.17. Table 14.7 presents the performance of the railway transport sub-sector. Freight traffic decreased by 9.3 per cent from 1,575 thousand tonnes in 2015 to 1,429 thousand tonnes in 2016. Revenue earnings from freight stream decreased by 10.6 per cent to KSh 5.6 billion in 2016. Passenger journeys contracted by 7.3 per cent from 2,359 in 2015 to 2,186 in 2016. However, earnings from passenger traffic stream improved slightly by 2.0 per cent to KSh 101.0 million in 2016.

Table 14.7: Railway Traffic, 2012 – 2016

| | Unit | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| **Freight:** | | | | | | |
| Tonnes | 000 | 1,394 | 1,214 | 1,509 | 1,575 | 1,429 |
| Tonne-km | Million | 995 | 848 | 1,169 | 1,391 | 1,186 |
| Revenue | KSh Million | 5,525 | 4,638 | 6,148 | 6,218 | 5,561 |
| Revenue per tonne-Km | KSh | 4.39 | 5.47 | 5.26 | 4.47 | 4.69 |
| **Passenger:** | | | | | | |
| Journeys | 000 | 4,077 | 4,016 | 3,845 | 2,359 | 2,186 |
| Passenger-Km | Million | 221 | 183 | 176 | 108 | 116 |
| Revenue | KSh Million | 206 | 211 | 162 | 99 | 101 |
| Revenue per passenger-Km | KSh | 0.93 | 1.15 | 0.92 | 0.92 | 0.87 |

Source: Kenya Railways Corporation/Rift Valley Railways

* Provisional

**Water Transport**

14.18. Total cargo throughput handled at the port of Mombasa posted a growth of 2.6 per cent from 26.7 million tonnes in 2015 to 27.4 million tonnes in 2016 as shown in Table 14.8. The number of vessels docking at the port decreased by 5.1 per cent while total container traffic handled rose by 1.4 per cent to 1.1 million Twenty-foot Equivalent Units (TEUs) in 2016. This was mainly due to larger capacity of the vessels docking at the port in the review period.

14.19. Total import traffic handled registered a 1.8 per cent increase from 22.7 million tonnes in 2015 to 23.1 million tonnes in 2016. Imports of bulk liquids and dry bulk cargo rose by 6.2 per cent and 1.5 per cent, respectively, in 2016. Imports of dry general cargo handled declined by 1.1 per cent from 9.1 million tonnes in 2015 to 9.0 million tonnes in 2016. The number of motor vehicles landed continued on a downward trend for the second consecutive year, dropping by 32.1 per cent from 143,833 units in 2015 to 97,726 units in 2016. This may be partly explained by increased import duty during the review period.

14.20. Total exports handled grew by 5.7 per cent from 3.5 million tonnes in 2015 to 3.7 million tonnes in 2016. Dry general and dry bulk exports cargo handled recorded growths of 2.9 per cent and 4.6 per cent, respectively, during the review period. Similarly, bulk liquid exports rose by 27.5 per cent from 40 thousand tonnes in 2015 to 51 thousand tonnes in 2016.

**Table 14.8: Traffic Handled at Mombasa Port, 2012 – 2016**

| | Unit | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| Container Traffic | TEUs | 903,463 | 894,000 | 1,012,002 | 1,076,118 | 1,091,371 |
| Ships Docking | No. | 1,763 | 1,768 | 1,832 | 1,694 | 1,607 |
| **Imports** | 000' DWT | | | | | |
| Dry General | " | 7,256 | 7,700 | 8,354 | 9,099 | 8,992 |
| Dry Bulk | " | 4,811 | 4,913 | 5,231 | 6,350 | 6,447 |
| Bulk Liquids | " | 6,665 | 6,537 | 7,192 | 7,232 | 7,677 |
| **Total** | " | **18,732** | **19,150** | **20,777** | **22,681** | **23,116** |
| *Of which* Transit In | " | 6,201 | 6,338 | 6,691 | 7,126 | 7,217 |
| Motor Vehicles landed | No. | 120,268 | 136,915 | 157,856 | 143,833 | 97,726 |
| **Exports** | 000' DWT | | | | | |
| Dry General | " | 2,779 | 2,818 | 2,899 | 2,915 | 3,002 |
| Dry Bulk | " | 106 | 65 | 422 | 578 | 606 |
| Bulk Liquids | " | 160 | 100 | 45 | 40 | 51 |
| **Total** | " | **3,045** | **2,983** | **3,366** | **3,533** | **3,659** |
| *Of which* Transit Out | " | 425 | 513 | 508 | 541 | 531 |
| **Total Imports and Exports** | " | **21,777** | **22,133** | **24,143** | **26,214** | **26,775** |
| Transhipment | " | 143 | 174 | 732 | 518 | 589 |
| **Grand Total** | " | **21,920** | **22,307** | **24,875** | **26,732** | **27,364** |

Source: Kenya Ports Authority

* Provisional.

DWT - Deadweight Tonnes

**Pipeline Transport**

14.21. Table 14.9 shows pipeline throughput of white petroleum products for the period 2012 to 2016. Total pipeline throughput increased by 160.8 thousand cubic metres to 5,872.9 thousand cubic metres in 2016. The volume of refined petroleum products for export declined by 8.5 per cent from 2,026.4 thousand cubic metres in 2015 to 1.854.3 thousand cubic metres in 2016. The reduction in exports was partly attributed to non-tariff barriers which have been cited as a major hindrance to road transport along the Northern Corridor.

14.22. The volume of white petroleum products transported through the pipeline for domestic consumption expanded by 9.0 per cent from 3,685.7 thousand cubic metres in 2015 to 4,018.6 thousand cubic metres in 2016. The volume of premium motor spirit for domestic consumption increased by 6.7 per cent from 1,103.4 thousand cubic metres in 2015 to 1,177.6 thousand cubic metres in 2016 while that of light diesel increased by 12.0 per cent from 1,372.6 thousand cubic metres in 2015 to 1,537.4 thousand cubic metres in 2016.

**Table 14.9: Pipeline Throughput of White Petroleum Products, 2012 – 2016**

'000 Cubic Metres

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **Exports** | | | | | |
| Motor Spirit (Premium) | 626.3 | 688.6 | 726.0 | 757.0 | 696.3 |
| Kerosene Illuminating Oil | 89.3 | 86.1 | 75.8 | 70.1 | 66.2 |
| Light Diesel Oil | 899.4 | 979.1 | 916.1 | 936.9 | 857.2 |
| Jet Fuel | 206.4 | 198.3 | 267.6 | 262.4 | 234.6 |
| **Sub-Total** | **1,821.4** | **1,952.1** | **1,985.5** | **2,026.4** | **1,854.3** |
| **Domestic Consumption**[1] | | | | | |
| Motor Spirit (Premium) | 785.9 | 897.5 | 1,028.8 | 1,103.4 | 1,177.6 |
| Motor Spirit (Regular) | 14.2 | 1.3 | - | - | - |
| Kerosene Illuminating Oil | 304.8 | 353.8 | 362.9 | 396.5 | 450.1 |
| Light Diesel Oil | 1,079.0 | 1,174.0 | 1,314.2 | 1,372.6 | 1,537.4 |
| Jet Fuel | 850.3 | 792.7 | 866.5 | 813.2 | 853.5 |
| **Sub-Total** | **3,034.2** | **3,219.3** | **3,572.4** | **3,685.7** | **4,018.6** |
| **Grand Total** | **4,855.6** | **5,171.4** | **5,557.9** | **5,712.1** | **5,872.9** |

Source: Kenya Pipeline Company

* Provisional.

[1] Excludes fuels transported by Kenya Railways or consumed in the Coastal region

## Air Transport

14.23. **Passenger traffic:** Table 14.10(a) presents commercial air traffic handled at the airports from 2012-2016. Total number of passengers handled rose by 11.1 per cent to 10.0 million in 2016. This was mainly attributed to a 17.6 per cent increase in domestic passengers from 3.4 million in 2015 to 4.0 million in 2016. International passengers handled increased by 7.1 per cent from 5.6 million in 2015 to 6.0 million in 2016. In 2016, total passenger arrivals, departures and transit stood at 4.9 million, 3.6 million and 1.5 million, respectively.

14.24. The total number of passengers handled at JKIA increased by 9.2 per cent from 6.5 million in 2015 to 7.1 million in 2016. Moi International Airport recorded an increase of 8.3 per cent in total number of passengers handled from 1.2 million in 2015 to 1.3 million in 2016. Some of the factors that contributed to improved performance in passenger traffic handled included, conference tourism, route expansion and the lifting of travel advisories.

**Table 14.10a: Commercial Passenger Traffic[1] by Airport, 2012-2016**

000 Number

| Year | Category | Sub-Category | JKIA | MIA | Other Airports | Total Passenger Traffic |
|---|---|---|---|---|---|---|
| 2012 | Domestic | Arrivals | 649.0 | 399.8 | 415.5 | 1,464.3 |
| | | Departures | 483.3 | 386.6 | 400.0 | 1,269.9 |
| | | **Sub-Total** | **1,132.3** | **786.4** | **815.5** | **2,734.2** |
| | International | Arrivals | 2,480.2 | 205.6 | 12.8 | 2,698.6 |
| | | Departures | 1,432.9 | 241.0 | 19.7 | 1,693.6 |
| | | In Transit | 1,226.5 | 114.8 | 116.1 | 1,457.4 |
| | | **Sub-Total** | **5,139.6** | **561.4** | **148.6** | **5,849.6** |
| | **Total** | | **6,271.9** | **1,347.8** | **964.1** | **8,583.8** |
| 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 | 2,097.3 |
| | | Departures | 739 | 478.5 | 705.4 | 1,922.9 |
| | | **Sub-Total** | **1,639.6** | **958.4** | **1,422.2** | **4,020.2** |
| | 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 | 87.4 | 164.0 | 1,469.2 |
| | | **Sub-Total** | **5,471.9** | **366.9** | **184.8** | **6,023.6** |
| | **Total** | | **7,111.5** | **1,325.3** | **1,607.0** | **10,043.8** |

Source: Kenya Airports Authority

* Provisional

[1] Passenger Traffic includes residents.

14.25. **Cargo and Mail Traffic:** The volume of commercial cargo and mail traffic handled at the airports for the last five years is presented in Table 14.10b. Total cargo handled at the airports reduced by 5.1 per cent from 263.0 thousand tonnes in 2015 to 249.5 thousand tonnes

in 2016. During the period under review, total cargo traffic handled at JKIA decreased by 4.9 per cent to 231.3 thousand tonnes while that handled at MIA decreased by 35.8 per cent to 3.0 thousand tonnes in 2016. Total mail traffic handled at the airports recorded a decline of 10.3 per cent from 605.9 tonnes in 2015 to 543.2 tonnes in 2016. Loaded mail traffic at JKIA increased by 7.6 per cent while landed mail traffic dropped by 22.1 per cent in 2016. Total mail traffic handled at MIA decreased from 18.3 tonnes in 2015 to 5.2 tonnes in 2016 mainly on account of a sharp decrease in loaded mail.

**Table 14.10b: Commercial Cargo and Mail Traffic by Airport, 2012 – 2016**

| Year | Category | Cargo Traffic (Tonnes) | | | | Mail Traffic (Tonnes) | | |
|---|---|---|---|---|---|---|---|---|
| | | JKIA | MIA | Other Airports | Total Cargo | JKIA | MIA | Total Mail |
| 2012 | Landed | 59,982.0 | 1,536.7 | 6,928.1 | 68,446.8 | 1,144.8 | 4.7 | 1,149.5 |
| | Loaded | 219,009.3 | 2,702.6 | 4,895.7 | 226,607.6 | 173.0 | 18.8 | 191.8 |
| | **Total** | **278,991.3** | **4,239.3** | **11,823.8** | **295,054.4** | **1,317.8** | **23.5** | **1,341.3** |
| 2013 | Landed | 52,350.8 | 1,533.5 | 8,482.4 | 62,366.7 | 506.3 | 6.6 | 512.9 |
| | Loaded | 191,966.9 | 2,290.3 | 5,091.6 | 199,348.8 | 236.6 | 15.5 | 252.1 |
| | **Total** | **244,317.7** | **3,823.8** | **13,574.0** | **261,715.5** | **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 | 1.7 | 249.5 |
| | 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** | **5.2** | **543.2** |

Source: Kenya Airports Authority

*Provisional

14.26. **Aircraft Movements:** Overall, aircraft movements increased by 12.4 per cent from 305,021 in 2015 to 342,795 in 2016 as shown in Table 14.10c. Total domestic landings and take-offs increased by 13.2 per cent to 203,256 in 2016. Domestic landings increased from 89,611 in 2015 to 101,414 in 2016 while domestic take-offs increased from 89,872 to 101,842 during the same period. Both international landings and take-offs increased by 7.3 per cent from 86,750 in 2015 to 93,052 in 2016. International landings increased from 43,689 in 2015 to 46,698 in 2016 while international take-offs rose from 43,061 in 2015 to 46,354 in 2016. Total over flights increased by 19.8 per cent from 38,788 in 2015 to 46,487 in 2016.

14.27. The share of domestic aircraft movements to total movements increased by 0.5 percentage points from 58.8 per cent in 2015 to 59.3 per cent in 2016 while that of international aircraft movement dropped by 1.3 percentage points from 28.4 per cent to 27.1 per cent during the same period. This development may be attributable to increased use of domestic air transport by the growing middle class in the country.

**Table 14.10c: Aircraft Movements by Type, 2012 - 2016**

Number

| Type | Movement | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| Domestic | Landings | 89,071 | 87,457 | 89,820 | 89,611 | 101,414 |
| | Take-offs | 86,975 | 83,484 | 86,870 | 89,872 | 101,842 |
| | **Total** | **176,046** | **170,941** | **176,690** | **179,483** | **203,256** |
| International | Landings | 43,699 | 42,935 | 45,602 | 43,689 | 46,698 |
| | Take-offs | 44,919 | 45,528 | 47,893 | 43,061 | 46,354 |
| | **Total** | **88,618** | **88,463** | **93,495** | **86,750** | **93,052** |
| Total | Landings | 132,770 | 130,392 | 135,422 | 133,300 | 148,112 |
| | Take-offs | 131,894 | 129,012 | 134,763 | 132,933 | 148,196 |
| | **Sub-Total** | **264,664** | **259,404** | **270,185** | **266,233** | **296,308** |
| | Over flights | 34,992 | 36,290 | 36,941 | 38,788 | 46,487 |
| | **Grand Total** | **299,656** | **295,694** | **307,126** | **305,021** | **342,795** |

Source:Kenya Civil Aviation Authority

*Provisional

**Postal Services**

14.28. The number of licensed courier operators increased by 18.3 per cent from 241 in 2015 to 285 in 2016, mainly on account of new entrants to the market. On the other hand, the number of private courier outlets reduced from 2,117 in 2015 to 1,599 in 2016 as shown in Table 14.11. The decline in number of courier outlets was as a result of deregistration of non-compliant courier operators. Total Expedited Mail Service (EMS) items handled registered a growth of 7.4 per cent to 1,977 thousand in 2016, up from 1,840 thousand in 2015.

14.29. During the review period, domestic and international registered and insured items posted growths of 11.7 per cent and 26.6 per cent, respectively. Total unregistered correspondence handled declined from 73 million items in 2015 to 70 million items in 2016. Total parcels handled grew significantly from 49 thousand in 2015 to 80 thousand in 2016, partly due to increased popularity of e-commerce and m-commerce in Kenya and strategic partnership with online shops for last mile delivery. Total money orders issued declined by 28.7 per cent from 1,221 thousand in 2015 to 870 thousand in 2016. This could be as a result of increased use of mobile money transfer services which has negatively impacted on the use of financial services offered through postal outlets.

## Table 14.11: Postal Services, 2012 – 2016

| Item | Unit | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| Post Offices | No. | 634 | 622 | 622 | 623 | 623 |
| Private Courier Operator Outlets | No. | 683 | 707 | 2,048 | 2,117 | 1,599 |
| Licensed Courier Operators | No. | 190 | 214 | 230 | 241 | 285 |
| **Total Private Letter Boxes:** | | | | | | |
| Installed | '000 | 432 | 432 | 432 | 432 | 442 |
| Rented | '000 | 382 | 383 | 380 | 382 | 385 |
| Private Bags Rented | No. | 846 | 846 | 846 | 846 | 846 |
| **Total EMS Items Handled:** | **'000** | **1,619** | **1,483** | **1,801** | **1,840** | **1,977** |
| Accepted | '000 | 821 | 772 | 933 | 916 | 990 |
| Delivered | '000 | 798 | 711 | 868 | 924 | 987 |
| **Total Registered and Insured Items Posted:** | **'000** | **1,254** | **1,005** | **1,001** | **812** | **921** |
| Domestic | '000 | 1,169 | 924 | 914 | 718 | 802 |
| International | '000 | 85 | 81 | 87 | 94 | 119 |
| **Unregistered correspondence handled :** | **Millions** | **75** | **68** | **69** | **73** | **70** |
| Domestic | Millions | 68 | 63 | 64 | 67 | 64 |
| International | Millions | 7 | 5 | 5 | 6 | 6 |
| **Parcels handled :** | **'000** | **51** | **36** | **48** | **49** | **80** |
| Domestic - Posted | '000 | 26 | 18 | 26 | 32 | 53 |
| International - Posted | '000 | 25 | 18 | 33 | 17 | 27 |
| **Money Orders Issued [1]:** | **'000** | **346.2** | **574.2** | **1339.2** | **1221.2** | **870.2** |
| Domestic (IFS)+ | '000 | 281 | 501 | 500 | 453 | 439 |
| Express | '000 | 10 | - | - | - | - |
| PostaPay | '000 | 55 | 73 | 839 | 768 | 431 |
| Interstate (IFS) | '000 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| **Postal Orders Issued:** | **No.** | 5 | - | - | - | - |

Source:Postal Corporation of Kenya/Communications Authority of Kenya

*Provisional

+Revised

[1] Series re-classified

IFS - International Financial Services

**Storage**

### Container Freight Stations

14.30. Container Freight Stations (CFS) provide additional storage space for containerized cargo at the Port of Mombasa. The number of Container Freight Stations increased from 12 in 2015 to 15 in 2016.

**Developments in the Transport and Storage sector**

### Kenya Pipeline Company

14.31. In 2016, Kenya Pipeline Company completed a 122km 10-inch pipeline parallel to the existing 6-inch pipeline from Sinendet to Kisumu (Line 3). This pipeline is expected to enhance availability of petroleum products in the Western Kenya and the export market. The benefits of the project include; increased product flow to Kisumu depot by 350 cubic metres per hour, optimization of tank utilization and opening up development of other projects such as the Kisumu Oil Jetty (KOJ) and Kisumu – Busia Pipeline.

14.32. The other major infrastructural achievement in the review period was the construction of additional tanks in Nairobi Terminal. The new tanks are expected to enhance storage capacity from 100,000 to 233,000 cubic metres. The new tanks will provide sufficient capacity for receipt of higher volumes of products expected, once the Mombasa – Nairobi pipeline is replaced. The project to expand storage capacity in the Nairobi Terminal by 133,000 cubic metres is currently ongoing and is expected to be completed by June 2017. Upon completion, the project is anticipated to enhance operational flexibility and increase tank turnaround for Kipevu Oil Storage Facility while guaranteeing security of supply.

### The Standard Gauge Railway (SGR)

14.33. The Government has continued to implement major infrastructural developments on the various modes of transport aimed at easing the flow of people and goods across the country and beyond. The Standard Gauge Railway (SGR) is one such project.

14.34. Phase 1 of the SGR from Mombasa to Nairobi is nearly complete with all the line completed 18 months ahead of time. Currently, two stations, Mombasa and Nairobi, have been completed. The inland container deport (dry port) in Embakasi has been expanded to cater for the anticipated increase in container traffic. Throughput at the Port of Mombasa currently stands at an estimated 22 million Twenty Equivalent Units (TEUs'). Forty per cent of this traffic is expected to be offloaded to the SGR once it commences operations and is anticipated to grow in volume in tandem with the growth in port throughput to an estimated 15.5 million TEUs' by 2022.

14.35. The SGR is expected to be commissioned on 1st June, 2017, upon which operations will commence. Towards this realization, work is ongoing to test the operations. Rail freight from Mombasa to Nairobi is expected to take eight hours with the locomotives moving at a speed of 80 km/h while the time taken for movement of passengers is expected to reduce to four and a half hours with locomotives moving at a speed of 120 km/h over the same distance.
Phase II of the SGR from Nairobi to Naivasha is also on course. Route identification for this second phase of the project as well as identification of the Project Affected Persons (PAP) have been done. The National Land Commission (NLC) is currently doing valuation of the land in a bid to relocate people from the identified route. The Contractor is expected to start work by July or August, 2017. The Government has secured funding of up to 150 million USD from the EXIM Bank of China.

15 Chapter

# Information and Communication Technology

## Overview

Information and Communication Technologies (ICTs) have become crucial enablers of socio-economic development mainly through reduced transaction costs and enhanced efficiency in connectivity. Besides being pivotal in sectors like telecommunications and financial intermediation, ICTs are increasingly being applied across all the economic activities most notably health, education and public administration. In line with this, the government has made considerable effort to enhance broadband availability and connectivity through the implementation of the National ICT Infrastructure. The laying of the fiber optic infrastructure has resulted to faster communications and enhanced use of online services such as e-government and e-commerce. Over the years, the government has also facilitated the development of the digital economy through ensuring competition and encouraging innovation.

15.2. In 2016, the penetration rate for mobile subscriptions improved to 85.9 per cent in 2016 from 85.4 per cent in 2015. Wireless subscriptions per 100 inhabitants increased to 59 from 54 in 2015. Mobile money subscriptions per 100 inhabitants stood at 71 in 2016 from 61 in 2015. The value of money transacted through mobile phones increased from KSh 2.8 trillion in 2015 to KSh 3.4 trillion in 2016. Value of mobile commerce accounted for slightly over a half of the value of mobile money transactions in 2016. The number of internet users is estimated to have increased by 10.7 per cent from 35.6 million in 2015 to 39.4 million users in 2016. Total domestic calls stood at 42.2 billion minutes, which was an increase of 7.7 per cent from the previous year. International calls increased from 1,172 million minutes in 2015 to 1,196 million minutes in 2016. The number of SMSs sent increased by 63.6 per cent to 46.3 billion messages in 2016 from 28.3 billion messages in 2015.

15.3. Gender related statistics in ICT are important in identifying the variations in access to and use of ICT by men and women. This is in order to inform national and international policy goals that are a prerequisite for the achievement of an equitable information society. Overall, gender disparity in the use of ICT remained low and in favour of male users in 2016. However, gender disparity was notable in mobile-cellular and mobile money penetration rates with a consistent gap of about 2.8 and 2.1 percentage points respectively, over the last five years.

## Value of Output

15.4. Details on value of output, intermediate consumption and value added for the ICT sector at current prices are presented in Table 15.1. The value of ICT output increased by 11.1 per cent from KSh 280.0 million in 2015 to KSh 311.1 million in 2016. Intermediate consumption increased by 10.1 per cent to KSh 242.2 million in 2016. Consequently, ICT value added increased by 13.9 per cent from KSh 60.5 million in 2015 to KSh 68.9 million in 2016.

**Table 15.1: Communications Output, Intermediate Consumption and Value Added, 2012-2016**

KSh Million

| Year | Value of Output | Intermediate Consumption | Value Added |
|---|---|---|---|
| 2012 | 203,924.0 | 135,479.0 | 68,445.0 |
| 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* | 311,069.3 | 242,216.3 | 68,853.0 |

*Provisional

+Revised

**Fixed Telephone and Mobile Network Services**

15.5. **Fixed Telephone:** Details on the performance of fixed and mobile network services for the period 2012 to 2016 are presented in Table 15.2. Fixed line capacity more than doubled from 75 thousand in 2015 to 179 thousand lines in 2016. The increase in the fixed line capacity was mainly attributed to recommissioning of fixed network services during the review period. However, total connections for fixed telephony declined by 14.4 per cent to 72.8 thousand in 2016 from 85 thousand in 2015, despite the increase in capacity.

15.6. **Mobile Network Services:** Mobile telephone capacity expanded by 14.0 per cent from 62.8 million in 2015 to 71.6 million in 2016 mainly on account of strong demand for mobile services. Mobile subscriptions increased from 37.7 million in 2015 to 39.0 million in 2016. The number of mobile money subscribers increased by 19.6 per cent to 32.0 million in 2016 while the value of funds sent via mobile money platform increased by 19.2 per cent to KSh 3.4 trillion in 2016. Similarly, the number of mobile money transactions grew by 37.0 per cent from 1,114.2 million in 2015 to 1,526.2 million in 2016. During the review period, the country recorded 928.2 thousand mobile commerce (m-commerce) transactions with a value of KSh 1.8 trillion. Mobile commerce transactions are payments for goods and services made from a customer's account mobile money platform.

**Table 15.2: Fixed and Mobile Network Services, 2012-2016**

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **Fixed Telephony** | | | | | |
| Fixed line Capacity ('000)[1] | 380 | 408 | 340 | 75 | 179 |
| **Total Connections ('000)** | **263.0** | **206.0** | **180.0** | **85.0** | **72.8** |
| Wireline Connections | 75.0 | 57.0 | 48.0 | 85.0 | 72.4 |
| Wireless Connections[1] | 188.0 | 149.0 | 132.0 | 0.0 | 0.374 |
| **Mobile Telephony** | | | | | |
| Mobile Telephone Capacity ('000) | 49,977 | 55,077 | 65,077 | 62,800 | 71,600 |
| Connections ('000) | 30,433 | 31,309 | 33,633 | 37,716 | 38,982 |
| **Mobile Money** | | | | | |
| Mobile Money Transfer Agents | 49,079 | 93,689 | 123,703 | 143,946 | 165,908 |
| Mobile Money Transfer Service Subscribers ('000) | 19,319 | 26,016 | 26,023 | 26,753 | 31,997 |
| Total Deposits through Agents (KSh Billion) [+] | 811 | 1,033 | 1,269 | 1,347 | 1,536 |
| Total Transfer from Subscriber to Subscriber (KSh Billion) | .. | .. | .. | 1,339 | 1,818 |
| Total Transfers (KSh Billion) | 1,544 | 1,902 | 2,372 | 2,816 | 3,356 |
| Number of Total Transactions in Million | 577.4 | 732.6 | 911.3 | 1,114.2 | 1,526.2 |
| Value of Mobile Commerce Transactions (KSh Billion) | .. | .. | .. | .. | 1,750 |
| Number of Mobile Commerce Transactions ('000) | .. | .. | .. | .. | 928.2 |

Source: Communication Authority of Kenya/ Central Bank of Kenya

* Provisional

[+] Revised

[1] Includes Local Loop Operators.

.. Data not available

**Voice Call Traffic**

15.6. **International Telephone Traffic:** Voice call traffic for the period 2012 to 2016 is presented in Table 15.3. The total international telephone traffic increased from 1,173 million minutes in 2015 to 1,196 million minutes in 2016. The slow growth in international telephone traffic can mainly be attributed to the increased competition from "over the top" services and social media during the review period. Outgoing international telephone traffic decreased by 11.4 per cent to 482.5 million minutes in 2016 while international incoming telephone traffic increased by 13.6 per cent to 714 million minutes during the same period.

15.7. Data on the international telephone traffic through fixed line shows a continuous decline for both incoming and outgoing calls over the last five years as shown in Figure 15.1. This was partly due to the decline in fixed line subscriptions over time. During the period under review, outgoing international fixed telephone traffic decreased by 9.3 per cent while incoming traffic decreased by 3.8 per cent. Outgoing international traffic for mobile telephones declined by 11.4 per cent. Incoming international traffic through the mobile telephony however increased by 13.9 per cent in 2016. The decline in international outgoing traffic through mobile telephony was partly due to the high cost of making international calls in some foreign countries and preference of using instant messaging applications.

15.8. **Roaming Voice Traffic:** Total roaming voice traffic increased by 36.3 per cent from 194.8 million minutes recorded in 2015 to 265.6 million minutes in 2016. Outbound roaming traffic increased by 57.4 per cent to stand at 143.5 million minutes while inbound roaming grew by 17.8 per cent to stand at 122.0 million minutes in 2016. Figure 15.2 shows trends in international outbound and inbound roaming for the period 2012 to 2016. The upward trend observed for outbound traffic was partly due to the reduced roaming rates within the East African Community. Similary, the rise in inbound traffic can partly be attributed to the high-level meetings hosted in the country over the review period.

15.9. **Domestic Voice Traffic:** Total domestic voice traffic increased by 7.6 per cent to 42.2 million minutes in 2016. However, fixed to fixed traffic declined further from 5.3 million minutes in 2015 to 2.5 million minutes in 2016. Despite the recommissioning of the fixed wireless service in the last quarter of 2016, traffic from fixed wireless to fixed wireless decreased to 877 thousand minutes during the reporting period. Traffic from fixed to mobile and mobile to fixed traffic declined by 13.2 per cent and 16.1 per cent, respectively, in 2016. However, mobile-to-mobile traffic stood at 42.1 billion minutes in 2016, reflecting a 7.7 per cent increase.

15.10. **VoIP Traffic:** Voice over Internet Protocol (VoIP) traffic declined to 3.9 million minutes in 2016 compared to 4.8 million minutes in 2015. VoIP traffic has been on a downward trend in the last five years as shown in Figure 15.3. This is mainly due to competition from instant messaging applications and social media.

**Table 15.3: Telephone Call Traffic, 2012 - 2016**

Minutes '000

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **International Calls** | | | | | |
| **Total International Outgoing Telephone Traffic** | **630,591** | **546,558** | **461,754** | **544,560** | **482,482** |
| International Outgoing Mobile | 614,208 | 530,823 | 446,591 | 534,433 | 473,292 |
| International Outgoing Fixed | 16,383 | 15,736 | 15,163 | 10,127 | 9,190 |
| **Total International Incoming Telephone Traffic** | **797,532** | **676,267** | **591,022** | **628,403** | **713,969** |
| International Incoming Mobile | 781,010 | 664,035 | 578,920 | 619,395 | 705,299 |
| International Incoming Fixed | 16,522 | 12,232 | 12,102 | 9,008 | 8,670 |
| **Total International Telephone Traffic** | **1,428,123** | **1,222,825** | **1,052,776** | **1,172,963** | **1,196,451** |
| **Roaming** | | | | | |
| Roaming by Home Subscribers Abroad (Outbound Roaming) | 36,992 | 48,011 | 38,251 | 91,171 | 143,529 |
| Roaming by Foreign Subscribers Abroad (Inbound Roaming) | 40,593 | 41,382 | 48,060 | 103,612 | 122,023 |
| **Total Roaming** | **77,585** | **89,393** | **86,311** | **194,783** | **265,552** |
| **Domestic Calls** | | | | | |
| **Total Fixed to Fixed Telephone Traffic (a+b)** | **59,078** | **28,560** | **23,298** | **5,252** | **2,513** |
| Fixed wireless to Fixed wireless (a) | 41,026 | 18,892 | 21,622 | 3,336 | 877 |
| Fixed to Fixed telephone (b) | 18,052 | 9,668 | 1,676 | 1,916 | 1,636 |
| Fixed to Mobile telephone | 124,423 | 101,722 | 117,053 | 47,702 | 41,394 |
| Mobile to Mobile telephone | 27,439,110 | 29,758,949 | 30,473,694 | 39,068,816 | 42,070,692 |
| Mobile to Fixed telephone | 66,823 | 52,334 | 66,564 | 75,394 | 63,240 |
| **Total Domestic Traffic** | **27,654,199** | **29,960,246** | **30,680,916** | **39,197,164** | **42,177,839** |
| International Outgoing Fixed VoIP | 9,886 | 8,101 | 7,335 | 4,785 | 3,938 |

Source: Communication Authority of Kenya

*Provisional

**Figure 15.1: International Outgoing and Incoming Fixed Traffic, 2012-2016**

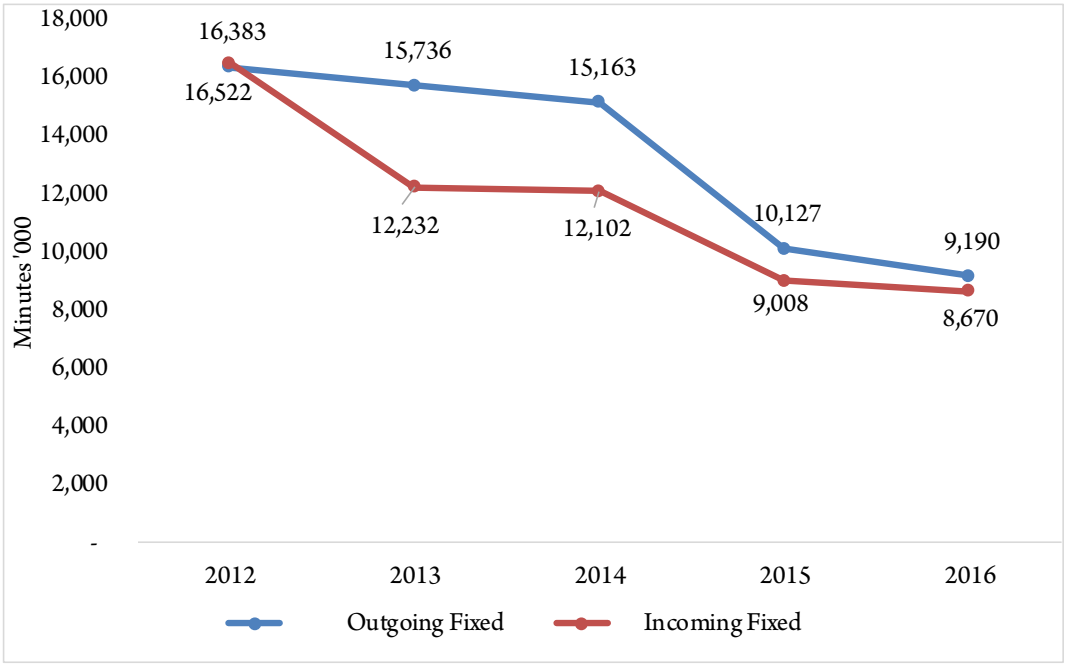



**Figure 15.2: Outbound and Inbound Roaming Traffic, 2012 - 2016**

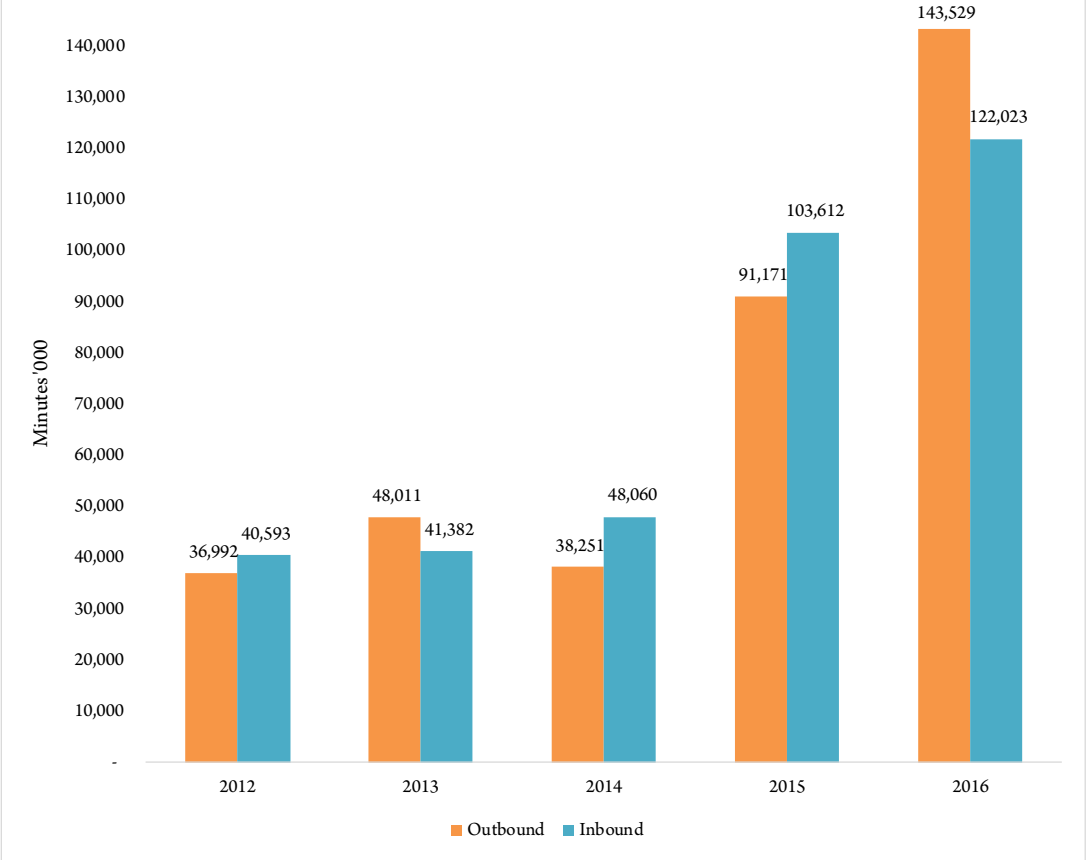
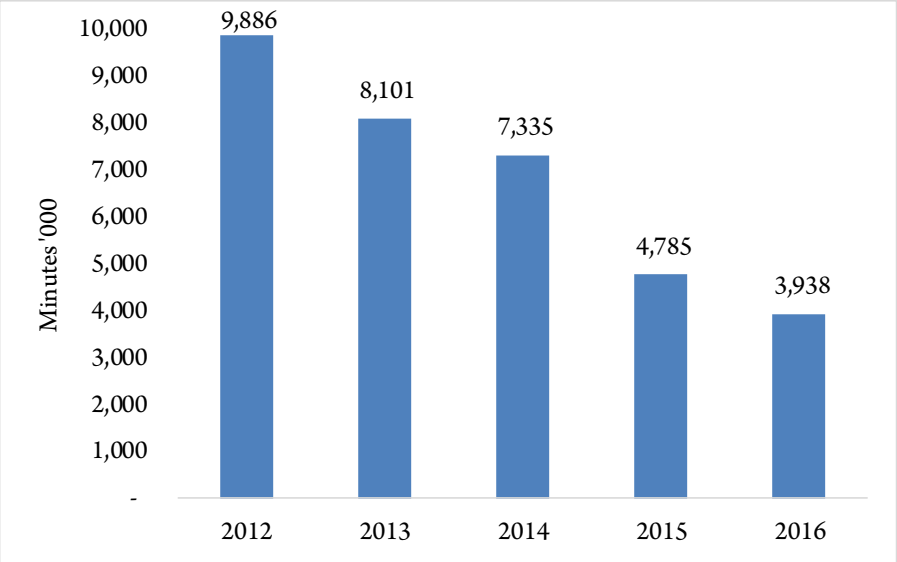


**Figure 15.3: International Outgoing Fixed VoIP, 2012-2016**




**Message Services Traffic**

15.11. **Message Services Traffic:** Information on message services traffic is presented in Table 15.4. The total number of messages sent via Short Messaging Services (SMS) increased by 63.6 per cent to 46.3 billion in 2016 compared to 28.3 billion messages in 2015. This growth was mainly driven by domestic messages which increased by 63.7 per cent during the review period. The vigorous promotions carried out by operators, such as providing plans to customers to create their own SMS bundles, which allow one to send numerous texts at minimal costs further explains the upsurge. However, international messages declined substantially with those received dropping by 29.4 per cent from 131.1 million in 2015 to 38.5 million in 2016. Similarly, international SMSs sent decreased by 6.3 per cent to 36.8 million in 2016. The downward trend observed in Figure 15.4 has been attributed to competition from instant messaging applications that are cheaper. In 2016, Multimedia Messaging Services (MMS) were not offered due to availability of Over the Top (OTT) services.

**Table 15.4: Message Traffic, 2012-2016**

Number '000

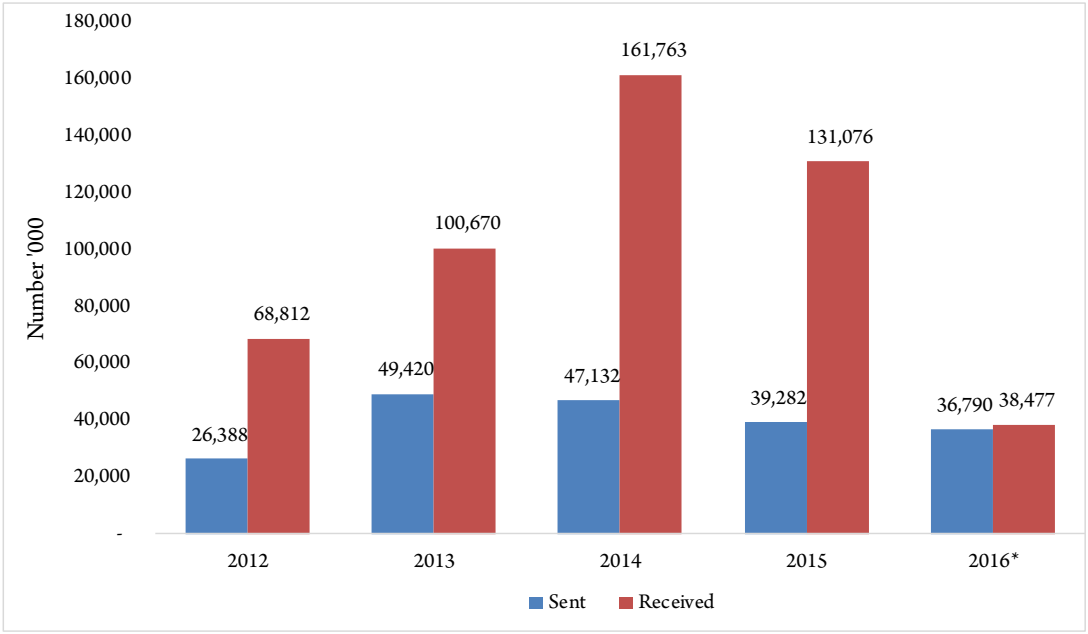
| Messages | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Multimedia Messaging Service (MMS) | 8,783 | 9,761 | 12,011 | 13,686 | .. |
| **Total SMS sent** | **6,788,315** | **19,837,856** | **27,416,127** | **28,320,513** | **46,342,334** |
| Domestic | 6,761,927 | 19,788,436 | 27,368,995 | 28,281,231 | 46,305,544 |
| International | 26,388 | 49,420 | 47,132 | 39,282 | 36,790 |
| International SMS received | 68,812 | 100,670 | 161,763 | 131,076 | 38,477 |

Source: Communication Authority of Kenya

* Provisional

.. Data not available

**Figure 15.4: International SMS Sent and Received Traffic**




**Internet Services**

15.12. **Internet:** The number of Internet Service Providers (ISPs) increased from 221 in 2015 to 242 in 2016 as shown in Table 15.5. Total wireless internet subscriptions increased by 11.5 per cent to 26.6 million subscribers in 2016. Similarly, wired internet subscriptions increased by 8.3 per cent to 124,637 in 2016 from 115,111 registered in 2015. In 2016, fixed fiber optic subscriptions were separated from the fixed cable subscriptions, which had been combined previously. This was done in an effort to adhere to the recommended international grouping for fixed wired broadband. The change led to a decrease in the fixed fiber optic subscribers by 67.7 per cent to 36,015. Dial up subscriptions increased from 25 in 2015 to 86,139 in 2016 ,following change of definition. The estimated number of internet users increased by 11.0 per cent to an estimate of 39.4 million in 2016 compared to a growth of 35.9 per cent in 2015. The slowdown in growth may be attributed to approaching saturation in internet use in the market.

**Table 15.5: Internet Providers, Users and Subscriptions, 2012 - 2016**

Number

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Licensed Internet Services Providers (ISPs)[1] | 165 | 171 | 177 | 221 | 242 |
| Estimated Internet Users (000') | 13,542 | 21,274 | 26,164 | 35,550 | 39,351 |
| **Total Wireless Internet Subscriptions** | **8,458,818** | **13,107,459** | **16,357,239** | **23,814,546** | **26,559,184** |
| Terrestrial Mobile Data | 8,436,578 | 13,090,348 | 16,338,990 | 23,794,550 | 26,528,876 |
| Terrestrial Wireless Data | 21,709 | 16,429 | 17,537 | 19,507 | 29,724 |
| Satellite Data | 531 | 682 | 712 | 489 | 584 |
| **Total Fixed (Wired) Internet Subscriptions** | **48,351** | **79,509** | **95,780** | **115,111** | **124,637** |
| Fixed Digital Subscriber Line (DSL) Data | 10,098 | 12,014 | 14,512 | 3,732 | 2,483 |
| Fixed Fiber Optic Data[2] | 38,228 | 67,470 | 81,243 | 111,354 | 36,015 |
| Fixed Cable Modem (Dial Up) Data[2] | 25 | 25 | 25 | 25 | 86,139 |
| **Total Fixed and Wireless Internet Subscriptions** | **8,507,169** | **13,186,968** | **16,453,019** | **23,929,657** | **26,683,821** |

Source: Communication Authority of Kenya

* Provisional

[1]Also includes Application Service Providers (ASPs)

[2]Definition was changed in 2016

**Broadband Services**

15.13. **Bandwidth Capacity:** Bandwidth capacity increased by 30.8 per cent to 2,028,743 mbps in 2016 as presented in Table 15.6. The increase was mainly attributed to the continued laying of fiber optic cable in the country especially in business premises and residential areas. However, usage of the undersea bandwidth improved marginally from 854,300 mbps in 2015 to 860,300 mbps in 2016. The use of satellite bandwidth increased by 7.6 per cent to 270 mbps in 2016. The review period witnessed a shift in preference to high broadband speeds (1 mbps or more) from the lower speeds of 256 kbps and 512 kbps. High internet speeds enable users to download large files faster, stream online videos with minimal or no hang-ups, hold clear video conferencing and many other activities.

15.14. **Broadband Subscriptions:** Demand for mobile broadband increased by 76.4 per cent to 12.5 million subscribers in 2016 while GSM mobile networks had the largest share with 11.2 million subscribers in 2016 as shown in Table 15.6. This increase was partly attributed to availability of affordable internet based phones in the market. The number of GSM modems increased by 81.5 per cent from 768.8 thousand in 2015 to 1,349.9 thousand in 2016 mainly due to intensive promotions of data bundle packages by service providers during the review period. However usage of wired broadband increased by 15.1 per cent to 127.9 thousand subscriptions in 2016.

**Table 15.6: Broadband Services, 2012-2016**

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **Capacity in Megabits Per Second (Mbps)** | | | | | |
| Undersea Bandwidth Capacity | 574,054 | 862,210 | 847,250 | 1,550,270 | 2,028,270 |
| Satellite Bandwidth Capacity | 650 | 264 | 273 | 498 | 473 |
| **1. Total Available Bandwidth Capacity** | **574,704** | **862,474** | **847,523** | **1,550,768** | **2,028,743** |
| **Utilized Bandwidth in Mbps** | | | | | |
| Undersea Bandwidth | 264,426 | 365,330 | 498,015 | 854,300 | 860,300 |
| Satellite Bandwidth | 158 | 83 | 106 | 251 | 270 |
| **2. Total Utilized Bandwidth** | **264,584** | **365,413** | **498,121** | **854,551** | **860,570** |
| **Broadband Subscriptions** | | | | | |
| Copper line (Dial-up, DSL and xDSL) | 5,214 | 5,967 | 3,388 | 441 | 2,483 |
| Fiber to the Home | 31,280 | 42,958 | 59,986 | 81,532 | 15,853 |
| Fiber to the Office | 16,236 | 20,215 | 21,257 | 29,156 | 23,402 |
| Cable modem | .. | .. | .. | .. | 86,139 |
| **3.Total Fixed (Wired)- Broadband** | **52,730** | **69,140** | **84,631** | **111,129** | **127,877** |
| **4. Satellite broadband** | **476** | **474** | **495** | **481** | **445** |
| **5. Terrestrial fixed wireless broadband** | **10,941** | **15,367** | **16,687** | **19,507** | **29,556** |
| **6. Total Active mobile broadband (a+b+c)** | **1,838,844** | **2,395,836** | **4,141,498** | **7,112,991** | **12,546,559** |
| GSM mobile phones (a) | 817,815 | 1,755,116 | 3,417,949 | 6,344,226 | 11,151,664 |
| GSM modems (b) | 948,847 | 586,484 | 657,902 | 768,765 | 1,394,895 |
| CDMA 2000 phones** (c) | 72,182 | 54,236 | 65,647 | 0 | 0 |
| **7. Total wireless broadband (4+5+6)** | **1,850,261** | **2,411,677** | **4,158,680** | **7,132,979** | **12,576,560** |
| **8. Total fixed and wireless broadband (3+7)** | **1,902,991** | **2,480,817** | **4,243,311** | **7,244,108** | **12,704,437** |
| **Fixed Broadband by speed** | | | | | |
| 256 Kbps | .. | 482 | 2,272 | 2,500 | 862 |
| 512 Kbps | .. | 10,501 | 10,527 | 3,500 | 4,808 |
| 1 Mbps | .. | 51,194 | 62,146 | 18,000 | 22,702 |
| 2 Mbps | .. | 8,791 | 3,810 | 4,000 | 33,574 |
| > 2 Mbps | .. | 12,868 | 9,567 | 69,000 | 91,046 |

Source: Communication Authority of Kenya

*Provisional

**CDMA 2000 phones were decommissioned in 2015

.. Data not available

**Tariffs**

15.15. **Fixed and Mobile Telephone Domestic Charges:** Table 15.7 presents information on fixed and mobile charges for the period 2012 to 2016. The cost of installing fixed telephone increased by 38.5 per cent from KSh 3,394 in 2015 to KSh 4,699 in 2016. Subscription fees for residential and business telephone services increased from KSh 580 to KSh 750 and KSh 1,000 in 2016, respectively. The increase in the installation and subscription fees is partly attributed to the value-added services operators introduced to the fixed telephone services in the review period. Generally, prices of text messages and local calls remained unchanged during the review period.

**Table 15.7: Fixed and Mobile Charges, 2012-2016**

KSh

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **Fixed Charges** | | | | | |
| Business and Residential Telephone Service | | | | | |
| Installation Fee ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... . | 5,694.00 | 3,394.00 | 3,394.00 | 3,394.00 | 4,699.00 |
| Monthly Subscription for Residential Telephone Service ... | 580.00 | 580.00 | 580.00 | 580.00 | 750.00 |
| Monthly Subscription for Business Telephone Service ... ... | 580.00 | 580.00 | 580.00 | 580.00 | 1,000.00 |
| | | | | | |
| Average price of a one minute Fixed to Fixed local call ... ... ... | 2.64 | 4.50 | 4.50 | 3.00 | 3.00 |
| Average price of a one minute Fixed to Mobile local call ... ... .. | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 |
| **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 ... | 3.57 | 3.86 | 3.10 | 3.08 | 3.08 |
| Average price of a one minute Mobile to Fixed local call ... .. | 3.17 | 3.25 | 3.25 | 3.25 | 3.25 |
| Average price of a message via SMS ... ... ... ... ... ... ... ... ... | 1.50 | 1.50 | 1.00 | 1.25 | 1.25 |

Source: Communication Authority of Kenya

* Provisional

Note: All averages are unweighted

15.16. **Mobile Telephone International Traffic Charges:** Table 15.8 presents average prices of a one-minute call originating from a mobile phone in Kenya to other countries for the period 2012 to 2016. There was a substantial increase in the calling rates to Burundi, which more than doubled from KSh 13.25 in 2015 to KSh 33.75 in 2016. Similarly, calling rates to Somalia doubled from KSh 20 in 2015 to KSh 40 in 2016. Calling rates to Tanzania recorded a 46.1 per cent increase to KSh 23.75 in 2016. The increase in the calling rates was attributed to the high roaming cost between the operators in each country. During the review period, calling rates to South Sudan, Uganda and Rwanda however dropped by 28.6 and 21.1 per cent, respectively. The average cost of making calls to majority of African and European countries was priced at KSh 22.50 and KSh. 28.75 per minute, respectively.

**Table 15.8 Average International Call rates from Mobile Phone, 2012- 2016**

KSh

| Countries | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| Uganda | 19.00 | 20.25 | 20.25 | 9.50 | 7.50 |
| Rwanda | 24.50 | 23.25 | 23.25 | 9.50 | 7.50 |
| Burundi | 27.00 | 25.75 | 25.75 | 13.25 | 33.75 |
| Tanzania | 22.00 | 23.25 | 23.25 | 16.25 | 23.75 |
| Ethiopia | 30.00 | 32.50 | 32.50 | 22.50 | 25.00 |
| Somalia | 30.00 | 32.50 | 32.50 | 20.00 | 40.00 |
| South Sudan | 47.50 | 50.00 | 50.00 | 17.50 | 12.50 |
| South Africa | 19.00 | 19.00 | 19.00 | 13.50 | 13.50 |
| Other African Countries | 30.00 | 32.50 | 32.50 | 22.50 | 22.50 |
| USA | 3.37 | 3.62 | 3.62 | 3.00 | 3.50 |
| Germany | 28.75 | 28.75 | 28.75 | 28.75 | 27.50 |
| Switzerland | 33.75 | 33.75 | 33.75 | 28.75 | 37.50 |
| Italy | 28.75 | 28.75 | 28.75 | 28.75 | 37.50 |
| France | 28.75 | 28.75 | 28.75 | 28.75 | 27.50 |
| United Kingdom | 19.00 | 19.00 | 19.00 | 13.50 | 13.50 |
| Other European Countries | 33.75 | 33.75 | 33.75 | 28.75 | 28.75 |
| India | 3.37 | 3.62 | 3.62 | 3.00 | 3.50 |
| China | 3.37 | 3.62 | 3.62 | 3.00 | 3.50 |
| Japan | 33.75 | 33.75 | 33.75 | 28.75 | 30.00 |

Source: Kenya Network Information Centre

**Domains**

15.17. The total number of domains increased by 25.0 per cent to 62,636 in 2016 as shown in Table 15.9. Domains under mobile content rebound after contraction in 2015 while the company domains grew by 25.0 per cent in 2016. The number of domain registrars increased from 270 in 2015 to 367 in 2016.

**Table 15.9 Registered Domains, 2012-2016**

Number

| Subdomain | Users | 2012 | 2013 | 2014 | 2015+ | 2016* |
|---|---|---|---|---|---|---|
| .ac.ke | Institutions of Higher Education | 603 | 737 | 792 | 580 | 726 |
| .co.ke | Companies | 22,607 | 27,643 | 35,274 | 46,541 | 58,165 |
| .go.ke | Government entities | 278 | 339 | 314 | 290 | 363 |
| .info.ke | Information e.g. blogs | 84 | 98 | 105 | 115 | 144 |
| .me.ke | Personal websites & email | 331 | 413 | 650 | 260 | 326 |
| .mobi.ke | Mobile content | 31 | 37 | 48 | 35 | 44 |
| .ne.ke | Network Devices | 38 | 46 | 65 | 140 | 175 |
| .or.ke | Non profit making organisations or NGO's | 948 | 1,159 | 1,190 | 1,485 | 1,860 |
| .sc.ke | Lower & middle institutions of learning | 93 | 113 | 95 | 665 | 833 |
| **TOTAL** | | **25,013** | **30,585** | **38,533** | **50,111** | **62,636** |
| | Number of registras | 150 | 180 | 210 | 270 | 367 |
| | Domain renewal fee | 2,320 | 2,320 | 2,320 | 580 | 580 |
| | Average annual fee to operate domain (Domain registration fee)in KSh | 2,300 | 2,300 | 2,300 | 650 | 650 |

Source: Kenya Network Information Centre

* Provisional

+Revised

**Media Frequencies and Mobile Transceivers**

15.18. **Media Frequencies and Subscriptions:** Information on media frequencies and mobile transceivers for the period 2012 to 2016 is presented in Table 15.9. The number of TV frequencies increased from 302 recorded in 2015 to 312 in 2016. The increase was attributed to the spread of digital TV broadcasting, which requires less bandwidth than similar analogue broadcasting thereby freeing some bandwidth for more frequencies. The number of radio FM frequencies also increased by 79 to stand at 687 in 2016. The number of free to air TV channels on the digital terrestrial platform increased slightly to 63 while digital signal distributors remained unchanged.

15.19. **Mobile Transceivers:** The total number of mobile transceivers grew by 12.9 per cent from 109,294 in 2015 to 123,380 in 2016. The third generation (3G) increased by 59.7 per cent to 30,818 while the second generation (2G) rose by 2.9 per cent to 92,562 during the review period. The substantial increase in the 3G mobile transceivers resulted from extension of the third-generation network to several towns during the review period. However, the second generation remained the most widely used technology accounting for 75.0 per cent of the total transceivers in 2016.

**Table 15.10: Media Frequencies and Mobile Transceivers, 2012-2016**

Number

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| TV Frequencies | 228 | 336 | 245 | 302 | 312 |
| Radio FM Frequencies | 461 | 553 | 561 | 608 | 687 |
| Digital Signal Distributor (Number) | 2 | 2 | 2 | 5 | 5 |
| Analogue TV Stations[1] | 14 | 14 | 19 | 0 | 0 |
| Digital TV stations | 0 | 0 | 36 | 62 | 63 |
| **Total TV Stations** | **14** | **14** | **55** | **62** | **63** |
| **Digital Subscriptions** | | | | | |
| Cable TV | .. | .. | 56,106 | 81,118 | 95,493 |
| Direct to Home Satellite | .. | .. | 211,846 | 250,627 | 350,626 |
| Digital Terrestrial Televisions (STBs) | .. | .. | 1,041,656 | 3,712,548 | 3,905,656 |
| **Total Digital Subscriptions** | **0** | **0** | **1,309,608** | **4,044,293** | **4,351,775** |
| **Radio Stations** | | | | | |
| English and Kiswahili | 74 | 80 | 85 | 89 | 115 |
| All Vernacular Languages | 50 | 50 | 50 | 50 | 60 |
| **Total Radio Stations** | **124** | **130** | **135** | **139** | **175** |
| Mobile Transceivers by Technology | | | | | |
| 2G | 71,884 | 80,894 | 84,631 | 89,994 | 92,562 |
| 3G | 11,053 | 12,775 | 15,381 | 19,300 | 30,818 |
| **Total** | **82,937** | **93,669** | **100,012** | **109,294** | **123,380** |

Source: Communication Authority of Kenya

* Provisional

+ Revised

.. Data not available

[1]Analogue TV stations closed in 2015

STBs- Set Top Boxes

**Employment, Investment and Revenue**

15.20. **Employment:** Table 15.11 presents employment, investment and revenue in telecommunication operators and Internet Service Providers (ISPs) for the period 2012 to 2016. Employment by telecommunication operators increased marginally from 6,147 in 2015 to 6,178 in 2016. Internet service providers on the other hand, increased their employees by 8.1 per cent to 8,448 in 2016. This increment was partly due to the increase of ISPs that were newly registered in the period under review.

15.21. **Investment and Revenue:** The value of investment by telecommunication operators increased by KSh 52.2 billion in 2016 compared to an increase of KSh 36.2 billion in 2015. The investments were for upgrading data speeds and voice network quality for the telecommunication operators. In 2016, investment by ISPs however, declined by 35.3 per cent to KSh 2.2 billion. The annual revenue earned by telecommunication operators increased to KSh 214.8 billion in 2016 from KSh 194.5 billion in 2015 while that for ISPs grew from KSh 17.0 billion in 2015 to KSh 18.6 billion during the review period.

**Table 15.11: Employment, Investment and Revenue in the Telecommunication sector 2012-2016**

| | | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| **Employment (Number)** | Telecommunication Operators[1] | 5,542 | 5,617 | 6,439 | 6,147 | 6,178 |
| | Internet Service Provider (ISPs)[2] | 7,154 | 7,076 | 6,237 | 7,817 | 8,448 |
| **Annual Investment in KSh Billion[3]** | Telecommunication Operators[1] | 33.8 | 30.4 | 32.5 | 36.2 | 52.2 |
| | ISPs[2] | 6.4 | 3.7 | 3.4 | 3.4 | 2.2 |
| **Annual Revenue in KSh Billion[3]** | Telecommunication Operators[1] | 134.1 | 152.5 | 173.6 | 194.5 | 214.8 |
| | ISPs[2] | 12.8 | 14.6 | 15.7 | 17.0 | 18.6 |

* Provisional

[1] Include operators offering fixed, mobile and satellite telecommunication activities

[2] Include Application Service Providers (ASPs)

[3] As at June

**Information Society**

15.20. **ICT Penetration Rate (Total Population):** Table 15.12 presents indicators used for measuring information society. There has been an upward trend in most of the ICT indicators over the last five years. Mobile-cellular penetration rate, internet and mobile money subscriptions stood at 85.9 per cent, 58.8 per cent and 70.5 per cent in 2016 from 85.4 per cent, 54.2 per cent and 60.6 per cent in 2015, respectively. On the contrary, fixed line penetration declined from 0.19 per cent in 2015 to 0.16 percent in 2016. The decline was partly attributed to the low demand for the service and preference to using mobile phones. The bits per second per capita (Bps/ capita) also declined for the first time in 5 years from 20,292.8 Bps in 2015 to 19,890.4 Bps in 2016.

15.21. **ICT Penetration Rate (3 years and above):** This represents the population capable of owning and using ICT equipment. Mobile and internet penetration stood at 94.7 per cent and 64.9 per cent in 2016, respectively. The use of fixed telephone continued to deteriorate with only 0.18 per cent of the population of three years and above using the service in 2016 compared to 0.21 per cent in 2015.

**Table 15.12: Key Indicators Measuring Information Society, 2012-2016**

| Represents Total Population | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Fixed telephone lines per 100 inhabitants | 0.96 | 0.65 | 0.52 | 0.19 | 0.16 |
| Mobile-cellular telephone subscriptions per 100 inhabitants | 74.9 | 74.9 | 78.3 | 85.41 | 85.93 |
| Wireless internet subscribers per 100 inhabitants | 20.8 | 31.4 | 38.1 | 53.90 | 58.50 |
| Internet subscribers per 100 inhabitants (Wireless and Fixed) | 20.93 | 31.56 | 38.30 | 54.19 | 58.82 |
| Bits per second per capita (Bps/person) | 6824.7 | 9,168.2 | 12,157.9 | 20,292.8 | 19,890.40 |
| Broadband subscriptions per 100 inhabitants (wireless) | 4.6 | 5.8 | 9.7 | 16.20 | 27.70 |
| Broadband subscriptions per 100 inhabitants (Fixed and Wired) | 4.7 | 5.9 | 9.9 | 16.40 | 28.00 |
| Mobile money subscriptions per 100 inhabitants | 47.52 | 62.26 | 60.57 | 60.59 | 70.53 |
| **Represents Population of Three (3) years and above** | | | | | |
| Fixed telephone lines per 100 inhabitants | 0.71 | 0.54 | 0.46 | 0.21 | 0.18 |
| Mobile-cellular telephone subscriptions per 100 inhabitants | 82.4 | 82.5 | 86.2 | 94.20 | 94.70 |
| Wireless internet subscribers per 100 inhabitnats | 22.9 | 34.5 | 41.9 | 59.48 | 64.55 |
| Internet subscribers per 100 inhabitants (Wireless and Fixed) | 23.04 | 10.42 | 42.17 | 59.77 | 64.85 |
| Bits per second per capita (Bps/person) | 7,513.5 | 10,095.9 | 13,386.5 | 22,381.2 | 21,931.30 |
| Broadband subscriptions per 100 inhabitants (wireless) | 5.01 | 6.35 | 10.66 | 17.82 | 30.57 |
| Broadband subscriptions per 100 inhabitants (Fixed and Wired) | 5.2 | 6.5 | 10.9 | 18.10 | 30.90 |

*Provisional

15.22. **Gender Equality in ICT:** Table 15.13 presents data on gender equality in ICT for the period 2012 to 2016. Globally, the need for gender ICT statistics has been widely discussed and affirmed in many forums, including the World Summit on the Information Society (WSIS) and in achieving the Sustainable Development Goals (SDGs). Gender related statistics in ICT are important in identifying the variations in access to and use of ICT by men and women in order to inform national and international policy goals that are a prerequisite for the achievement of an equitable information society.

**Table 15.13: Key Indicators measuring Gender Equality in ICT, 2012-2016**

| Represents Total Population Male | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Fixed telephone lines per 100 inhabitants | 1.31 | 0.99 | 0.85 | 0.39 | 0.32 |
| Mobile-cellular telephone subscriptions per 100 inhabitants | 151.13 | 151.20 | 157.98 | 172.32 | 173.27 |
| Internet subscribers per 100 inhabitants (Wireless and Fixed) | 42.25 | 63.68 | 77.28 | 109.33 | 118.61 |
| Broadband subscriptions per 100 inhabitants (Fixed and Wired) | 9.45 | 11.98 | 19.93 | 33.10 | 56.47 |
| Mobile money subscriptions per 100 inhabitants | 95.94 | 125.64 | 122.23 | 122.23 | 142.22 |
| **Represents Total Population Female** | | | | | |
| Fixed telephone lines per 100 inhabitants | 1.28 | 0.98 | 0.83 | 0.38 | 0.32 |
| Mobile-cellular telephone subscriptions per 100 inhabitants | 148.35 | 148.52 | 155.19 | 169.36 | 170.45 |
| Internet subscribers per 100 inhabitants (Wireless and Fixed) | 41.47 | 62.55 | 75.92 | 107.45 | 116.68 |
| Broadband subscriptions per 100 inhabitants (Fixed and Wired) | 9.28 | 11.77 | 19.58 | 32.53 | 55.55 |
| Mobile money subscriptions per 100 inhabitants | 94.17 | 123.41 | 120.08 | 120.13 | 139.91 |

*Provisional

15.23. Majority of the ICT indicators show narrow gender gap with men performing slightly better than women in all the indicators. Gender disparity in mobile penetration was consistently about 2.8 percentage points over the last 5 years as shown in Figure 15.5. Mobile money penetration had an average gender disparity of about 2.1 percentage points over the same period as shown in Figure 15.6. The penetration rate of fixed telephone had the least gender gap of 0.01 percentage points as shown in Figure 15.7.

**Figure 15.5: Mobile Penetration Rate by Sex, 2012 - 2016**

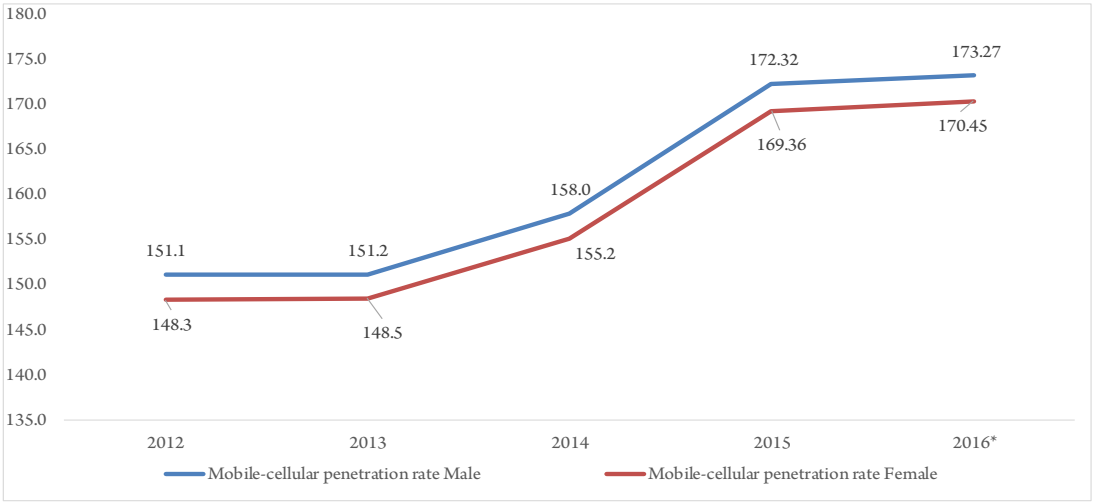



**Figure 15.6: Mobile Money Penetration Rate by Sex, 2012 - 2016**

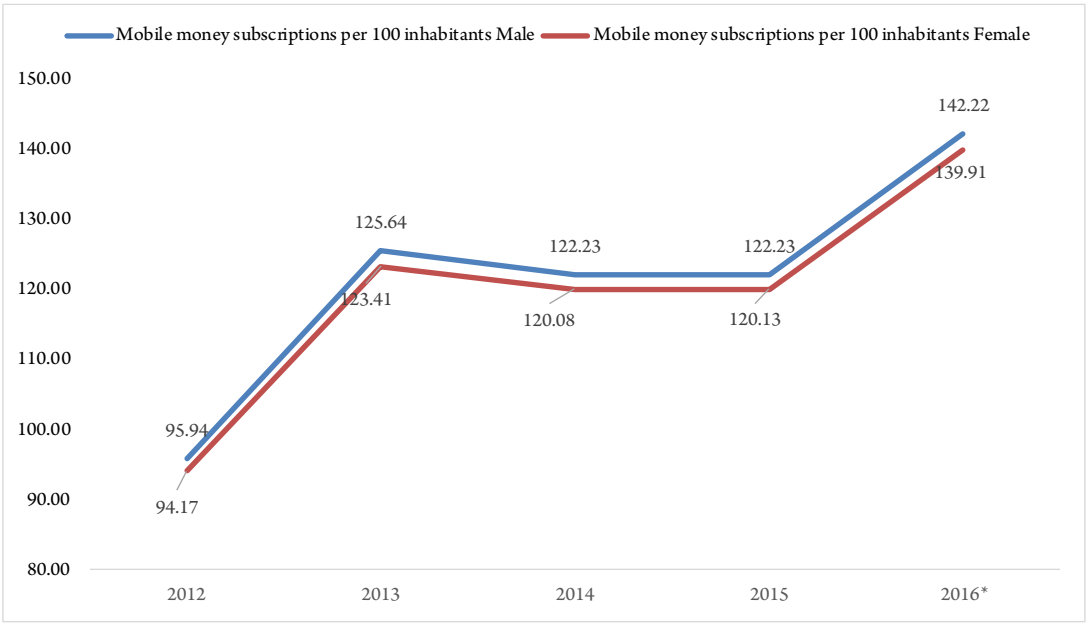
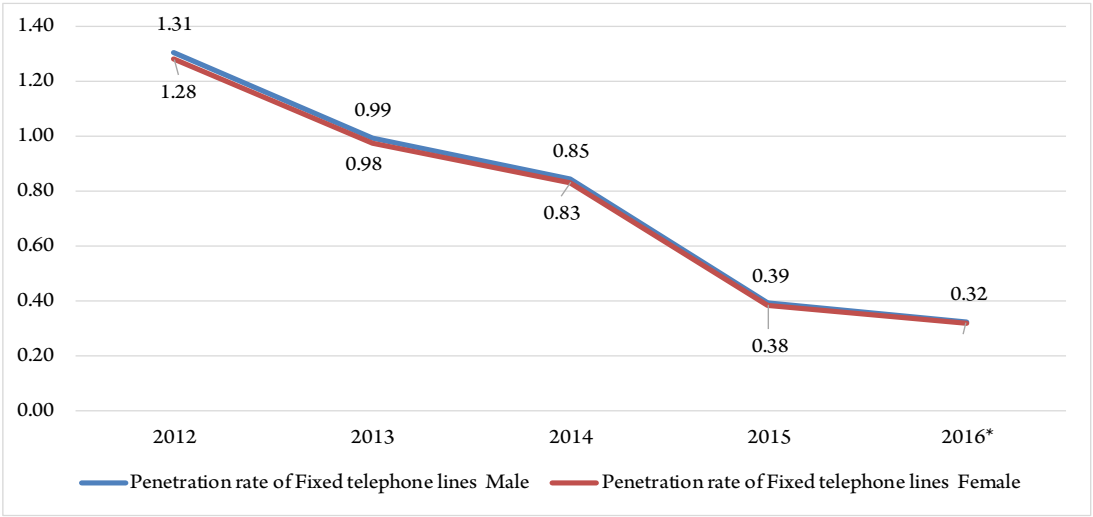



**Figure 15.7: Fixed Telephone Penetration Rate by Sex, 2012-2016**



**Exports and Imports of ICT goods**

15.24. Exports and Imports of ICT goods are presented in Table 15.13. During the period under review, the total value of ICT exports increased by 6.6 per cent compared to the 64.1 per cent growth recorded in 2015. Exports of monitors, projectors and reception apparatus for television more than doubled from KSh 194.6 million in 2015 to KSh 398.0 million in 2016, a reversal from the 34.0 per cent decline registered in 2015. The increase was partly attributed to re-exports of monitors, projectors and reception apparatus for television to Uganda and Tanzania during the review period.

15.25. The value of ICT imports increased by 11.0 per cent from KSh 51.3 billion in 2015 to KSh 57.0 billion in 2016. Imports of reception apparatus for radio broadcasting increased tenfold to KSh 1.2 billion in 2016 from KSh 118.4 million recorded in 2015. The increase was partly attributed to regular ICT infrastructure upgrading.

**Table 15.14: International Trade in ICT Equipment, 2012-2016**

KSh Million

| Exports | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Office machines [1] | 9.8 | 24.1 | 17.1 | 113.3 | 65.8 |
| Automatic data processing machines, storage units etc | 2,818.7 | 980.3 | 330.9 | 358.5 | 442.1 |
| Parts and accessories [2] | 96.1 | 63.8 | 68.9 | 76.2 | 55.7 |
| Monitors and projectors and reception apparatus for television [3] | 118.4 | 72.4 | 294.9 | 194.6 | 398.0 |
| Reception apparatus for radio broadcasting [4] | 16.1 | 30.5 | 8.8 | 12.5 | 22.1 |
| Recording equipment [5] | 6.9 | 5.7 | 9.5 | 5.9 | 7.0 |
| Telecommunications equipment [6] | 1,016.7 | 1,122.6 | 528.2 | 1,303.5 | 1,209.3 |
| **Total** | **4,082.7** | **2,299.4** | **1,258.3** | **2,064.5** | **2,200.0** |
| **Imports** | | | | | |
| Office machines [1] | 603.3 | 834.1 | 804.7 | 1,352.1 | 1,298.7 |
| Automatic data processing machines, storage units etc | 19,556.0 | 15,018.8 | 9,720.0 | 11,211.7 | 18,959.4 |
| Parts and accessories [2] | 1,158.9 | 998.9 | 1,034.1 | 682.3 | 700.8 |
| Monitors and projectors and reception apparatus for television [3] | 3,923.1 | 8,621.6 | 5,991.5 | 8,049.7 | 5,771.0 |
| Reception apparatus for radio broadcasting [4] | 247.8 | 488.8 | 134.9 | 118.4 | 1,190.8 |
| Recording equipment [5] | 477.5 | 592.2 | 370.0 | 462.3 | 344.0 |
| Telecommunications equipment [6] | 24,582.4 | 24,160.0 | 23,622.2 | 29,444.0 | 28,693.9 |
| **Total** | **50,549.0** | **50,714.4** | **41,677.4** | **51,320.5** | **56,958.6** |

*Provisional

[1] Electronic calculating machines, cash registers, accounting machines, postage-franking machines, ticket issuing machines, reproducing and displaying machines with calculating functions, duplicating machines and their parts/accessories etc

[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**

15.26. Circulation of hardcopy newspapers continued to decline as shown in Table 15.14. The decline was mainly attributable to increased online readership with the average online newspaper readers increasing by 18.3 per cent to 1,862,943 in 2016. Online newspapers are easily accessible on mobile phones, tablets and computers, among others. The number of Kiswahili daily and weekly newspapers in circulation decreased by 15.5 per cent and 22.6 per cent, respectively, in 2016. The daily and weekly English newspapers in circulation declined by 4.2 per cent and 8.2 per cent, respectively, during the review period.

**Table 15.15: Local Daily/Weekly Newspapers in Circulation, 2012 – 2016**

'000 Copies

| Newspapers | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **Daily Newspapers** | | | | | |
| English | 110,592 | 104,057 | 102,000 | 98,548 | 94,348 |
| Kiswahili | 6,000 | 5,900 | 5,800 | 5,209 | 4,401 |
| **Weekly Newspapers** | | | | | |
| English | 29,019 | 16,794 | 15,900 | 14,975 | 13,741 |
| Kiswahili | 1,790 | 1,810 | 1,900 | 1,825 | 1,413 |
| **Average online visitors per day** | 294,546 | 793,046 | 1,025,043 | 1,575,043 | 1,862,943 |

Source: Various Media Houses

* Provisional

# Governance

16 Chapter

## Overview

In 2016, the Government continued to implement various institutional reforms to improve Governance. The reforms included; vetting of police officers, installation of a national secure communication network and surveillance system for the National Police Service (NPS) in Nairobi and Mombasa, and introduction of a 'Roadmap Toolkit' to guide the training of police officers. The toolkit comprise of new Service Standing Orders, regulations on the use of force and the use of firearms, and strategies to counter corruption in the police service. During the same period, additional armored vehicles as well as transport trucks were procured to enhance capacity of the police to respond to emerging security threats and improve police mobility.

16.2. During the review period, the Judiciary implemented various reforms which were aimed at promoting socio-economic development. Among them was the operationalization of Employment and Labour Relations Court, formerly the Industrial Court, and the Environment and Land Court to High Court status. The Judiciary also established the Anti-Corruption and Economic Crimes Division in the High Court that is dedicated to hearing and determining corruption and economic crime cases. At the same time, the department of Immigration rolled out Electronic Foreign Nationals Services (eFNS) portal used by foreign nationals to apply for entry documents, work permits, citizenship and permanent residence.

16.3. The number of crimes reported to the police increased by 6.2 per cent from 72,490 in 2015 to 76,986 in 2016. Offences against persons and stealing were the main types of crimes reported in 2016 and accounted for 29.0 per cent and 13.5 per cent of crimes reported, respectively. During the same period, counties that had high number of reported crimes were Kiambu (6,006), Meru (5,117), Nairobi City (4,954) and Nakuru (4,133). The number of persons reported to have committed offences increased by 3.8 per cent from 70,515 in 2015 to 73,221 in 2016, of which 77.9 per cent were males.

16.4. The total number of cases handled by Ethics and Anti-Corruption Commission (EACC) increased by 40.1 per cent from 5,660 in 2014/15 to 7,929 in 2015/16. Corruption reports under investigation increased by 40.4 per cent from 2,747 in 2014/15 to 3,856 in 2015/16. The value of public assets recovered in 2015/16 amounted to KSh 420.6 million compared to KSh 140.3 million in 2014/15. In the review period, EACC also averted a loss of assets valued at KSh 2.6 billion.

16.5. The number of cases filed in law courts decreased by 37.1 per cent from 359,946 in 2015 to 226,554 in 2016. The number of cases concluded declined by 29.8 per cent to 191,386 during the same period. However, pending cases increased from 463,152 in 2015 to 498,320 in 2016. The total prison population which comprise of all persons committed to prison regardless of duration during the reference period decreased slightly by 5.3 per cent to 210,227 in 2016. This was partly attributed to sustained implementation of non-custodial policy aimed at decongesting the prisons. The daily average population of prisoners decreased by 6.8 per cent from 54,631 in 2015 to 50,900 in 2016.

16.6 The number of identity card applications for persons not previously registered (NPR) increased by 39.4 per cent to 1.5 million while production of identity cards (NPR) increased by 75.3 per cent to 1.4 million in 2016. During the same period, the number of identity cards collected increased by 62.0 per cent to 1.2 million.

## Public Safety, Law and Order

16.7. The number of crimes reported to the police increased by 6.2 per cent from 72,490 in 2015 to 76,986 in 2016. The main categories that contributed to the increase in the number of reported crimes were other offences against person and stealing which rose by 1,121 and 833 crimes, respectively, in 2016. However, declines in the number of reported crimes were mainly recorded in robbery and theft of stock categories during the review period.

**Table 16.1: Crimes Reported to the Police, 2012 – 2016**

Number

| Crimes[1] | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Homicide | 2,761 | 2,878 | 2,649 | 2,648 | 2,751 |
| Offences against morality | 4,806 | 4,779 | 5,184 | 6,164 | 6,228 |
| Other offences against persons | 20,698 | 19,344 | 19,911 | 21,174 | 22,295 |
| Robbery | 3,262 | 3,551 | 3,011 | 2,865 | 2,697 |
| Breakings | 7,578 | 6,397 | 5,656 | 5,591 | 5,621 |
| Theft of stock | 2,377 | 1,965 | 1,848 | 1,961 | 1,918 |
| Stealing | 14,111 | 11,455 | 10,042 | 9,528 | 10,361 |
| Theft by servant | 2,984 | 2,702 | 2,279 | 2,184 | 2,440 |
| Theft of Vehicles and other thefts | 1,663 | 1,631 | 1,239 | 1,111 | 1,355 |
| Dangerous drugs | 4,181 | 4,316 | 4,850 | 5,525 | 6,160 |
| Traffic offences | 66 | 45 | 100 | 120 | 139 |
| Criminal damage | 3,769 | 3,603 | 3,709 | 3,983 | 4,307 |
| Economic crimes | 3,369 | 2,750 | 3,038 | 3,244 | 3,503 |
| Corruption | 49 | 57 | 138 | 79 | 92 |
| Offences involving police officers | 69 | 95 | 53 | 71 | 57 |
| Offences involving tourists | 0 | 14 | 21 | 19 | 15 |
| Other penal code offences | 6,109 | 6,250 | 5,648 | 6,223 | 7,047 |
| **Total** | **77,852** | **71,832** | **69,376** | **72,490** | **76,986** |

Source: Kenya Police Service

* Provisional

[1] Refers to the description of crimes in appendix 16.1

16.8. The distribution of crimes reported to the police by command stations for 2014 to 2016 are shown in Table 16.2. Kiambu County recorded the highest number of crimes at 6,006 followed by Meru and Nairobi at 5,117 and 4,954, respectively. In the review period, the counties which recorded high increases in reported crimes were Kiambu (1,238), Machakos (991) and Meru (902). On the other hand, Bungoma, Trans-nzoia and Kisumu recorded high declines in reported crimes at 430, 324 and 267, respectively, in 2016.

## Table 16.2: Crimes Reported to Police by Command Station, 2014-2016

Number

| S/No | Command station | 2014 | 2015 | 2016* |
|---|---|---|---|---|
| 1 | Mombasa | 2,946 | 3,194 | 3,034 |
| 2 | Kwale | 958 | 1,097 | 1,037 |
| 3 | Kilifi | 2,362 | 2,199 | 2,254 |
| 4 | Tana River | 525 | 622 | 453 |
| 5 | Lamu | 316 | 492 | 434 |
| 6 | Taita Taveta | 1,047 | 961 | 755 |
| 7 | Garrissa | 850 | 638 | 525 |
| 8 | Wajir | 438 | 317 | 343 |
| 9 | Mandera | 252 | 271 | 254 |
| 10 | Marsabit | 370 | 468 | 675 |
| 11 | Isiolo | 219 | 213 | 507 |
| 12 | Meru | 1,971 | 4,215 | 5,117 |
| 13 | Tharaka Nithi | 659 | 628 | 722 |
| 14 | Embu | 824 | 848 | 1,433 |
| 15 | Kitui | 722 | 1,573 | 1,679 |
| 16 | Machakos | 738 | 1,461 | 2,452 |
| 17 | Makueni | 561 | 1,025 | 1,630 |
| 18 | Nyandarua | 1,654 | 1,446 | 1,473 |
| 19 | Nyeri | 1,632 | 1,668 | 1,792 |
| 20 | Kirinyaga | 1,776 | 1,177 | 1,656 |
| 21 | Muranga | 2,501 | 2,363 | 2,260 |
| 22 | Kiambu | 4,449 | 4,768 | 6,006 |
| 23 | Turkana | 787 | 974 | 927 |
| 24 | West Pokot | 739 | 684 | 795 |
| 25 | Samburu | 371 | 355 | 361 |
| 26 | Trans Nzoia | 1,610 | 1,781 | 1,457 |
| 27 | Uasin Gishu | 1,872 | 1,654 | 2,068 |
| 28 | Elgeyo Marakwet | 892 | 571 | 579 |
| 29 | Nandi | 1,090 | 989 | 1,105 |
| 30 | Baringo | 923 | 1,035 | 827 |

**Table 16.2: Crimes Reported to Police by Command Station, 2014-2016, Cont'd**

Number

| S/No | Command station | 2014 | 2015 | 2016* |
|---|---|---|---|---|
| 31 | Laikipia | 752 | 830 | 1,061 |
| 32 | Nakuru | 4,525 | 4,384 | 4,133 |
| 33 | Narok | 1,626 | 1,335 | 1,308 |
| 34 | Kajiado | 1,502 | 1,256 | 1,435 |
| 35 | Kericho | 1,577 | 1,510 | 1,568 |
| 36 | Bomet | 1,089 | 968 | 897 |
| 37 | Kakamega | 2,444 | 2,514 | 2,382 |
| 38 | Vihiga | 771 | 1,146 | 886 |
| 39 | Bungoma | 2,150 | 2,852 | 2,422 |
| 40 | Busia | 931 | 1,553 | 1,633 |
| 41 | Siaya | 1,452 | 1,493 | 1,470 |
| 42 | Kisumu | 2,249 | 2,293 | 2,026 |
| 43 | Homa Bay | 1,320 | 1,568 | 1,400 |
| 44 | Migori | 1,054 | 1,282 | 1,303 |
| 45 | Kisii | 1,933 | 2,018 | 2,180 |
| 46 | Nyamira | 878 | 1,124 | 1,055 |
| 47 | Nairobi City | 6,732 | 4,383 | 4,954 |
| 48 | KAPU[1] | 148 | 132 | 141 |
| 49 | Railways[1] | 189 | 162 | 122 |
| | **Kenya** | **69,376** | **72,490** | **76,986** |

Source: Kenya Police Service

* Provisional

[1] Kenya Airport Police Unit (KAPU) and Railways are fully fledged police command stations

16.9. The number of firearms and rounds of ammunition recovered and surrendered, and the quantity of drugs seized for 2012 to 2016 are presented in Table 16.3. In 2016, total firearms recovered stood at 436 while the number of rounds of ammunition of recovered and surrendered were 4,711 during the same period.

**Table 16.3: Firearms and Ammunition Recovered or Surrendered, and Drugs Seized, 2012 – 2016**

Number

| Firearms/Ammunition/Drugs | Unit | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|---|
| **Firearms** | | | | | | |
| Recovered | | | | | | |
| Rifles ... ... ... ... ... ... ... ... ... .. | Number | 122 | 169 | 210 | 141 | 85 |
| Pistols ... ... ... ... ... ... ... ... ... . | Number | 97 | 77 | 142 | 81 | 152 |
| Toy Pistols ... ... ... ... ... ... ... ... .. | Number | 17 | 39 | 39 | 108 | 199 |
| **Total** | | **236** | **285** | **391** | **330** | **436** |
| Surrendered | | | | | | |
| Rifles ... ... ... ... ... ... ... ... ... .. | Number | 11 | 16 | 1 | 1 | 8 |
| **Total** | | **11** | **16** | **1** | **1** | **8** |
| Ammunition (Rounds) | | | | | | |
| Recovered ... ... ... ... ... ... ... | Number | 12,768 | 3,712 | 5,166 | 5,000 | 4,694 |
| Surrendered ... ... ... ... ... ... . | Number | 56 | 499 | 7 | 7 | 17 |
| **Total** | | **12,824** | **4,211** | **5,173** | **5,007** | **4,711** |
| **Dangerous Drugs[1] seized** | Kg | **4,735** | **17,122** | **4,313** | **4,420** | **..** |

Source: Kenya Police Service

* Provisional

.. Data not available

[1] Means 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, Laws of Kenya

16.10. Table 16.4 shows the number of persons reported to the police to have committed offences by sex and county for 2014 to 2016. Overall, the number of persons reported to have committed crime increased by 3.8 per cent from 70,515 in 2015 to 73,221 in 2016, out of which 77.9 per cent were males. In the same period, the proportion of female offenders increased from 20.7 per cent to 22.1 per cent. Nairobi City County had the highest number of persons reported to have committed crime at 6,227 persons and accounted for 8.5 per cent of the total. Mandera County had the least number of persons reported to have committed crime in 2016 at 178. Mombasa County recorded the highest increase (2,047) of the number of persons reported to have committed crime in the review period. On the other hand, Uasin Gishu County had the highest decline (1,221) in the number of persons reported to have committed crime.

## Table 16.4: Persons Reported to the Police to have Committed Offences by sex and Command Stations, 2014–2016

Number

| S/No | Command station | 2014 | | | 2015 | | | 2016* | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 1 | Mombasa | 2,266 | 620 | 2,886 | 1,045 | 140 | 1,185 | 2,426 | 806 | 3,232 |
| 2 | Kwale | 376 | 135 | 511 | 904 | 272 | 1,176 | 740 | 103 | 843 |
| 3 | Kilifi | 587 | 104 | 691 | 1,481 | 330 | 1,811 | 1,583 | 475 | 2,058 |
| 4 | Tana River | 395 | 109 | 504 | 415 | 81 | 496 | 324 | 70 | 394 |
| 5 | Lamu | 360 | 41 | 401 | 577 | 140 | 717 | 313 | 35 | 348 |
| 6 | Taita Taveta | 940 | 153 | 1,093 | 870 | 184 | 1,054 | 561 | 143 | 704 |
| 7 | Garrissa | 399 | 280 | 679 | 270 | 23 | 293 | 71 | 262 | 333 |
| 8 | Wajir | 66 | 11 | 77 | 165 | 47 | 212 | 141 | 107 | 248 |
| 9 | Mandera | 310 | 29 | 339 | 259 | 17 | 276 | 149 | 29 | 178 |
| 10 | Marsabit | 468 | 60 | 528 | 377 | 69 | 446 | 695 | 49 | 744 |
| 11 | Isiolo | 258 | 80 | 338 | 93 | 4 | 97 | 346 | 78 | 424 |
| 12 | Meru | 4,588 | 1,525 | 6,113 | 2,870 | 1,292 | 4,162 | 4,339 | 1,134 | 5,473 |
| 13 | Tharaka Nithi | 665 | 96 | 761 | 559 | 129 | 688 | 721 | 99 | 820 |
| 14 | Embu | 1,342 | 180 | 1,522 | 1,110 | 327 | 1,437 | 695 | 428 | 1,123 |
| 15 | Kitui | 1,328 | 309 | 1,637 | 1,788 | 410 | 2,198 | 1,225 | 370 | 1,595 |
| 16 | Machakos | 2,123 | 679 | 2,802 | 1,829 | 471 | 2,300 | 1,929 | 287 | 2,216 |
| 17 | Makueni | 1,339 | 218 | 1,557 | 1,293 | 223 | 1,516 | 1,203 | 221 | 1,424 |
| 18 | Nyandarua | 1,202 | 299 | 1,501 | 1,243 | 286 | 1,529 | 1,360 | 249 | 1,609 |
| 19 | Nyeri | 1,519 | 284 | 1,803 | 1,330 | 709 | 2,039 | 1,257 | 301 | 1,558 |
| 20 | Kirinyaga | 628 | 343 | 971 | 423 | 185 | 608 | 1,171 | 478 | 1,649 |
| 21 | Muranga | 1,992 | 380 | 2,372 | 1,333 | 334 | 1,667 | 1,741 | 366 | 2,107 |
| 22 | Kiambu | 3,804 | 1,199 | 5,003 | 4,401 | 1,304 | 5,705 | 3,707 | 1,235 | 4,942 |
| 23 | Turkana | 737 | 240 | 977 | 350 | 41 | 391 | 403 | 18 | 421 |
| 24 | West Pokot | 659 | 147 | 806 | 464 | 142 | 606 | 657 | 90 | 747 |
| 25 | Samburu | 35 | 38 | 73 | 234 | 53 | 287 | 276 | 58 | 334 |
| 26 | Trans Nzoia | 3,129 | 818 | 3,947 | 1,751 | 463 | 2,214 | 1,304 | 171 | 1,475 |
| 27 | Uasin Gishu | 1,631 | 406 | 2,037 | 1,439 | 222 | 1,661 | 348 | 92 | 440 |
| 28 | Elgeyo Marakwet | 644 | 84 | 728 | 324 | 60 | 384 | 471 | 83 | 554 |
| 29 | Nandi | 633 | 171 | 804 | 724 | 229 | 953 | 884 | 163 | 1,047 |
| 30 | Baringo | 721 | 134 | 855 | 579 | 133 | 712 | 698 | 290 | 988 |
| 31 | Laikipia | 730 | 114 | 844 | 739 | 127 | 866 | 884 | 188 | 1,072 |
| 32 | Nakuru | 2,757 | 807 | 3,564 | 3,038 | 775 | 3,813 | 2,787 | 986 | 3,773 |
| 33 | Narok | 1,156 | 300 | 1,456 | 292 | 110 | 402 | 1,260 | 380 | 1,640 |
| 34 | Kajiado | 322 | 319 | 641 | 1,108 | 305 | 1,413 | 1,194 | 125 | 1,319 |
| 35 | Kericho | 1,383 | 183 | 1,566 | 1,075 | 184 | 1,259 | 1,277 | 243 | 1,520 |
| 36 | Bomet | 1,073 | 162 | 1,235 | 636 | 78 | 714 | 820 | 174 | 994 |
| 37 | Kakamega | 2,355 | 339 | 2,694 | 2,294 | 701 | 2,995 | 2,901 | 1,676 | 4,577 |
| 38 | Vihiga | 1,903 | 217 | 2,120 | 1,045 | 140 | 1,185 | 882 | 145 | 1,027 |
| 39 | Bungoma | 2,467 | 541 | 3,008 | 2,138 | 433 | 2,571 | 1,099 | 458 | 1,557 |
| 40 | Busia | 1,191 | 120 | 1,311 | 1,358 | 537 | 1,895 | 1,195 | 246 | 1,441 |
| 41 | Siaya | 1,030 | 224 | 1,254 | 1,025 | 145 | 1,170 | 887 | 400 | 1,287 |
| 42 | Kisumu | 900 | 146 | 1,046 | 1,775 | 327 | 2,102 | 1,388 | 371 | 1,759 |
| 43 | Homa Bay | 992 | 351 | 1,343 | 993 | 131 | 1,124 | 1,256 | 193 | 1,449 |
| 44 | Migori | 844 | 198 | 1,042 | 1,349 | 176 | 1,525 | 290 | 70 | 360 |
| 45 | Kisii | 1,525 | 514 | 2,039 | 1,275 | 408 | 1,683 | 1,733 | 358 | 2,091 |
| 46 | Nyamira | 898 | 217 | 1,115 | 1,000 | 158 | 1,158 | 612 | 206 | 818 |
| 47 | Nairobi | 5,799 | 2,309 | 8,108 | 4,110 | 1,465 | 5,575 | 4,581 | 1,646 | 6,227 |
| 48 | KAPU | 19 | 2 | 21 | 62 | 20 | 82 | 132 | 22 | 154 |
| 49 | Railways | 141 | 13 | 154 | 129 | 34 | 163 | 104 | 24 | 128 |
| | **Total** | **62,629** | **16,248** | **78,877** | **55,941** | **14,574** | **70,515** | **57,020** | **16,201** | **73,221** |

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 16.1) because a person may commit more than one crime or a crime may be committed by more than one person.

16.11. The number of persons reported to have committed offences against morality and other offences against persons increased by 2.9 per cent from 26,250 in 2015 to 27,018 in 2016 as shown in Table 16.5. Further, the number reported to have committed offences against morality increased from 5,700 in 2015 to 5,908 in 2016. Assault accounted for more than half of the total number of persons reported, while creating disturbance and defilement accounted for 22.7 and 16.4 per cent, respectively. The number of persons reported to have defiled children increased by 7.7 per cent from 4,107 in 2015 to 4,422 in 2016. Females accounted for 13.2 per cent and 26.3 per cent of persons reported to have committed offences against morality and other offences against persons in 2016, respectively.

## Table 16.5: Persons Reported to have committed Offences against Morality and Other Offences against Persons by Sex, 2012-2016

Number

| Offence | 2012 | | | 2013 | | | 2014 | | | 2015 | | | 2016* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| **Against morality** | | | | | | | | | | | | | | | |
| Rape | 839 | 44 | 883 | 772 | 141 | 913 | 710 | 145 | 855 | 758 | 135 | 893 | 739 | 149 | 888 |
| Defilement | 3,082 | 135 | 3,217 | 3,174 | 422 | 3,596 | 3,554 | 342 | 3,896 | 3,794 | 313 | 4,107 | 3,848 | 574 | 4,422 |
| Incest | 286 | 22 | 308 | 220 | 22 | 242 | 199 | 16 | 215 | 267 | 24 | 291 | 248 | 36 | 284 |
| Unnatural/sodomy | 111 | 3 | 114 | 115 | 9 | 124 | 107 | 6 | 113 | 101 | 8 | 109 | 68 | 7 | 75 |
| Bestiality | 47 | 3 | 50 | 76 | 55 | 131 | 23 | 4 | 27 | 25 | 5 | 30 | 38 | 5 | 43 |
| Indecent assault | 173 | 82 | 255 | 201 | 69 | 270 | 167 | 16 | 183 | 179 | 17 | 196 | 129 | 8 | 137 |
| Abduction | 102 | 12 | 114 | 55 | 15 | 70 | 60 | 15 | 75 | 46 | 16 | 62 | 52 | 3 | 55 |
| Bigamy | 3 | 56 | 59 | 32 | 13 | 45 | 6 | 0 | 6 | 11 | 1 | 12 | 3 | 1 | 4 |
| **Sub-total** | **4,643** | **357** | **5,000** | **4,645** | **746** | **5,391** | **4,826** | **544** | **5,370** | **5,181** | **519** | **5,700** | **5,125** | **783** | **5,908** |
| **Other offences against persons** | | | | | | | | | | | | | | | |
| Assault | 11,182 | 3,292 | 14,474 | 13,460 | 3,142 | 16,602 | 11,574 | 4,079 | 15,653 | 10,788 | 3,741 | 14,529 | 10,324 | 3,755 | 14,079 |
| Creating disturbance | 4,253 | 1,367 | 5,620 | 5,360 | 1,128 | 6,488 | 5,294 | 1,593 | 6,887 | 4,144 | 1,384 | 5,528 | 4,651 | 1,478 | 6,129 |
| Affray (scuffle) | 484 | 231 | 715 | 331 | 177 | 508 | 434 | 181 | 615 | 307 | 186 | 493 | 584 | 318 | 902 |
| **Sub-total** | **15,919** | **4,890** | **20,809** | **19,151** | **4,447** | **23,598** | **17,302** | **5,853** | **23,155** | **15,239** | **5,311** | **20,550** | **15,559** | **5,551** | **21,110** |
| **Total** | **20,562** | **5,247** | **25,809** | **23,796** | **5,193** | **28,989** | **22,128** | **6,397** | **28,525** | **20,420** | **5,830** | **26,250** | **20,684** | **6,334** | **27,018** |

*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 16.1) because a person may commit more than one crime or a crime may be committed by more than one person.*

16.12. The number of persons reported to have committed homicides increased by 8.5 per cent from 2,047 in 2015 to 2,221 in 2016 as presented in Table 16.6. The increase in homicides was mainly driven by suicides and murder which increased by 102 and 91cases, respectively. Causing death by dangerous driving, manslaughter and procuring abortion categories registered declines during the reference period.

## Table 16.6: Persons Reported to the Police to have Committed Homicides by Sex, 2012–2016

Number

| Offence | 2012 | | | 2013 | | | 2014 | | | 2015 | | | 2016* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Murder | 1,711 | 297 | 2,008 | 1,507 | 214 | 1,721 | 1,248 | 240 | 1,488 | 1,115 | 240 | 1,355 | 1,248 | 198 | 1,446 |
| Manslaughter | 217 | 41 | 258 | 42 | 11 | 53 | 30 | 6 | 36 | 44 | 13 | 57 | 42 | 10 | 52 |
| Infanticide | 7 | 35 | 42 | 15 | 45 | 60 | 6 | 25 | 31 | 11 | 19 | 30 | 9 | 25 | 34 |
| Procuring abortion | 7 | 31 | 38 | 5 | 29 | 34 | 8 | 37 | 45 | 8 | 25 | 33 | 6 | 21 | 27 |
| Concealing birth | 13 | 85 | 98 | 7 | 88 | 95 | 23 | 53 | 76 | 21 | 44 | 65 | 13 | 61 | 74 |
| Suicide | 219 | 104 | 323 | 263 | 64 | 327 | 239 | 62 | 301 | 177 | 44 | 221 | 234 | 89 | 323 |
| Causing death by dangerous driving | 338 | 19 | 357 | 462 | 32 | 494 | 205 | 21 | 226 | 249 | 37 | 286 | 238 | 27 | 265 |
| **Total** | **2,512** | **612** | **3,124** | **2,301** | **483** | **2,784** | **1,759** | **444** | **2,203** | **1,625** | **422** | **2,047** | **1,790** | **431** | **2,221** |

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 16.1) because a person may commit more than one crime or a crime may be committed by more than one person.

16.13. Table 16.7 presents the number of persons reported to have committed robbery and theft for 2012 to 2016. Persons reported to have committed robbery and theft increased slightly from 22,869 in 2015 to 23,131 in 2016. During the period under review, the number of persons reported to have committed offences related to vehicle and other thefts, theft by servant and stealing increased by 27.0, 11.0 and 4.6 per cent, respectively. The number of persons reported to have committed robbery, breakings and theft of stock however declined by 7.6, 6.1 and 4.1 per cent, respectively, during the same period.

## Table 16.7: Persons Reported to the Police to have Committed Robbery and Theft by Sex, 2012-2016

Number

| Offences | 2012 | | | 2013 | | | 2014 | | | 2015 | | | 2016* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Robbery | 4,044 | 265 | 4,311 | 4,025 | 307 | 4,332 | 2,983 | 379 | 3,362 | 2,485 | 298 | 2,783 | 2,096 | 475 | 2,571 |
| Breakings | 7,252 | 526 | 7,778 | 7,134 | 405 | 7,539 | 6,176 | 587 | 6,763 | 5,326 | 563 | 5,889 | 4,616 | 916 | 5,532 |
| Theft of stock | 2,403 | 99 | 2,502 | 2,335 | 126 | 2,461 | 2,091 | 182 | 2,273 | 1,688 | 223 | 1,911 | 1,579 | 254 | 1,833 |
| Stealing | 11,332 | 2,238 | 13,570 | 10,550 | 1,719 | 12,269 | 7,404 | 2,145 | 9,549 | 7,346 | 1,847 | 9,193 | 7,495 | 2,120 | 9,615 |
| Theft by servant | 2,303 | 853 | 3,156 | 2,134 | 918 | 3,052 | 1,704 | 841 | 2,545 | 1,504 | 667 | 2,171 | 1,550 | 859 | 2,409 |
| Vehicle & other thefts | 1,975 | 62 | 2,037 | 2,294 | 293 | 2,587 | 1,029 | 135 | 1,164 | 820 | 102 | 922 | 1,013 | 158 | 1,171 |
| **Total** | **29,309** | **4,043** | **33,354** | **28,472** | **3,768** | **32,240** | **21,387** | **4,269** | **25,656** | **19,169** | **3,700** | **22,869** | **18,349** | **4,782** | **23,131** |

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 16.1) because a person may commit more than one crime or a crime may be committed by more than one person.

16.14. The number of persons reported to have committed offences related to drugs, criminal damage, economic crimes and corruption by sex for 2012 to 2016 are shown in Table 16.8. In 2016, the total number of persons reported increased by 13.3 per cent to 13,793. Females accounted for 19.1 per cent of all persons reported to have committed these offences. The number of persons reported to have committed offences related to dangerous drugs stood at 5,901 in 2016, a 22.2 per cent increase compared to 2015. The number of males reported to have committed crimes related to dangerous drugs increased by 20.9 per cent to 4,971 in 2016 while that of females increased from 718 in 2005 to 930 in 2016. During the same period, the number of persons reported to have committed offences related to criminal damage increased by 12.5 per cent and accounted for 32.8 per cent of the total cases reported to police. Likewise, those reported to have committed economic crimes increased by 9.1 per cent and counted for 23.0 per cent of the total cases reported.

## Table 16.8: Persons Reported to have Committed Offences Related to Drugs, Criminal Damage, Economic Crimes and Corruption by Sex, 2012-2016

Number

| Offences | 2012 | | | 2013 | | | 2014 | | | 2015 | | | 2016* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total | male | female | Total | male | female | Total |
| Dangerous Drugs ..... | 3,759 | 406 | 4,165 | 3,670 | 562 | 4,232 | 4,424 | 541 | 4,965 | 4,111 | 718 | 4,829 | 4,971 | 930 | 5,901 |
| Criminal Damage ..... | 2,992 | 879 | 3,871 | 3,471 | 605 | 4,076 | 3,645 | 878 | 4,523 | 3,126 | 893 | 4,019 | 3,586 | 936 | 4,522 |
| Economic crimes ..... | 3,252 | 641 | 3,893 | 2,081 | 556 | 2,637 | 2,233 | 913 | 3,146 | 2,078 | 831 | 2,909 | 2,433 | 740 | 3,173 |
| Corruption ..... | 326 | 48 | 374 | 141 | 24 | 165 | 78 | 26 | 104 | 247 | 84 | 331 | 75 | 18 | 93 |
| Offences involving Police officers ..... | 69 | 6 | 75 | 38 | 24 | 62 | 913 | 16 | 146 | 54 | 32 | 86 | 96 | 8 | 104 |
| **Total** | **10,398** | **1,980** | **12,378** | **9,401** | **1,771** | **11,172** | **11,293** | **2,374** | **12,884** | **9,616** | **2,558** | **12,174** | **11,161** | **2,632** | **13,793** |

*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 16.1) because a person may commit more than one crime or a crime may be committed by more than one person.*

**Ethics and Corruption**

16.15. Cases handled and action taken by the Ethics and Anti-Corruption Commission (EACC) for 2011/12 to 2015/16 are shown in Table 16.9a. The total number of cases handled increased by 40.1 per cent from 5,660 in 2014/15 to 7,929 in 2015/16. Corruption cases under investigation increased by 40.4 per cent from 2,747 in 2014/15 to 3,856 in 2015/16. Complainants advised to seek civil redress nearly doubled to 566 in 2015/16 while those advised on the right authority to report to, increased by 44.7 per cent to 2,002 in the same period.

**Table 16.9a: Cases Handled and Action Taken by Ethics and Anti-Corruption Commission+, 2011/12 - 2015/16**

Number

| S/No | Action taken | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16* |
|---|---|---|---|---|---|---|
| 1 | Corruption cases for investigation ... ... ... ... ... ... ... ... ... | 2,183 | 1,423 | 1,950 | 2,747 | 3,856 |
| 2 | Cases referred to other investigative agencies ... ... ... ... ... ... ... ... | 178 | 111 | 120 | 117 | 215 |
| 3 | Cases referred to public service organizations for administrative intervention ... ... ... ... ... ... ... ... ... ... ... | 754 | 506 | 561 | 649 | 633 |
| 4 | Cases pending for more information ... ... ... ... ... ... ... ... ... ... ... .. | 30 | 18 | 65 | 80 | 115 |
| 5 | Complainants advised on the right authority to report to... ... ... ... ... .. | 1,597 | 900 | 868 | 1,384 | 2,002 |
| 6 | Complainants advised to seek civil redress ... ... ... ... ... ... ... ... ... .. | 301 | 270 | 264 | 288 | 566 |
| 7 | Cases with no further action (terminated)... ... ... ... ... ... ... ... ... ... | 187 | 127 | 178 | 395 | 542 |
| | **Total** | **5,230** | **3,355** | **4,006** | **5,660** | **7,929** |

*Source: Ethics and Anti-Corruption Commission*

** provisional*
*+ Revised*

16.16. Table 16.9b presents the number of reports forwarded to the Office of Director of Public Prosecution (ODPP) and action taken for 2011/12 to 2015/16. The total number of reports forwarded to ODPP increased from 117 in 2014/15 to 167 in 2015/16. The ODPP recommended 117 cases for prosecution, 25 for closure and 14 for further investigation in the period under review.

**Table 16.9b: Number of Cases Forwarded to the Office of the Director of Public Prosecution and Action Taken, 2011/12-2015/16**

Number

| S/No | Action Taken | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16* |
|---|---|---|---|---|---|---|
| 1 | Recommendtion to prosecute accepted | 102 | 38 | 43 | 74 | 117 |
| 2 | Recommendation to prosecute not accepted | 3 | 4 | 1 | 1 | 5 |
| 3 | Recommendation for administrative or other action accepted | 2 | 5 | 7 | 8 | 3 |
| 4 | Recommendation for administrative or other action not accepted | 0 | 0 | 1 | 0 | 1 |
| 5 | Recommendation for closure accepted | 16 | 15 | 14 | 19 | 25 |
| 6 | Recommendation for closure not accepted | 2 | 0 | 3 | 3 | 2 |
| 7 | Files returned for further investigations | 6 | 6 | 6 | 12 | 14 |
| 8 | Files awaiting DPP's action[1] | 7 | 2 | 0 | 0 | 0 |
| | **Total** | **138** | **70** | **75** | **117** | **167** |

*Source: Ethics and Anti-Corruption Commission (EACC)*

[1] *DPP - Director of Public Prosecution*

* *Provisional*

16.17. The value of public assets traced, recovered and loss averted by EACC for the period 2011/12 to 2015/16 is presented in Table 16.9c. During the period under review, the commission traced public assets valued at KSh 3.6 billion compared to KSh 3.7 billion in 2014/15. In same period, the value of public assets recovered stood at KSh 420.6 million. In addition, EACC averted a loss of assets worth KSh 2.6 billion in 2015/16.

**Table 16.9c: Public Assets traced, recovered and loss averted by EACC, 2011/12 – 2015/16**

KSh Million

| Period | Value of Public Assets traced | Value of public Assets recovered | Loss Averted[1] |
|---|---|---|---|
| 2011/12 | 126.5 | 41.2 | 1,208.2 |
| 2012/13 | 16,380.0 | 567.4 | 55,016.5 |
| 2013/14 | 7,214.0 | 2,068.0 | 5,600.0 |
| 2014/15 | 3,669.6 | 140.3 | 1,600.0 |
| 2015/16* | 3,614.1 | 420.6 | 2,600.0 |

Source: Ethics and Anti-Corruption Commission (EACC)

*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

16.18. Table 16.10 presents the number of environmental crimes reported to National Environmental Management Authority (NEMA) for the period 2012 to 2016. In 2016, 342 crimes were reported to NEMA out of which 229 involved illegal movement or dumping of waste. This increase is partly attributed to intensified public awareness campaign by NEMA in the review period. Crimes on air pollution increased from 57 in 2015 to 74 in 2016 while those on water and soil pollution declined during the review period.

**Table 16.10 Environmental Crimes Reported to NEMA, 2012–2016**

Number

| Type of cases | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Air Pollution | 20 | 13 | 72 | 57 | 74 |
| Water Pollution | 6 | 34 | 79 | 52 | 32 |
| Soil Pollution | 1 | 11 | 71 | 44 | 7 |
| Illegal movement or dumping of waste | 5 | 8 | 46 | 59 | 229 |
| **Total** | **32** | **66** | **268** | **212** | **342** |

Source: National Environment Management Authority

*Provisional

## Public Prosecutions

16.19. Table 16.11 presents the number of registered murder cases and convictions obtained by High Court Station from 2012 to 2016. The number of registered murder cases reduced from 987 in 2015 to 940 in 2016 while convictions for murder cases reduced from 204 in 2015 to 207 during the same period. Nairobi City County had the highest number of murder cases at 184 followed by Eldoret and Meru at 92 and 77, respectively.

**Table 16.11: Registered Murder cases and Convictions obtained by High Court Station, 2012 – 2016**

Number

| | 2012 | | 2013 | | 2014 | | 2015 | | 2016* | |
|---|---|---|---|---|---|---|---|---|---|---|
| **High Court Station** | **R** | **C** | **R** | **C** | **R** | **C** | **R** | **C** | **R** | **C** |
| Nairobi | 109 | 5 | 188 | 18 | 95 | 15 | 118 | 25 | 184 | 11 |
| Mombasa | 74 | 0 | 95 | 0 | 43 | 16 | 57 | 16 | 40 | 1 |
| Kisumu | 121 | 0 | 131 | 5 | 5 | 4 | 30 | 3 | 30 | 10 |
| Eldoret | 149 | 9 | 150 | 41 | 21 | 4 | 89 | 21 | 92 | 13 |
| Kitale | 55 | 5 | 86 | 12 | 77 | 12 | 50 | 18 | 3 | 5 |
| Kakamega | 70 | 5 | 74 | 0 | 70 | 0 | 41 | 0 | 55 | 0 |
| Bungoma | 123 | 14 | 124 | 24 | 124 | 8 | 37 | 3 | 28 | 14 |
| Meru[3] | 85 | 1 | 122 | 7 | 43 | 16 | 109 | 44 | 77 | 35 |
| Machakos[4] | 41 | 4 | 67 | 79 | 149 | 6 | 61 | 7 | 23 | 1 |
| Kericho | 48 | 2 | 72 | 15 | 38 | 0 | 14 | 16 | 28 | 18 |
| Nyeri | 50 | 6 | 61 | 0 | 87 | 0 | 21 | 1 | 11 | 0 |
| Kisii | 212 | 4 | 212 | 15 | 30 | 5 | 79 | 1 | 34 | 0 |
| Embu | 33 | 0 | 61 | 4 | 26 | 12 | 27 | 4 | 21 | 6 |
| Malindi | 30 | 0 | 46 | 2 | 71 | 4 | 7 | 11 | 14 | 6 |
| Nakuru | 135 | 8 | 141 | 22 | 36 | 7 | 21 | 5 | 52 | 2 |
| Busia | 12 | 3 | 26 | 6 | 0 | 0 | 27 | 1 | 34 | 24 |
| Garissa | - | - | 29 | 6 | 29 | 12 | 39 | 0 | 20 | 0 |
| Homa Bay | - | - | 24 | 8 | 5 | 1 | 27 | 12 | 18 | 17 |
| Murang'a | - | - | - | - | 77 | 9 | 36 | 2 | 32 | 1 |
| Kerugoya | - | - | - | - | 200 | 27 | 28 | 0 | 19 | 1 |
| Bomet | - | - | - | - | - | - | 48 | 7 | 20 | 8 |
| Kajiado | - | - | - | - | - | - | 3 | 0 | 21 | 0 |
| Kitui | - | - | - | - | - | - | 13 | 7 | 15 | 14 |
| Voi[2] | - | - | - | - | - | - | 5 | 0 | 4 | 1 |
| Naivasha[1] | - | - | - | - | - | - | .. | .. | 44 | 8 |
| Lodwar[1] | - | - | - | - | - | - | .. | .. | 21 | 11 |
| **Total** | **1,347** | **66** | **1,709** | **264** | **1,226** | **158** | **987** | **204** | **940** | **207** |

Source: Office of the Director of Public Prosecutions

* Provisional

R - Registered murder cases, C - Murder convictions obtained

[1] New courts

[2] Voi was previously reported as Taita Taveta

[3] Meru includes Isiolo

[4] Makueni is under Machakos

**Judiciary** 16.20. In 2016, the Judiciary fully operationalized the Employment and Labour relations Court, formerly the industrial court, and the Environment and Land Court which are courts of the status of the High Court. The number of cases handled by various courts in 2014/15 to 2015/16 are presented in Table 16.12. In the year under review, the number of cases filed in the magistrates court declined by 35.6 per cent to 198,656 while the number of pending cases increased by 9.1 per cent to 333,014. In the Employment and Labour Relations Court, the number of filed cases increased by 23.5 per cent to 4,244 in 2015/16, while the number of cases disposed of more than doubled to 2,403. In the Kadhis Court, the number of filed cases increased by 1,591 to 3,495 during the review period. The Court of Appeal recorded reduction in the number of cases in all categories in 2016.

**Table 16.12: Cases Handled by Various Courts, 2012–2016[1]**

Number

| Year | Status of Case | Kadhis Court | Magistrates Courts | High Courts | Employment & Labour Relations Court* | Environment and Land Court* | Court of Appeal | Supreme Court | Total |
|---|---|---|---|---|---|---|---|---|---|
| 2012 | Filed ... ... ... ... . | 2,421 | 315,206 | 27,614 | .. | .. | 1,126 | 17 | 343,963 |
| | Pending ... ... ... | 2,437 | 510,107 | 114,826 | .. | .. | 6,234 | 9 | 631,176 |
| | Disposed of ... ... | 3,123 | 313,457 | 21,290 | .. | .. | 606 | 8 | 335,361 |
| 2013 | Filed ... ... ... ... . | 3,462 | 277,666 | 41,814 | .. | .. | 402 | 70 | 319,952 |
| | Pending ... ... ... | 2,222 | 304,080 | 160,058 | .. | .. | 4,209 | 20 | 468,367 |
| | Disposed of ... ... | 2,262 | 213,688 | 18,718 | .. | .. | 476 | 42 | 232,924 |
| 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 ... ... | 1,446 | 216,998 | 49,409 | 1,129 | 2,156 | 1,420 | 47 | 272,605 |
| 2016 | Filed ... ... ... ... . | 3,495 | 198,656 | 15,867 | 4,244 | 3,353 | 901 | 38 | 226,554 |
| | Pending ... ... ... | 3,256 | 333,014 | 127,678 | 10,883 | 20,560 | 2,861 | 68 | 498,320 |
| | Disposed of ... ... | 1,207 | 170,858 | 14,002 | 2,403 | 1,836 | 1,057 | 23 | 191,386 |

Source: Judiciary

*Provisional

.. Data not available

[1]Data for 2015 refers to 2014/15 and 2016 refers to 2015/16 financial years

Filed cases refer to all cases brought before a court during the year in reference

Pending cases refer to the cases which had not been determined/resolved by 30th June during the year in reference

Disposed of cases refers to all cases that were resolved/determined by 30th June during the year in reference.

16.21. The number of judicial officers and practicing lawyers for 2012 to 2016 are shown in Table 16.13. The number of judicial officers decreased from 616 in 2015 to 611 in 2016. The number of magistrates decreased from 451 in 2015 to 438 in 2016. During the same period, the number of Kadhis increased to 45. Similarly, the number of practicing lawyers increased by 14.7 per cent to 8,231 in 2016.

**Table 16.13: Number of Magistrates, Judges and Practicing Lawyers, 2012–2016**

Number

| Category of Magistrates | 2012 | 2013 | | | 2014 | | | 2015 | | | 2016* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Magistrates and Kadhis** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** | **Male** | **Female** | **Total** |
| Chief Magistrates | 33 | 27 | 13 | 40 | 25 | 24 | 49 | 23 | 21 | 44 | 28 | 21 | 49 |
| Senior Principal Magistrate | 49 | 53 | 28 | 81 | 32 | 22 | 54 | 30 | 22 | 52 | 35 | 26 | 61 |
| Principal Magistrate | 81 | 60 | 39 | 99 | 56 | 29 | 85 | 56 | 29 | 85 | 43 | 22 | 65 |
| Senior Resident Magistrate | 78 | 30 | 42 | 72 | 58 | 46 | 104 | 58 | 46 | 104 | 77 | 79 | 156 |
| Resident Magistrate | 214 | 28 | 60 | 88 | 68 | 98 | 166 | 68 | 98 | 166 | 39 | 68 | 107 |
| **Total Magistrates** | 455 | **198** | **182** | **380** | **239** | **219** | **458** | **235** | **216** | **451** | **222** | **216** | **438** |
| Chief Kadhi | 1 | 1 | - | 1 | 1 | - | 1 | 1 | - | 1 | 1 | - | 1 |
| Deputy Chief Kadhi | .. | 1 | - | 1 | 1 | - | 1 | 1 | - | 1 | 1 | - | 1 |
| Principal Kadhi | .. | 2 | - | 2 | 2 | - | 2 | 2 | - | 2 | 2 | - | 2 |
| Kadhi I | .. | 8 | - | 8 | 11 | - | 11 | 11 | - | 11 | 11 | - | 11 |
| Kadhi II | .. | 18 | - | 18 | 20 | - | 20 | 20 | - | 20 | 30 | - | 30 |
| **Total Kadhis** | .. | **30** | **0** | **30** | **35** | **0** | **35** | **35** | **0** | **35** | **45** | **0** | **45** |
| **Total magistrates & Kadhis** | **456** | **228** | **182** | **410** | **274** | **219** | **493** | **270** | **216** | **486** | **267** | **216** | **483** |
| **Judges** | | | | | | | | | | | | | |
| Supreme Court Judges | 6 | 5 | 2 | 7 | 5 | 2 | 7 | 5 | 2 | 7 | 5 | 2 | 7 |
| Court of Appeal Judges | 27 | 18 | 8 | 26 | 18 | 8 | 26 | 18 | 8 | 26 | 18 | 7 | 25 |
| High Court (Puisne) Judges | 80 | 51 | 35 | 86 | 60 | 37 | 97 | 60 | 37 | 97 | 59 | 37 | 96 |
| **Total Judges** | **113** | **74** | **45** | **119** | **83** | **47** | **130** | **83** | **47** | **130** | **82** | **46** | **128** |
| **Grand Total** | **569** | **302** | **227** | **529** | **357** | **266** | **623** | **353** | **263** | **616** | **349** | **262** | **611** |
| **Number of Practicing Lawyers** | **5,525** | **..** | **..** | **6,500** | **..** | **..** | **7,200** | **4,294** | **2,885** | **7,179** | **4,803** | **3,428** | **8,231** |

Source: Judiciary, Law Society of Kenya

* Provisional

..Data not available

## Prisons

16.22. Table 16.14 provides details of prison population by sex and duration of sentence for the period 2012 to 2016. The total prison population which comprise of all persons committed to prison regardless of duration during the reference period decreased slightly by 5.3 per cent to 210,227 in 2016. During this period, convicted prisoners declined by 6.4 per cent to 82,433 in 2016. Similarly, those committed for civil debt and remandees decreased by 9.0 per cent and 4.5 per cent to 534 and 127,260 in 2016, respectively. The total number of prisoners on death sentence and those on life imprisonment dropped by 11.4 per cent from 2,220 in 2015 to 1,967 in 2016. The prison population per 100,000 of Kenyan population decreased from 502.7 in 2015 to 463.4 in 2016.

## Table 16.14: Prison Population by Sentence, Duration and Sex, 2012 – 2016

Number

| | 2012 | | 2013+ | | 2014 | | 2015 | | 2016* | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Less than 1 Month | 12,294 | 1,374 | 14,736 | 1,644 | 24,374 | 2,053 | 20,597 | 1847 | 16,956 | 1,337 |
| Sentenced to 1 Month to < 2yrs | 34,604 | 3,853 | 43,686 | 5,721 | 53,313 | 7,819 | 43,015 | 9,574 | 42,001 | 8,767 |
| Sentenced to 2 yrs or more | 500 | 511 | 7,563 | 421 | 15,138 | 407 | 10,083 | 779 | 11,003 | 402 |
| Life imprisonment | 1,994 | 44 | 2,111 | 45 | 2,582 | 42 | 1,074 | 87 | 1,087 | 120 |
| Death sentence | 714 | 27 | 778 | 31 | 2,708 | 49 | 998 | 61 | 742 | 18 |
| **Total Convicted Prisoners by sex** | **50,106** | **5,809** | **68,874** | **7,862** | **98,115** | **10,370** | **75,767** | **12,348** | **71,789** | **10,644** |
| **Total Convicted Prisoners** | **55,915** | | **76,736** | | **108,485** | | **88,115** | | **82,433** | |
| Committed for civil debt | 118 | 18 | 556 | 113 | 1036 | 108 | 472 | 115 | 431 | 103 |
| **Total Committed for debt** | **136** | | **669** | | **1,144** | | **587** | | **534** | |
| Committed to remand by sex | 129,348 | 11,512 | 137,974 | 12,539 | 124,795 | 13,966 | 121,097 | 12,175 | 117,687 | 9,573 |
| **Total Committed to Remand** | **140,860** | | **150,513** | | **138,761** | | **133,272** | | **127,260** | |
| **Total Prisons Population by sex** | **179,572** | **17,339** | **207,404** | **20,514** | **223,946** | **24,444** | **197,336** | **24,638** | **189,907** | **20,320** |
| **Total Prisons Population** | **196,911** | | **227,918** | | **248,390** | | **221,974** | | **210,227** | |
| Number Previously convicted | 11,446 | 1,503 | 21,830 | 1,080 | 23,670 | 11,257 | 15,979 | 1,704 | 13,897 | **827** |
| Deaths (Excluding Executions) | 217 | 19 | 623 | 9 | 421 | 3 | 247 | 14 | **178** | **9** |
| **Prison population per 100,000 of Kenyan population** | **480.2** | | **556.4** | | **578.2** | | **502.7** | | **463.4** | |

Source: Kenya Prisons Service

* Provisional

+ Revised

16.24. Table 16.15 presents the daily average population of prisoners by sex for 2012 to 2016. In 2016, the daily average population of prisoners decreased by 6.8 per cent to 50,900. During this period, the daily average convicted and remanded population declined by 6.2 from 7.6 per cent, respectively. About 92.6 per cent of the daily average convicted and remanded population in Kenyan prisons were males.

## Table 16.15: Daily Average Population of Prisoners by Sex, 2012-2016

Number

| | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **Convicted Prisoners** | | | | | |
| Males | 31,877 | 30,356 | 30,601 | 28,889 | 27,078 |
| Females | 2,165 | 1,575 | 2,085 | 1,997 | 1,889 |
| **Sub-Total** | **34,042** | **31,931** | **32,686** | **30,886** | **28,967** |
| **Remanded Prisoners** | | | | | |
| Males | 16,472 | 19,166 | 20,896 | 21,760 | 20,060 |
| Females | 1,497 | 1,175 | 1,688 | 1,985 | 1,873 |
| **Sub -Total** | **17,969** | **20,340** | **22,584** | **23,745** | **21,933** |
| **Total** | **52,011** | **52,271** | **55,270** | **54,631** | **50,900** |

Source: Kenya Prison Service

* Provisional

16.23. Table 16.16 gives the convicted prison population by age and sex from 2012 to 2016. The number of convicted prisoners declined by 6.4 per cent to 82,433 in the period under review. The youth under 26 years (40,632) accounted for 49.3 per cent of the total convicted population. Male prisoners declined in all age categories except those aged 51 and above while female prisoners dropped in all age categories except juveniles.

**Table 16.16: Convicted Prison Population by Age and Sex, 2012-2016**

Number

| Year | Sex | Under 16 | 16 -17 | 18-20 | 21-25 | 26-50 | 51+ | Total |
|---|---|---|---|---|---|---|---|---|
| 2012 | Male ... ... ... . | 184 | 2,462 | 11,537 | 17,188 | 21,864 | 4,281 | 50,106 |
| | Female ... ... .. | 1 | 120 | 878 | 2,010 | 2,849 | 317 | 5,809 |
| | **Total... ... ... .** | **185** | **2,582** | **12,415** | **19,198** | **24,713** | **4,598** | **55,915** |
| 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** |

*Source: Kenya Prison Service*

* *Provisional*

\+ Revised

16.24. Table 16.17 presents the number of convicted prisoners by type of offence and sex for 2012 to 2016. In 2016, persons convicted for liqour offences contributed slightly more than a third of convicted prisoners. All offences recorded declines in the number of convicts except those related to liquor which increased by 7.7 per cent to 28,936 in 2016. Persons convicted under order and administration of lawful authority decreased by 11.4 per cent to 9,468 in 2016. At the same time, those convicted for offences related to property declined by a similar margin to 8,603.

## Table 16.17: Convicted Prisoners by Type of Offence and Sex, 2012-2016

Number

| Type of Offence[1] | 2012 | | | 2013 | | | 2014 | | | 2015 | | | 2016* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Order and administration of lawful authority | 5,739 | 279 | 6,018 | 8,862 | 345 | 9,207 | 17,171 | 415 | 17,586 | 10,235 | 457 | 10,692 | 9,113 | 355 | 9,468 |
| Injurious to public | 2,492 | 154 | 2,646 | 2,947 | 174 | 3,121 | 4,527 | 188 | 4,715 | 3,231 | 169 | 3,400 | 3,127 | 132 | 3,259 |
| Against person | 3,598 | 329 | 3,927 | 4,838 | 467 | 5,305 | 7,574 | 496 | 8,070 | 5,771 | 394 | 6,165 | 5,084 | 369 | 5,453 |
| Related to property | 7,148 | 361 | 7,509 | 9,393 | 374 | 9,767 | 13,762 | 503 | 14,265 | 9,382 | 333 | 9,715 | 8,269 | 334 | 8,603 |
| Attempts & conspiracies | 1,161 | 81 | 1,242 | 1,554 | 62 | 1,616 | 3,720 | 106 | 3,826 | 1,312 | 75 | 1,387 | 1,308 | 23 | 1,331 |
| Employment Act | 2,274 | 768 | 3,042 | 2,861 | 611 | 3,472 | 4,375 | 321 | 4,696 | 5,851 | 253 | 6,104 | 3,992 | 297 | 4,289 |
| Liquor Act | 8,203 | 2,264 | 10,467 | 12,309 | 3,899 | 16,208 | 18,828 | 6,485 | 25,313 | 18,292 | 8,564 | 26,856 | 20,967 | 7,969 | 28,936 |
| Drugs related | 3,292 | 78 | 3,370 | 3,361 | 59 | 3,420 | 5,246 | 221 | 5,467 | 5,174 | 249 | 5,423 | 4,264 | 114 | 4,378 |
| Various cases | 16,199 | 1,495 | 17,694 | 20,545 | 1,732 | 22,277 | 18,303 | 1,427 | 19,730 | 16,111 | 1,814 | 17,925 | 15,554 | 1,049 | 16,603 |
| Registration of persons[2] | .. | .. | .. | 2,204 | 139 | .. | 4,609 | 208 | .. | 408 | 40 | .. | 111 | 2 | 113 |
| **Total by sex** | **50,106** | **5,809** | **55,915** | **68,874** | **7,862** | **76,736** | **98,115** | **10,370** | **108,485** | **75,767** | **12,348** | **88,115** | **71,789** | **10,644** | **82,433** |

Source: Kenya Prison Service

* Provisional

[+] Revised

[1] As categorised in Appendix 16.2

[2] refers to offences outlined in the Registration of Persons Act Cap 107 such as illegal registrations

16.25. The number of Police, Prison and Probation officers from 2012 to 2016 are shown in Table 16.18. In the review period, the number of police officers increased by 25.6 per cent to 53,844, following the absorption of two groups of recruits into the service The number of prison officers increased by 9.0 per cent from 19,389 in 2015 to 21,139 in 2016 with the number of female prison officers increasing by 14.9 per cent. Prison officers in juveniles prisons increased from 321 in 2015 to 399 in 2016. However, the number of probation officers decreased by 4.3 per cent from 579 in 2015 to 554 in 2016.

**Table 16.18: Police, Prisons and Probation Officers, 2012 – 2016**

Number

| Year | Sex | Police[1] Officers | Prison Officers | | | Probation Officers |
|---|---|---|---|---|---|---|
| | | | in Adult Prisons | in Juvenile Prisons | Total | |
| 2012 | Male ... ... ... ... | 37,868 | 16,688 | 235 | 16,923 | 349 |
| | Female ... ... ... ... | 4,718 | 3,163 | 54 | 3,217 | 275 |
| | **Total ... ... ... ...** | **42,586** | **19,851** | **289** | **20,140** | **624** |
| 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 ... ... ... ... | 45,898 | 17,249 | 308 | 17,557 | 303 |
| | Female ... ... ... ... | 7,946 | 3,491 | 91 | 3,582 | 251 |
| | **Total ... ... ... ...** | **53,844** | **20,740** | **399** | **21,139** | **554** |

Source: Kenya Police, Prisons Service and Probation and Aftercare Department

* Provisional

1 Excludes administration police

**Probation and Aftercare**

16.26. Table 16.19 shows the number of offenders serving probation sentence, community service and aftercare by sex and type of offence from 2015 to 2016. The total number of offenders declined by 12.7 per cent from 58,003 in 2015 to 50,619 in 2016. About three quarters of the offenders were on community service while 22.3 per cent were serving probation sentences in 2016. Offenders on probation and those on community service decreased by 15.9 and 13.0 per cent, respectively, while offenders serving aftercare increased by 33.6 per cent in 2016. Offenders involved in general stealing, dangerous drugs and assault accounted for 14.3, 11.7 and 11.5 per cent, respectively.

## Table 16.19: Number of Offenders Serving Probation Sentence, Community Service and Aftercare by Sex and Type of Offence, 2015 and 2016

Number

| Offence | Offenders Serving Probation Sentence | | | | | | Offenders Serving Community Service | | | | | | Offenders Serving Aftercare | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2015 | | | 2016* | | | 2015 | | | 2016* | | | 2015* | | | 2016* | | |
| | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Murder (including attempt) | 27 | 19 | 46 | 60 | 22 | 82 | 0 | 0 | 0 | 3 | 2 | 5 | 5 | 0 | 5 | 8 | 1 | 9 |
| Manslaughter | 91 | 28 | 119 | 92 | 30 | 122 | 16 | 1 | 17 | 5 | 15 | 20 | 3 | 0 | 3 | 20 | 0 | 20 |
| Rape (including attempt) | 188 | 0 | 188 | 217 | 10 | 227 | 18 | 0 | 18 | 118 | 8 | 126 | 123 | 0 | 123 | 139 | 1 | 140 |
| Assault | 1,006 | 355 | 1,361 | 957 | 345 | 1,302 | 525 | 118 | 643 | 431 | 75 | 506 | 22 | 6 | 28 | 105 | 19 | 124 |
| Other offences against persons | 1,065 | 309 | 1,374 | 992 | 284 | 1,276 | 421 | 80 | 501 | 440 | 84 | 524 | 48 | 7 | 55 | 67 | 12 | 79 |
| Robbery and Allied offences | 67 | 10 | 77 | 126 | 15 | 141 | 13 | 1 | 14 | 19 | 3 | 22 | 32 | 0 | 32 | 63 | 2 | 65 |
| Breakings | 529 | 16 | 545 | 502 | 21 | 523 | 330 | 28 | 358 | 256 | 16 | 272 | 193 | 11 | 204 | 150 | 0 | 150 |
| Theft of Stock | 317 | 10 | 327 | 213 | 6 | 219 | 199 | 16 | 215 | 181 | 24 | 205 | 14 | 2 | 16 | 30 | 2 | 32 |
| General stealing | 1,717 | 214 | 1,931 | 1,417 | 196 | 1,613 | 1,532 | 179 | 1,711 | 885 | 67 | 952 | 396 | 10 | 406 | 430 | 15 | 445 |
| Theft of M/vehicle | 20 | 0 | 20 | 19 | 5 | 24 | 23 | 0 | 23 | 4 | 0 | 4 | 10 | 0 | 10 | 11 | 0 | 11 |
| Theft of M/vehicles parts | 4 | 0 | 4 | 7 | 1 | 8 | 4 | 0 | 4 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| Theft from m/ vehicles | 9 | 2 | 11 | 19 | 5 | 24 | 11 | 0 | 11 | 40 | 1 | 41 | 0 | 0 | 0 | 0 | 0 | 0 |
| Theft of bicycles | 7 | 3 | 10 | 16 | 2 | 18 | 214 | 0 | 214 | 56 | 1 | 57 | 2 | 0 | 2 | 1 | 0 | 1 |
| Theft by servant | 223 | 66 | 289 | 268 | 37 | 305 | 624 | 33 | 657 | 78 | 36 | 114 | 0 | 0 | 0 | 21 | 4 | 25 |
| Dangerous drugs[1] | 1,341 | 538 | 1,879 | 1,066 | 258 | 1,324 | 2,613 | 1,002 | 3,615 | 2,073 | 703 | 2,776 | 43 | 30 | 73 | 60 | 10 | 70 |
| Handling stolen property | 193 | 19 | 212 | 163 | 27 | 190 | 85 | 15 | 100 | 216 | 75 | 291 | 11 | 0 | 11 | 18 | 1 | 19 |
| Corruption | 16 | 1 | 17 | 35 | 23 | 58 | 1 | 3 | 4 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 2 | 2 |
| Causing death by dangerous driving | 3 | 1 | 4 | 47 | 6 | 53 | 8 | 0 | 8 | 9 | 2 | 11 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other offences against property | 598 | 111 | 709 | 609 | 109 | 718 | 636 | 181 | 817 | 583 | 112 | 695 | 26 | 3 | 29 | 68 | 3 | 71 |
| All other penal code offences | 3,335 | 964 | 4,299 | 2,108 | 951 | 3,059 | 29,341 | 5,109 | 34,450 | 26,507 | 4,594 | 31,101 | 173 | 31 | 204 | 299 | 42 | 341 |
| **TOTAL** | **10,756** | **2,666** | **13,422** | **8,933** | **2,353** | **11,286** | **36,614** | **6,766** | **43,380** | **31,911** | **5,818** | **37,729** | **1,101** | **100** | **1,201** | **1,490** | **114** | **1,604** |

Source: Probation and Aftercare Department

* Provisional

[1] See Appendix 16.1

**Immigration**

16.27. Table 16.20 shows the number of passports and work permits issued, and foreign nationals registered for the period 2012 to 2016. In 2016, a total of 156,040 passports were issued compared to 151,589 in 2015. During this period, the number of foreign nationals registered rose by 47.6 per cent to 37,033. However, issued work permits decreased by 23.8 per cent to 5,851 while renewed work permits decreased by 14.2 per cent to 9,547 in 2016.

**Table 16.20: Passports and Work Permits Issued, and Foreign Nationals Registered, 2012 - 2016**

Number

| Category | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| Passports issued... ... ... ... ... ... ... | 171,169 | 148,940 | 183,042 | 151,589 | 156,040 |
| Foreign Nationals Registered[1] ... .. | 23,490 | 21,920 | 22,326 | 25,091 | 37,033 |
| Work permits issued[2]... ... ... ... ... ... | 11,360 | 10,411 | 10,540 | 7,683 | 5,851 |
| Work Permits Renewed ... ... ... ... | 8,636 | 9,315 | 10,532 | 11,125 | 9,547 |

Source: Department of Immigration

* Provisional

[1] Means the same as "Aliens registered" in previous reports

[2] Means the same as "Entry permits" in previous reports

**National Identity Cards**

16.28. Table 16.21 shows the number of applications made by persons Not Previously Registered (NPR), number of cards produced and collected by County for 2012 to 2016. The number of new applications increased from 1.1 million in 2015 to 1.5 million in 2016. The counties with high percentage increases in new applications were Garissa, Kirinyaga, Laikipia, Muranga and West Pokot. The increase in new application was mainly attributed to introduction of mobile registration centres especially in Arid and Semi-Arid Lands (ASALs). Production of national identification cards for persons not previously registered increased by 75.3 per cent from 816.5 thousands in 2015 to 1,431.1 thousands in 2016. Counties with high growths in production of ID cards were Lamu, Mandera and West Pokot. Collection of not previously registered ID cards increased by 62.0 per cent from 766.0 thousands in 2015 to 1,241.1 thousands in 2016.

## Table 16.21: New Identity Card Applications Made, Produced and Collected by County, 2012-2016

| S/No | County | NPR Applications | | | | | NPR IDs Produced | | | | | NPR IDs Collected | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2012 | 2013 | 2014 | 2015 | 2016* | 2012 | 2013 | 2014 | 2015 | 2016* | 2012 | 2013 | 2014 | 2015 | 2016* |
| 1 | Mombasa …… | 35,676 | 23,104 | 17,318 | 20,817 | 24,046 | 43,150 | 41,549 | 15,653 | 15,176 | 26,165 | 33,652 | 22,104 | 17,859 | 13,500 | 22,966 |
| 2 | Kwale …… | 28,117 | 22,444 | 17,169 | 21,513 | 37,846 | 10,949 | 3,137 | 15,802 | 14,745 | 38,688 | 24,137 | 24,921 | 15,969 | 14,469 | 33,417 |
| 3 | Kilifi …… | 47,748 | 38,326 | 36,227 | 41,283 | 54,127 | 21,933 | 26,574 | 29,382 | 30,820 | 50,026 | 51,970 | 40,609 | 29,183 | 32,753 | 55,187 |
| 4 | Tana River …… | 13,403 | 11,450 | 4,803 | 9,149 | 12,301 | 9,659 | 9,572 | 4,471 | 5,022 | 10,196 | 10,648 | 5,987 | 5,152 | 4,685 | 6,481 |
| 5 | Lamu …… | 4,149 | 1,060 | 735 | 2,357 | 4,539 | 28,792 | 24,657 | 1,625 | 119 | 6,129 | 3,188 | 3,063 | 1,513 | 292 | 4,069 |
| 6 | Taita Taveta …… | 13,306 | 8,263 | 7,245 | 6,354 | 9,566 | 14,941 | 10,219 | 7,323 | 5,315 | 10,556 | 13,238 | 9,667 | 6,063 | 6,316 | 9,728 |
| 7 | Garissa …… | 14,364 | 5,154 | 6,879 | 8,060 | 20,272 | 20,988 | 4,088 | 4,476 | 4,563 | 13,813 | 9,223 | 4,966 | 2,832 | 3,842 | 7,785 |
| 8 | Wajir …… | 24,471 | 6,591 | 4,225 | 14,157 | 20,386 | 19,835 | 5,147 | 3,454 | 5,033 | 17,188 | 12,956 | 7,961 | 1,748 | 1,866 | 14,201 |
| 9 | Mandera …… | 16,924 | 8,845 | 675 | 26,585 | 16,901 | 13,780 | 5,935 | 2,147 | 2,694 | 33,518 | 22,741 | 5,832 | 1,778 | 2,678 | 24,926 |
| 10 | Marsabit …… | 11,076 | 7,551 | 8,282 | 8,882 | 11,667 | 9,080 | 8,258 | 7,307 | 5,053 | 12,930 | 7,028 | 7,368 | 5,665 | 5,090 | 9,858 |
| 11 | Isiolo …… | 7,802 | 3,926 | 2,071 | 2,717 | 3,728 | 4,095 | 3,501 | 1,620 | 1,554 | 4,094 | 4,158 | 3,042 | 1,687 | 1,429 | 2,221 |
| 12 | Meru …… | 75,751 | 43,069 | 30,646 | 39,380 | 73,747 | 23,538 | 43,118 | 27,523 | 30,079 | 70,354 | 48,956 | 34,093 | 24,221 | 22,634 | 36,206 |
| 13 | Tharaka Nithi…… | 17,758 | 7,115 | 7,457 | 14,468 | 20,736 | 14,551 | 9,702 | 7,451 | 7,321 | 21,680 | 15,062 | 7,672 | 6,438 | 4,702 | 18,920 |
| 14 | Embu …… | 12,207 | 12,870 | 12,329 | 13,467 | 26,404 | 9,117 | 10,178 | 10,752 | 12,021 | 24,742 | 10,155 | 15,783 | 10,623 | 10,714 | 17,101 |
| 15 | Kitui …… | 54,381 | 30,138 | 29,626 | 32,969 | 46,591 | 42,163 | 32,307 | 24,728 | 29,031 | 48,371 | 48,867 | 34,959 | 26,227 | 25,142 | 45,740 |
| 16 | Machakos …… | 46,585 | 32,532 | 29,781 | 31,036 | 41,294 | 39,344 | 31,998 | 23,555 | 24,259 | 36,323 | 42,379 | 32,689 | 24,875 | 23,522 | 30,487 |
| 17 | Makueni …… | 41,528 | 28,185 | 26,248 | 26,660 | 33,376 | 38,936 | 31,261 | 21,879 | 24,419 | 37,069 | 32,545 | 31,972 | 21,227 | 20,720 | 33,468 |
| 18 | Nyandarua …… | 25,660 | 11,425 | 15,526 | 15,340 | 29,285 | 21,699 | 16,258 | 12,113 | 13,881 | 25,114 | 23,917 | 14,449 | 12,867 | 13,301 | 22,892 |
| 19 | Nyeri …… | 26,923 | 12,614 | 16,950 | 17,641 | 30,081 | 26,981 | 20,730 | 13,660 | 16,273 | 26,764 | 22,237 | 16,648 | 15,137 | 15,933 | 23,090 |
| 20 | Kirinyaga …… | 18,181 | 9,602 | 12,102 | 11,623 | 27,517 | 27,085 | 14,327 | 9,455 | 11,578 | 21,869 | 16,474 | 7,970 | 9,395 | 10,173 | 15,581 |
| 21 | Muranga …… | 38,361 | 18,772 | 23,021 | 24,745 | 54,021 | 24,855 | 15,610 | 19,526 | 21,749 | 43,570 | 49,528 | 21,358 | 20,206 | 20,204 | 36,605 |
| 22 | Kiambu …… | 50,919 | 29,055 | 36,921 | 39,555 | 64,134 | 45,747 | 35,979 | 30,150 | 36,354 | 58,070 | 50,481 | 31,551 | 30,676 | 33,341 | 47,227 |
| 23 | Turkana …… | 27,862 | 10,397 | 14,162 | 24,058 | 26,556 | 26,178 | 15,262 | 11,546 | 14,232 | 15,026 | 20,047 | 11,534 | 6,118 | 10,386 | 16,611 |
| 24 | West Pokot …… | 21,170 | 11,895 | 12,363 | 16,323 | 34,517 | 25,470 | 18,051 | 6,762 | 5,865 | 29,275 | 11,725 | 13,898 | 5,698 | 5,433 | 23,094 |
| 25 | Samburu …… | 9,303 | 2,699 | 3,831 | 6,341 | 8,868 | 6,379 | 3,443 | 2,222 | 4,661 | 8,125 | 6,722 | 4,253 | 2,180 | 3,149 | 7,058 |
| 26 | Trans Nzoia …… | 26,891 | 16,104 | 20,593 | 23,499 | 28,092 | 23,040 | 20,378 | 14,679 | 15,952 | 28,586 | 19,532 | 17,841 | 10,635 | 15,014 | 23,019 |
| 27 | Uasin Gishu …… | 23,872 | 17,194 | 20,456 | 20,138 | 31,005 | 14,165 | 15,558 | 14,512 | 16,551 | 25,288 | 21,285 | 14,813 | 15,979 | 16,636 | 24,026 |
| 28 | Elgeyo Marakwet … | 16,611 | 7,985 | 9,511 | 10,042 | 17,368 | 17,583 | 8,048 | 7,409 | 7,761 | 14,214 | 15,978 | 9,461 | 8,148 | 7,701 | 14,778 |
| 29 | Nandi …… | 30,278 | 11,508 | 9,339 | 21,113 | 32,215 | 33,481 | 15,194 | 10,507 | 13,946 | 22,143 | 24,279 | 13,960 | 8,284 | 12,944 | 20,637 |
| 30 | Baringo …… | 21,879 | 8,833 | 10,746 | 13,562 | 25,833 | 13,564 | 9,061 | 7,423 | 10,556 | 16,275 | 17,721 | 7,918 | 6,355 | 15,099 | 16,716 |

*Source: National Registration Bureau*

*NPR means Not Previously Registred*

*.. means Data not available*

## Table 16.21: New Identity Card Applications Made, Produced and Collected by County and Sex, 2012-2016. Cont....

| S/No | County | NPR Applications | | | | | NPR IDs Produced | | | | | NPR IDs Collected | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2012 | 2013 | 2014 | 2015 | 2016* | 2012 | 2013 | 2014 | 2015 | 2016* | 2012 | 2013 | 2014 | 2015 | 2016* |
| 31 | Laikipia ..... | 14,790 | 8,914 | 9,814 | 7,984 | 18,137 | 19,344 | 10,219 | 7,963 | 8,693 | 17,597 | 17,046 | 9,476 | 5,859 | 9,441 | 15,601 |
| 32 | Nakuru ..... | 62,796 | 31,589 | 45,660 | 55,237 | 76,607 | 47,693 | 34,782 | 32,579 | 36,520 | 62,504 | 55,129 | 32,970 | 32,800 | 42,429 | 56,198 |
| 33 | Narok ..... | 27,638 | 12,664 | 15,549 | 21,469 | 30,753 | 33,061 | 22,101 | 12,517 | 9,897 | 31,614 | 27,130 | 17,831 | 8,529 | 9,310 | 27,515 |
| 34 | Kajiado ..... | 9,153 | 6,451 | 8,759 | 10,259 | 18,529 | 23,206 | 18,209 | 13,349 | 13,454 | 20,600 | 8,556 | 7,897 | 6,475 | 14,334 | 15,152 |
| 35 | Kericho ..... | 31,222 | 21,329 | 23,160 | 23,077 | 30,801 | 11,231 | 11,586 | 14,450 | 16,928 | 23,979 | 31,501 | 22,611 | 17,509 | 28,171 | 23,086 |
| 36 | Bomet ..... | 22,335 | 11,029 | 13,896 | 15,009 | 24,076 | 19,276 | 16,113 | 12,823 | 14,767 | 22,741 | 18,135 | 11,598 | 9,620 | 14,743 | 19,357 |
| 37 | Kakamega ..... | 71,332 | 44,652 | 55,590 | 50,910 | 59,574 | 61,907 | 45,618 | 39,908 | 44,432 | 55,388 | 58,848 | 44,719 | 41,456 | 38,417 | 51,356 |
| 38 | Vihiga ..... | 23,543 | 13,653 | 18,932 | 17,352 | 19,812 | 38,969 | 45,584 | 12,291 | 15,107 | 19,585 | 24,197 | 12,782 | 12,972 | 11,941 | 14,093 |
| 39 | Bungoma ..... | 56,972 | 40,551 | 43,971 | 47,915 | 55,514 | 23,830 | 23,145 | 39,086 | 30,013 | 52,781 | 35,038 | 34,669 | 26,511 | 25,117 | 42,983 |
| 40 | Busia ..... | 28,289 | 18,511 | 21,667 | 28,017 | 30,280 | 20,774 | 15,256 | 21,098 | 21,377 | 33,511 | 26,305 | 20,052 | 15,381 | 16,329 | 32,681 |
| 41 | Siaya ..... | 57,343 | 20,591 | 25,457 | 35,071 | 45,097 | 54,925 | 34,866 | 19,430 | 26,613 | 41,453 | 45,643 | 24,558 | 19,003 | 25,691 | 38,887 |
| 42 | Kisumu ..... | 58,143 | 26,429 | 27,123 | 37,333 | 39,774 | 34,340 | 25,644 | 21,711 | 27,062 | 39,613 | 44,566 | 29,627 | 20,500 | 26,652 | 35,158 |
| 43 | Homabay ..... | 49,217 | 15,360 | 23,987 | 33,553 | 34,782 | 28,057 | 20,814 | 18,321 | 26,903 | 36,599 | 45,945 | 22,688 | 17,299 | 23,640 | 33,881 |
| 44 | Migori ..... | 47,903 | 23,001 | 23,594 | 33,279 | 40,649 | 32,902 | 30,507 | 18,047 | 20,014 | 41,090 | 39,341 | 24,241 | 14,003 | 18,263 | 36,770 |
| 45 | Kisii ..... | 66,234 | 22,298 | 31,799 | 32,752 | 40,140 | 19,801 | 20,887 | 22,662 | 27,739 | 40,567 | 58,270 | 31,316 | 21,890 | 24,230 | 37,381 |
| 46 | Nyamira ..... | 29,554 | 13,951 | 20,617 | 23,066 | 24,085 | 18,792 | 15,758 | 14,347 | 16,237 | 19,506 | 26,303 | 15,238 | 14,780 | 14,072 | 18,342 |
| 47 | Nairobi City[1] .... | 87,310 | 51,950 | 56,275 | 61,150 | 74,233 | 80,782 | 54,028 | 48,370 | 54,138 | 75,805 | 116,378 | 58,840 | 70,248 | 49,554 | 78,569 |
| **Total** | | **1,546,930** | **841,629** | **913,087** | **1,097,267** | **1,529,862** | **1,239,968** | **954,217** | **738,064** | **816,477** | **1,431,094** | **1,369,160** | **899,455** | **709,573** | **766,002** | **1,241,105** |

*Source: National Registration Bureau*

*NPR means Not Previously Registered*

[1] *Includes identity cards produced NPR citizens in diaspora totalling 532 in 2016*

**Registration of Voters**

16.29. During the year under review, the voter register was updated as a result of the mass voter registration exercise conducted in 2015. The number of registered voters stood at 15,961,627 by the end of 2016 as shown in Table 16.22.

**Table 16.22: Registered Voters, 2016**

| S/No | County name / Diaspora | No.of constituencies | Registered Voters as at 31.12.2016* |
|---|---|---|---|
| 1 | Mombasa | 6 | 454,799 |
| 2 | Kwale | 4 | 208,338 |
| 3 | Kilifi | 7 | 386,618 |
| 4 | Tana River | 3 | 96,675 |
| 5 | Lamu | 2 | 56,744 |
| 6 | Taita Taveta | 4 | 125,720 |
| 7 | Garissa | 6 | 124,870 |
| 8 | Wajir | 6 | 126,156 |
| 9 | Mandera | 6 | 125,156 |
| 10 | Marsabit | 4 | 124,748 |
| 11 | Isiolo | 2 | 59,724 |
| 12 | Meru | 9 | 542,575 |
| 13 | Tharaka-Nithi | 3 | 170,514 |
| 14 | Embu | 4 | 245,024 |
| 15 | Kitui | 8 | 394,366 |
| 16 | Machakos | 8 | 512,848 |
| 17 | Makueni | 6 | 342,344 |
| 18 | Nyandarua | 5 | 283,205 |
| 19 | Nyeri | 6 | 390,882 |
| 20 | Kirinyaga | 4 | 291,020 |
| 21 | Murang'a | 7 | 489,051 |
| 22 | Kiambu | 12 | 947,599 |
| 23 | Turkana | 6 | 153,752 |
| 24 | West Pokot | 4 | 134,767 |
| 25 | Samburu | 3 | 69,386 |
| 26 | Trans Nzoia | 5 | 274,479 |
| 27 | Uasin Gishu | 6 | 351,139 |
| 28 | Elgeyo/Marakwet | 4 | 144,703 |
| 29 | Nandi | 6 | 279,666 |
| 30 | Baringo | 6 | 190,306 |
| 31 | Laikipia | 3 | 193,326 |
| 32 | Nakuru | 11 | 772,912 |
| 33 | Narok | 6 | 283,777 |
| 34 | Kajiado | 5 | 329,533 |
| 35 | Kericho | 6 | 313,944 |
| 36 | Bomet | 5 | 270,496 |
| 37 | Kakamega | 12 | 632,751 |
| 38 | Vihiga | 5 | 224,638 |
| 39 | Bungoma | 9 | 471,456 |
| 40 | Busia | 7 | 289,610 |
| 41 | Siaya | 6 | 379,293 |
| 42 | Kisumu | 7 | 450,011 |
| 43 | Homa Bay | 8 | 385,538 |
| 44 | Migori | 8 | 326,455 |
| 45 | Kisii | 9 | 456,861 |
| 46 | Nyamira | 4 | 238,270 |
| 47 | Nairobi City | 17 | 1,843,040 |
| 48 | Diaspora | 1 | 2,542 |
| | **Total** | **291** | **15,961,627** |

Source: Independent Electoral and Boundaries Commission (IEBC)

* Provisional

**Refugees in Kenya**

16.30. Table 16.23 presents the number of refugees by age and sex for 2012 to 2016. The registered refugee population declined by 16.7 per cent from 593,881 in 2015 to 494,863 in 2016 following the voluntary repatriation of refugees from Dadaab camp and low registration of new refugees. Adult refugee population declined by 19.7 per cent to 210,718 in 2016 while child refugees reduced by 14.3 per cent to 284,145 in the same period. The decline in refugee population was more pronounced in males at 17.5 per cent than in females at 15.8 per cent in 2016.

**Table 16.23: Number of Registered Refugees by Age and Sex, 2012 - 2016**

Number

| Category | 2012 | 2013 | 2014 | 2015 | 2016* |
|---|---|---|---|---|---|
| **Children (under 18 yrs)** | | | | | |
| Male..... | 177,254 | 173,544 | 173,573 | 174,344 | 149,972 |
| Female..... | 161,017 | 157,070 | 155,350 | 157,276 | 134,173 |
| **Total Children** | **338,271** | **330,614** | **328,923** | **331,620** | **284,145** |
| **Adults (18 yrs & above)** | | | | | |
| Male..... | 128,004 | 151,227 | 123,991 | 129,616 | 100,781 |
| Female..... | 141,838 | 135,382 | 132,449 | 132,645 | 109,937 |
| **Total Adults** | **269,842** | **286,609** | **256,440** | **262,261** | **210,718** |
| **Total** | **608,113** | **617,223** | **585,363** | **593,881** | **494,863** |

Source: Refugee affairs Secretariat

*Provisional

## Appendix 16.1: Kenya Police Service reclassified offences reported to Police in view of new legislations such as the Economic Crimes

| CODE | OFFENCES | CATEGORY OF OFFENCES |
|---|---|---|
| 1 | HOMICIDE | a) Murder<br>b) Manslaughter<br>c) Infanticide<br>d) Procuring Abortion<br>e) Concealing Birth<br>f) Suicide<br>g) Causing Death by dangerous Driving |
| 2 | OFFENCES AGAINST MORALITY | a) Rape<br>b) Defilement<br>c) Incest<br>d) Unnatural Offences (Sodomy)<br>e) Bestiality<br>f) Indecent assault<br>g) Abduction<br>h) Bigamy |
| 3 | OTHER OFFENCES AGAINST PERSONS | a) Assault<br>b) Creating Disturbance<br>c) Affray |
| 4 | ROBBERY | a) Robbery<br>b) Robbery with Violance<br>c) Carjacking<br>d) Robbed of M/V<br>e) Cattle Rustling |
| 5 | BREAKING | a) House Breaking<br>b) Burglary<br>c) Other Breakings |
| 6 | THEFT OF STOCK | |
| 7 | STEALING | a) Handling Stolen Property<br>b) Stealing from Person<br>c) Stealing by Tenants/lodgers<br>d) Stealing from a building<br>e) General Stealing |
| 8 | THEFT BY SERVANT | a) Stealing by Directors<br>b) Stealing by employee/servant |
| 9 | VEHICLE AND OTHER THEFTS | a) Theft of M/V<br>b) Theft from M/V<br>c) Theft of M/V part<br>d) Theft of M/Cycle |
| 10 | DANGEROUS DRUGS | a) Possession<br>b) Handling<br>c) Trafficking<br>d) Cultivating<br>e) Usage |
| 11 | TRAFFIC OFFENCES | a) Taking and Driving Motor Vehicle without AuthorIty<br>b) Driving under influence of alcohol |
| 12 | CRIMINAL DAMAGE | a) Malicious Damage<br>b) Arson<br>c) Negligent Acts |
| 13 | ECONOMIC CRIMES | a) Obtaining by False Pretence<br>b) Currency Forgery<br>c) Other Fraud/Forgery Offences |
| 14 | CORRUPTION | a) Soliciting for Bribe<br>b) Accepting Bribe<br>c) Accept Free Gifts<br>d) Demanding by false pretence<br>e) Other Corruption Offences |
| 15 | OFFENCES INVOLVING POLICE OFFICERS | a) Soliciting for Bribe<br>b) Accepting Bribe<br>c) Accept Free Gifts<br>d) Demanding by false pretence<br>e) Other Criminal Offences |
| 16 | OFFENCES INVOLVING TOURIST | a) Bag Snatching<br>b) Other offences Against Tourists<br>c) Other Offences involving Tourist |

## Appendix 16.2: 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 corporation |
| Against person | Asault, grevious harm, murder etc |
| Related to property | Theft, robbery with violence, arson |
| Attempts and consipiracies | Attempts to commit offences, neglect to prevent offences, consipiracies to commit offences |
| Employment Act | Employment of alliens without work permit |
| Drug related | Possesion, manufacture, trafficking etc, of any quantity |
| Various cases | By-laws under local/county government Act, Traffic Act, Tax Act etc |

17 Chapter

# Highlights of the 2016 ICT Public Sector and Enterprise Surveys

**Overview**

The Government identified Information Communication Technology (ICT) as a key enabler to the achievement of Vision 2030 goals and aspirations which aims at transforming Kenya into a knowledge and information based economy. Information and Communication Technology has played a fundamental role both as an innovative economic sector and a catalyst for other sectors. The Government has put in place regulatory frameworks and guidelines for boosting Information and Communication Technologies (ICTs) usage in all sectors of the economy.

17.2. The role of ICTs in enhancing the ease of doing business has long been recognized. In the recent past, there have been significant changes in the ICT Industry in terms of products and services. The 2009 Kenya Population and Housing Census and the 2010 National ICT Survey provided ICT data at household level. However, there has been no data on ICT usage in enterprises and public institutions necessary for policy formulation, review and evaluation. The 2016 ICT surveys were conducted with the aim of completing the demand side by filling these data gaps.

17.3. Relevant and up-to-date data is required to strengthen the development of the ICT sector and measure its impact on the achievement of Sustainable Development Goals (SDGs). The 2016 ICT Public Sector and Enterprise Surveys were conducted by the Kenya National Bureau of Statistics (KNBS) in collaboration with Communications Authority of Kenya (CA) with a view to providing comprehensive information on the availability of ICT infrastructure, access and use of ICTs. The data on ICT were collected to compile comparable statistics at international level as well as creating national ICT indicators.

**Objectives of the Surveys**

17.4. The main objective of the 2016 ICT Public Sector and Enterprise surveys was to measure access to and use of ICTs. Specific objectives of the surveys were to asses the availability of ICT infrastructure and its applications in enterprises and institutions; measure the penetration of e-commerce in enterprises; measure availability of e-government services to citizens, establish the existence of internal ICT policies and generate national level ICT baseline indicators for both enterprises and public institutions.

**Survey Methodology**

17.5. The 2016 ICT Public-Sector survey targeted Ministries, Departments, and Agencies (MDAs) of the National Government as well as the county governments. A sample of public institutions was drawn based on known scientific methodology.

17.6. The 2016 ICT Enterprise Survey was designed to provide estimates on ICT access and use by enterprises. Stratified random sampling methodology was adopted to select a representative sample. The enterprises were stratified based on employment size: micro (1-9 employees), small (10-49 employees), medium (50-249 employees) and large (250 or more employees) enterprises and economic classification (ISIC Rev 4). However, in Agriculture, forestry and fishing industry, only enterprises engaged in horticulture were included in the sample. Sample allocation in each stratum was done using power allocation method to ensure that each stratum was represented in the sample irrespective of the number of enterprises in the stratum. The sample was then drawn independently in each stratum using equal probability

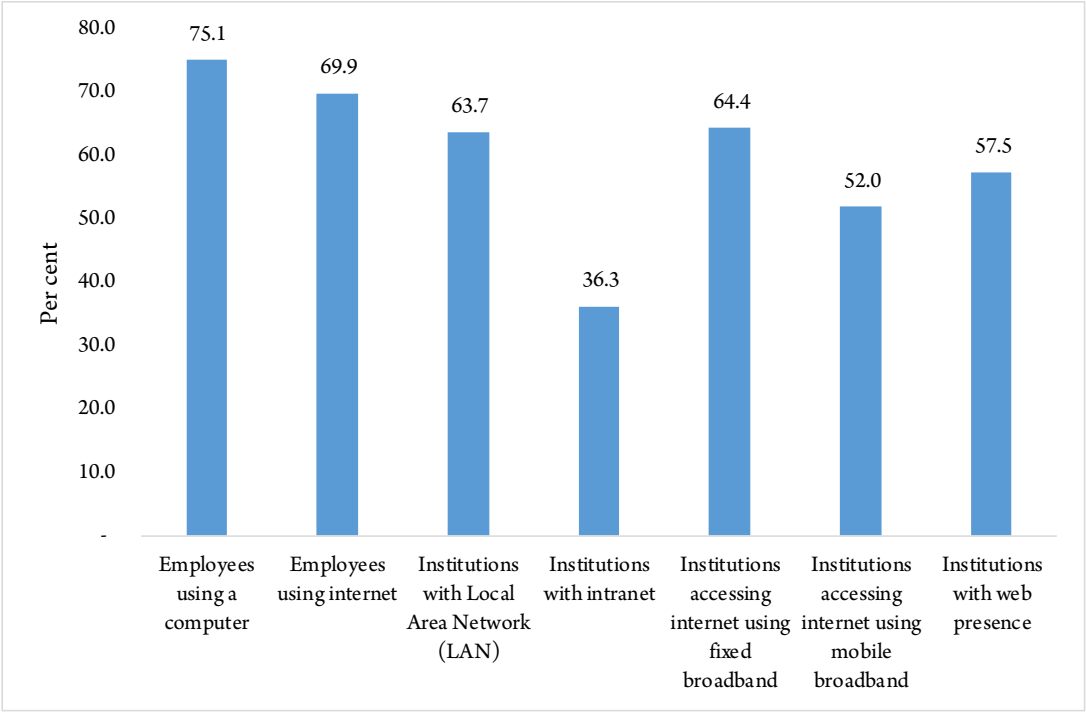
selection method. A total of 4,000 enterprises were sampled for the enterprise survey.

**Public Sector Key Findings**

17.7. There is a growing recognition that the use of ICTs by the public sector can improve efficiency in service delivery by the Government to its citizens. The provision of government services online (e-government) and innovations offers significant opportunities for transforming the public administration into an instrument of sustainable economic growth and development.

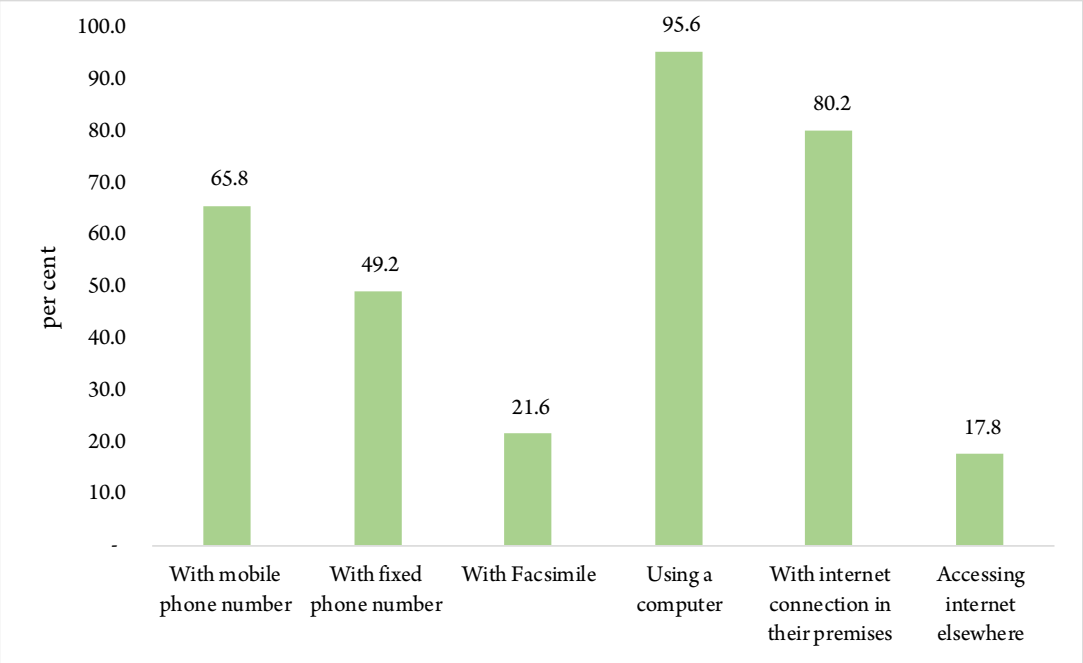
17.8. **Global Level Indicators:** Ownership and use of ICTs in public institutions is depicted in Figure 17.1. International level ICT indicators covered by the survey were; the proportion of persons employed that use: computers, intranet and proportion of institutions with: Local Area Network (LAN) and intranet. The survey established that 75.1 per cent of employees use computers and 69.9 per cent use intranet. Institutions with LAN were reported at 63.7 per cent while those with intranet were 36.3 per cent.

**Figure 17.1: Use of ICTs in Public Institutions, 2015**



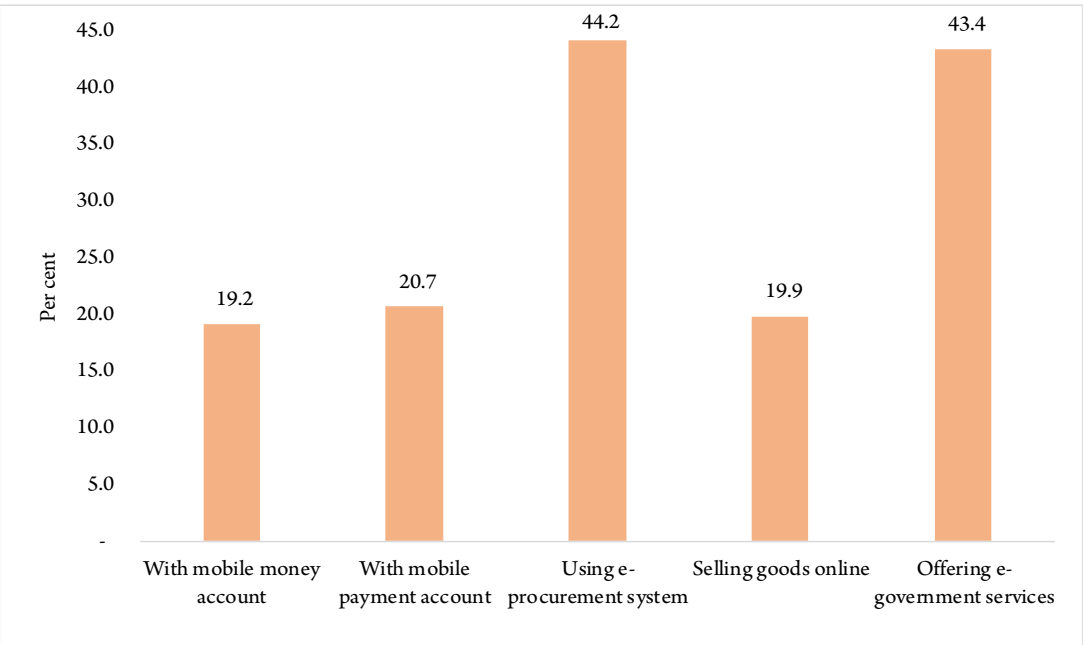

17.9. **Other Indicators:** Figure 17.2 presents the proportion of public institutions that reported owning or having access to some selected ICTs in 2015. Approximately 96.0 per cent of the public institutions reported using computers while 80.2 per cent of the institutions had internet connection in their premises. The proportion of public institutions with mobile number and fixed telephone number for official use was 65.8 per cent and 49.2 per cent, respectively. Ownership of facsimile was reported by 21.6 per cent of public institutions.

**Figure 17.2: Ownership and Access of ICTs in Public Institutions, 2015**



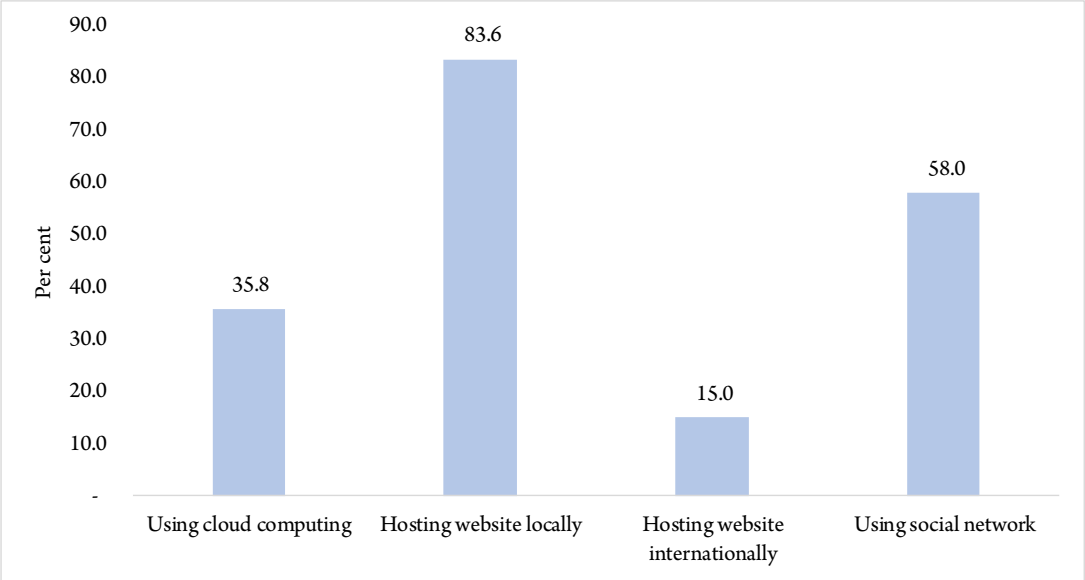

17.10. Figure 17.3 shows the proportion of public institutions that use mobile money and e-procurement and those that provided e-government services in their transactions. Use of these services aims at enhancing public sector's transparency and transactional effectiveness. About one in five public institutions reported to own mobile money account, mobile payment account and selling of goods online. The proportion of public institutions offering e-government services and using e-procurement system were 43.2 per cent and 44.2 per cent, respectively.

**Figure 17.3: Mobile money, e-Procurement and e-Government services in Public Institutions, 2015**



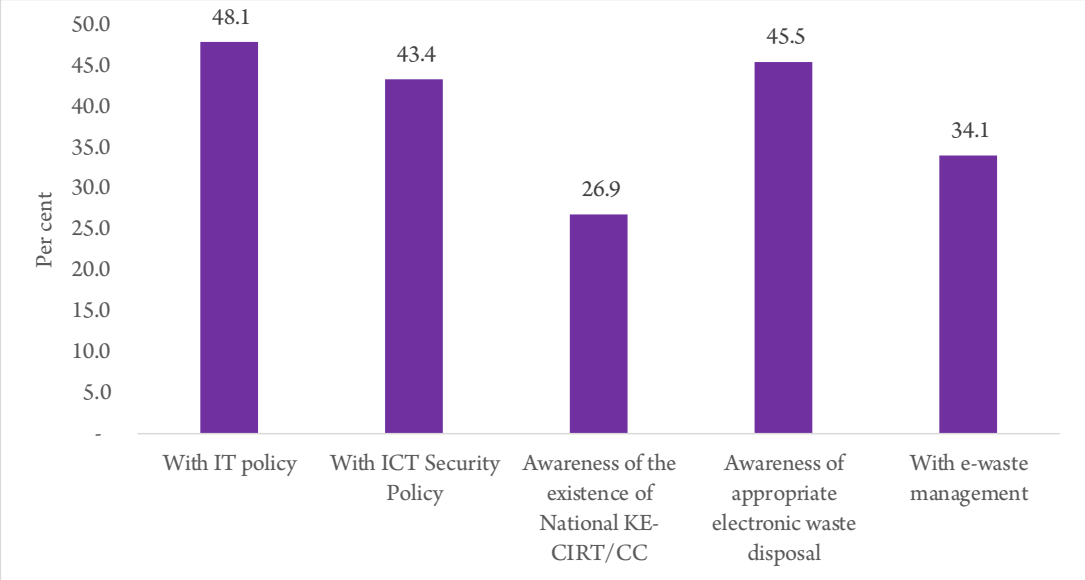
17.11. The proportion of public institutions using cloud computing, social networking and hosting their websites internationally or locally are shown in Figure 17.4. Public institutions that used cloud computing were 35.8 per cent while those using of social networking sites were 58.0 per cent. Over 80 per cent of the public institutions reported hosting their websites locally. Most of the institutions that hosted their website outside the country cited information security.

**Figure 17.4: Cloud Computing, Web Hosting and Use of Social Networking Sites in Public Institutions, 2015**




17.12. Figure 17.5 shows the proportion of public institutions that had IT and ICT security policies in place. IT policy lays down guidelines and framework for use and management of an institution's information technology resource. ICT security policy is usually a commitment by an institution to address confidentiality, integrity and risks of compromising information within its ICT systems. IT and ICT security policies were reported to be in place by 48.1 per cent and 43.4 per cent of the public institutions, respectively. Few institutions at 26.9 per cent were aware of the existence of Kenya Computer Incident Response Team - Coordination Center( KE-CIRT/CC) while 45.5 per cent were aware of an appropriate electronic waste disposal method. The proportion of institutions which reported to have adopted e-waste management policies were 34.1 per cent.

Figure 17.5: ICT Management and Security in Public Institutions, 2015

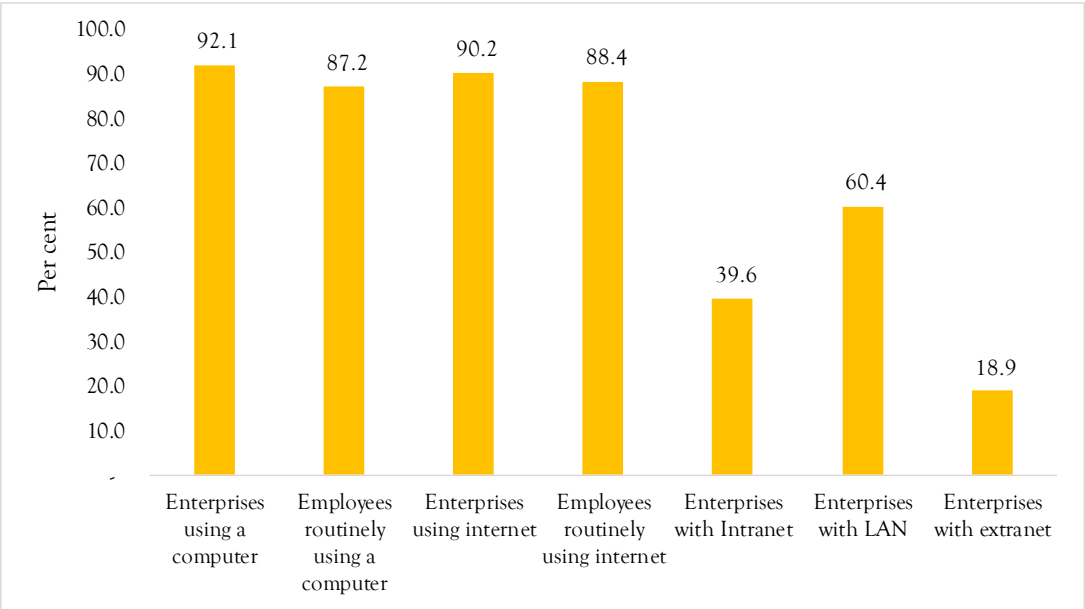



**ICT Enterprise Survey Key Findings**

17.13. The survey sought to establish the actual penetration on the use of the ICTs in private enterprises. It focused on capturing data on e-business and e-commerce; where the former refers to the use of ICTs to facilitate business processes while the latter refers to use of internet or computer- mediated networks by businesses to order or receive goods and services.

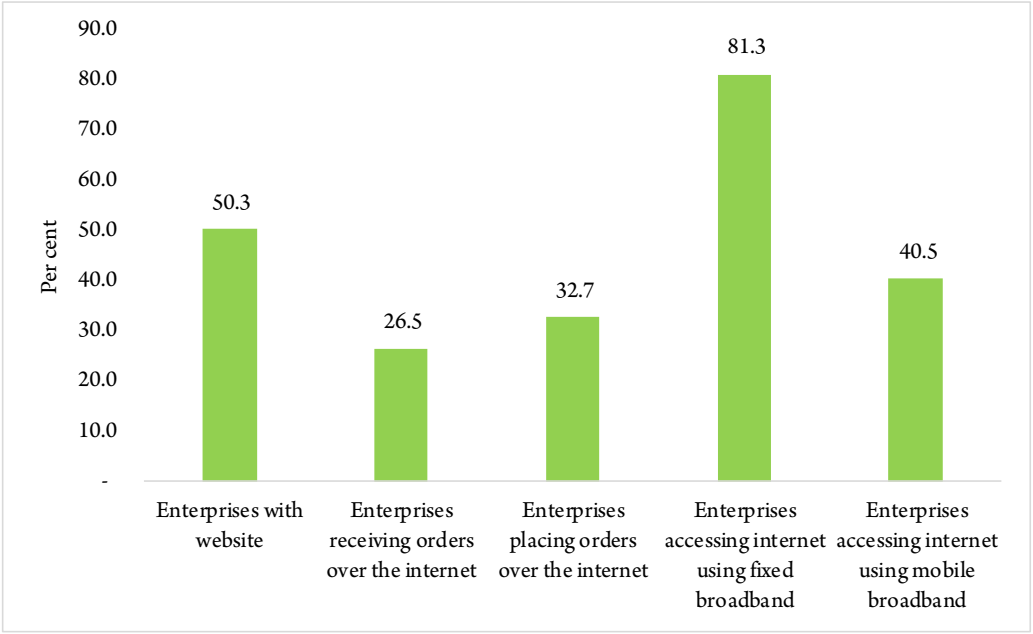
17.14. **Global Level Indicators:** Proportion of enterprises using selected ICTs is shown in Figure 17.6. The proportion of enterprises using computers and internet was 92.1 per cent and 90.2 per cent, respectively. The proportion of enterprises with employees routinely using internet and computer in their work place was 88.4 per cent and 87.2 per cent, respectively. The proportion of enterprises with intranet and extranet was 39.6 per cent and 18.9 per cent, respectively. Availability of LAN was reported by 60.4 per cent of the enterprises.

Figure 17.6: Use of ICTs in Enterprises, 2015



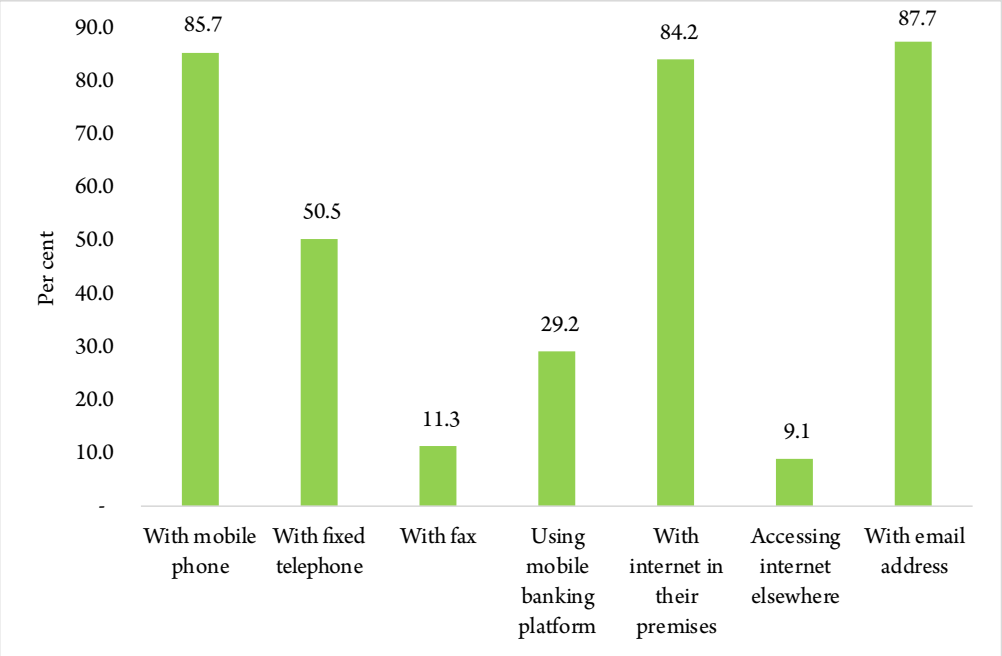
17.15. Figure 17.7 depicts the proportion of enterprises with web presence and access to selected ICTs in 2015. Enterprises with website were 50.3 per cent while 26.5 per cent and 32.7 per cent reported to have received and placed orders over the internet, respectively. Enterprises which reported to have accessed internet using fixed broadband were 81.3 per cent while 40.5 per cent accessed internet using mobile broadband.

**Figure 17.7: Ownership of website and access to selected ICTs by enterprises, 2015**



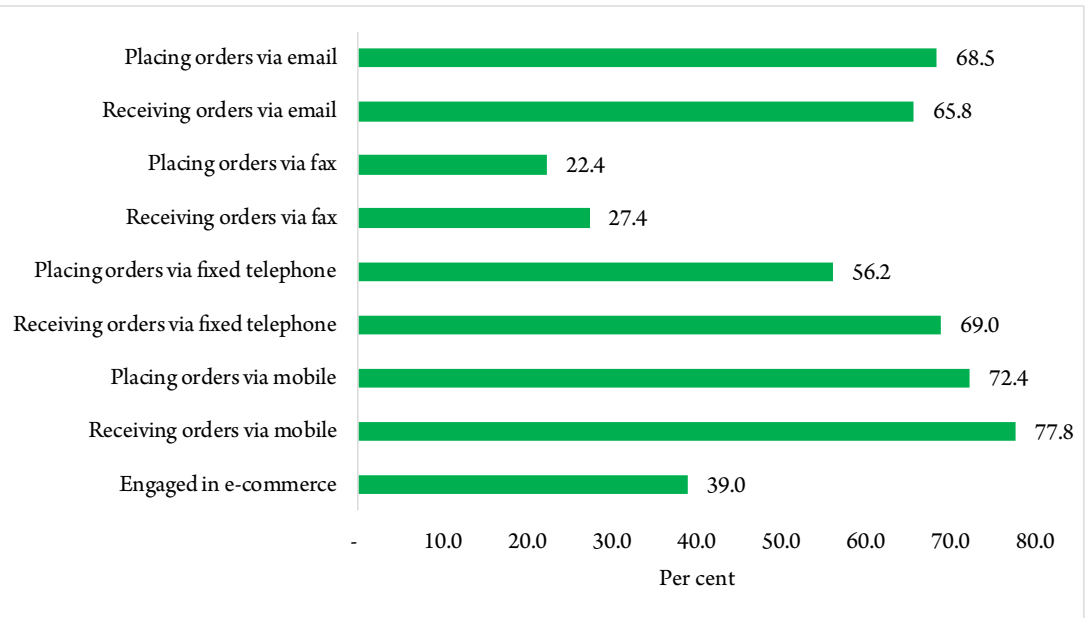

17.16. **Country Level Indicators:** Figure 17.8 portrays the proportion of enterprises with mobile, fixed telephones, fax, mobile banking, internet in their premises and those with official email. The proportion of enterprises with official email addresses and internet in their premises was 87.7 per cent and 84.2 per cent, respectively. Ownership of mobile phones was 85.7 per cent while that of fixed telephone and fax were 50.5 per cent and 11.3 per cent, respectively. Enterprises using mobile banking platform were 29.2 per cent.

Figure 17.8: Ownership of ICTs by Enterprises, 2015



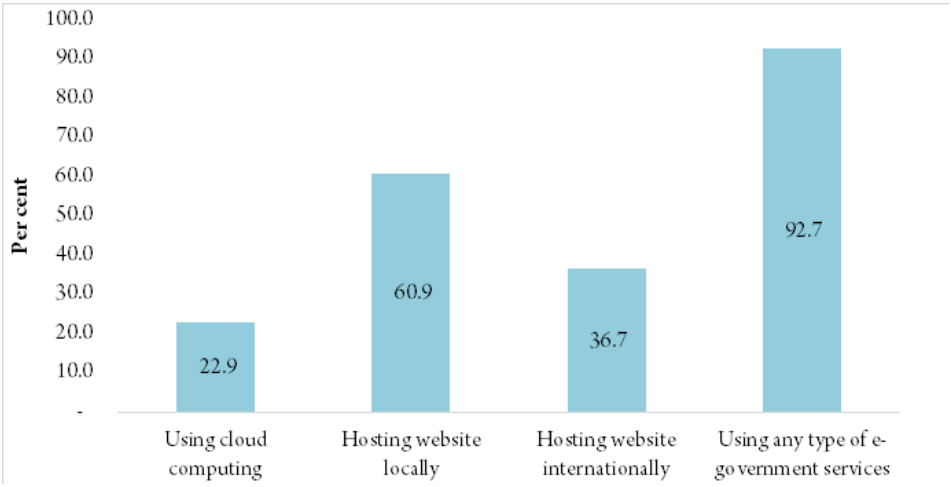

17.17. The proportion of enterprises that engaged in electronic and mobile commerce is presented in Figure 17.9. Thirty-nine per cent of enterprises reported to have engaged in e-commerce. In m-commerce, 72.4 percent of enterprises reported placing orders via mobile while 77.8 per cent reported receiving orders via mobile. Among the enterprises with fixed telephone, 56.2 per cent used them to place orders while 69.0 per cent use them to receive orders. Enterprises placing and receiving orders using email were 68.5 per cent and 65.8 per cent, respectively. Use of facsimiles to place and receive orders was 22.4 per cent and 27.4 per cent, respectively.

Figure 17.9: Proportion of Enterprises that Engaged in e-Commerce and m-Commerce, 2015



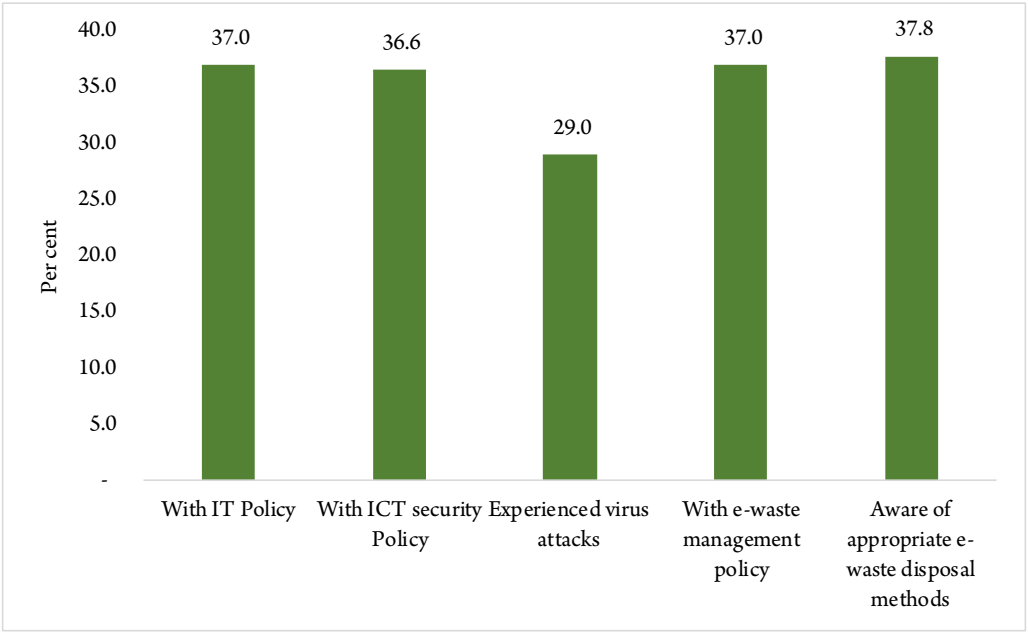
17.18. The proportion of enterprises using cloud computing was 22.9 per cent while the proportion of enterprises that reported using any type of e-government services was 92.7 per cent. Enterprises which reported hosting their websites locally were 60.9 per cent while 36.7 per cent reported hosting their website internationally as shown in Figure 17.10.

**Figure 17.10: Web hosting, Use of Cloud Computing and e-Government Services by Enterprises, 2015**




17.19. Figure 17.11 presents the proportion of enterprises with IT, ICT security and e-waste disposal policies. Enterprises which reported having IT policy were 37.0 per cent while those that reported to having ICT security policies were 36.6 per cent. The proportion of enterprises that reported to be aware of appropriate e-waste disposal methods was 37.8 per cent while those that had e-waste management policies in place constituted 37.0 per cent.

**Figure 17.11: ICT Management and Security in Enterprises, 2015**




17.20. Tables 17.1 and 17.2 provide a summary of ICT indicators for both public sector institutions and enterprises.

## Table 17.1: Public Sector ICT Indicators, 2015

| | Per cent |
|---|---|
| **a) Global Level Indicators** | |
| Proportion of persons employed using a computer | 75.1 |
| Proportion of persons employed using internet | 69.9 |
| Proportion of institutions with Local Area Network (LAN) | 63.7 |
| Proportion of institutions with intranet | 36.3 |
| Proportion of institutions with internet access, by type of access | |
| Fixed broadband | 64.4 |
| Mobile broadband | 52.0 |
| Proportion of institutions with web presence | 57.5 |
| **b) Other Indicators** | |
| Proportion of institutions with mobile phone number | 65.8 |
| Proportion of institutions with fixed phone number | 49.2 |
| Proportion of institutions with facsimile | 21.6 |
| Proportion of institutions with mobile money account | 19.2 |
| Proportion of institutions with mobile payment account | 20.7 |
| Proportion of institutions using a computer | 95.6 |
| Proportion of institutions with internet connection in their premises | 80.2 |
| Proportion of institutions accessing internet elsewhere | 17.8 |
| Proportion of institutions using the internet by type of activity | |
| Internet banking | 31.4 |
| Accessing other financial services | 36.8 |
| Staff training | 42.0 |
| Sending or receiving email | 98.3 |
| Telephoning over the Internet/ VoIP including video conferencing VoIP | 22.5 |
| Use of instant messaging such as Whatsapp etc | 55.2 |
| Use of social media e.g. Facebook for work purpose | 56.5 |
| Internal or external recruitment | 31.5 |
| Providing public services | 52.3 |
| Data collection | 58.8 |
| Research | 51.4 |
| Receiving feedback from public | 52.0 |
| Purchasing/ordering goods and services | 43.0 |
| Tracking of goods and services | 21.0 |
| Advertising | 43.4 |
| Selling goods and services | 10.6 |
| Sending and receiving information | 0.9 |

| | Per cent |
|---|---|
| Proportion of institutions offering e-government services | 43.4 |
| Proportion of institutions using cloud computing | 35.8 |
| Proportion of institutions hosting website Locally | 83.6 |
| Proportion of institutions hosting website Internationally | 15.0 |
| Proportion of institutions using social network by type | 58.0 |
| Proportion of institutions using specialized applications for human resource | 56.5 |
| Proportion of institutions using e-procurement system | 44.2 |
| Proportion of institutions selling goods online | 19.9 |
| Proportion of institutions with IT policy | 48.1 |
| Proportion of Institutions with ICT Security Policy | 43.4 |
| Proportion of institutions aware of National KE-CIRT/CC | 26.9 |
| Proportion of institutions aware of modes of disposing electronic waste | 45.5 |
| Proportion of institutions with e-waste management | 34.1 |

## Table 17.2: Enterprise ICT Indicators, 2015

| | Per cent |
|---|---|
| **a) Global Level Indicators** | |
| Proportion of persons employed using a computer | 75.1 |
| Proportion of persons employed using internet | 69.9 |
| Proportion of institutions with Local Area Network (LAN) | 63.7 |
| Proportion of institutions with intranet | 36.3 |
| Proportion of institutions with internet access, by type of access | |
| Fixed broadband | 64.4 |
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| Proportion of institutions with web presence | 57.5 |
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| Proportion of institutions with facsimile | 21.6 |
| Proportion of institutions with mobile money account | 19.2 |
| Proportion of institutions with mobile payment account | 20.7 |
| Proportion of institutions using a computer | 95.6 |
| Proportion of institutions with internet connection in their premises | 80.2 |
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| Telephoning over the Internet/ VoIP including video conferencing VoIP | 22.5 |
| Use of instant messaging such as Whatsapp etc | 55.2 |
| Use of social media e.g. Facebook for work purpose | 56.5 |
| Internal or external recruitment | 31.5 |
| Providing public services | 52.3 |
| Data collection | 58.8 |
| Research | 51.4 |
| Receiving feedback from public | 52.0 |
| Purchasing/ordering goods and services | 43.0 |
| Tracking of goods and services | 21.0 |
| Advertising | 43.4 |
| Selling goods and services | 10.6 |
| Sending and receiving information | 0.9 |

| | Per cent |
|---|---|
| Proportion of institutions offering e-government services | 43.4 |
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| Proportion of institutions hosting website Locally | 83.6 |
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| Proportion of institutions aware of modes of disposing electronic waste | 45.5 |
| Proportion of institutions with e-waste management | 34.1 |

# Highlights of the 2016 National Micro, Small and Medium Establishments Survey

18 Chapter

**Overview**

The MSME sector in Kenya has over the years been recognized for its role in provision of goods and services, enhancing competition, fostering innovation, generating employment and in effect, alleviation of poverty. The crucial role of MSMEs is underscored in Kenya's Vision 2030, which is the development blueprint which seeks to transform Kenya into an industrialized middle-income country, providing a high quality life to all its citizens by the year 2030. The MSME sector has been identified and prioritized as a key growth driver for achievement of the development blue print.

18.2. Micro, Small and Medium Establishments (MSMEs) survey adopted Kenya's official definition where MSMEs are defined according to employment size; Micro enterprises (less than 10 employees); Small enterprises (10 to 49 employees); Medium sized enterprises (50 to 99 employees). The main indicators targeted by the survey included: number of establishments in the country; distribution of MSMEs by sex of owners; level of innovation in the sector; education qualifications and training; persons engaged in the MSMEs sector; comparison of MSMEs to national value added; financing of MSMEs operations; MSMEs expenditure structure; constraints faced by MSMEs; prevalence for closure of businesses; reasons for business closures; and disposal of stock after business closure.

**Objectives of the Survey**

18.3. The overall objective of the 2016 National MSME Survey was to provide comprehensive data, at national and county levels, on the characteristics, operations, dynamics and evolving nature of micro, small, and medium-scale establishments in the country.

**Survey Methodology**

18.4. The MSMEs covered in the survey were all non-primary product activities or businesses and agri-businesses. The survey excluded primary activities such as agricultural production, animal husbandry, and fishing, among others. The previous Micro and Small Enterprises (MSE) studies used the household-based approach to identify businesses/establishments. However, the 2016 MSME survey, in addition to the household-based approach, interviewed businesses or establishments from a statistical frame that was constructed from business registers maintained by county governments.

18.5. A total of 50,000 MSMEs were sampled for the survey, targeting licensed businesses. A further 14,000 households were sampled to capture household based enterprises which are largely unlicensed. The unit of observation in the survey was the establishment and not the enterprise. An enterprise that engaged in say three economic activities, was recorded as having three businesses as opposed to one.

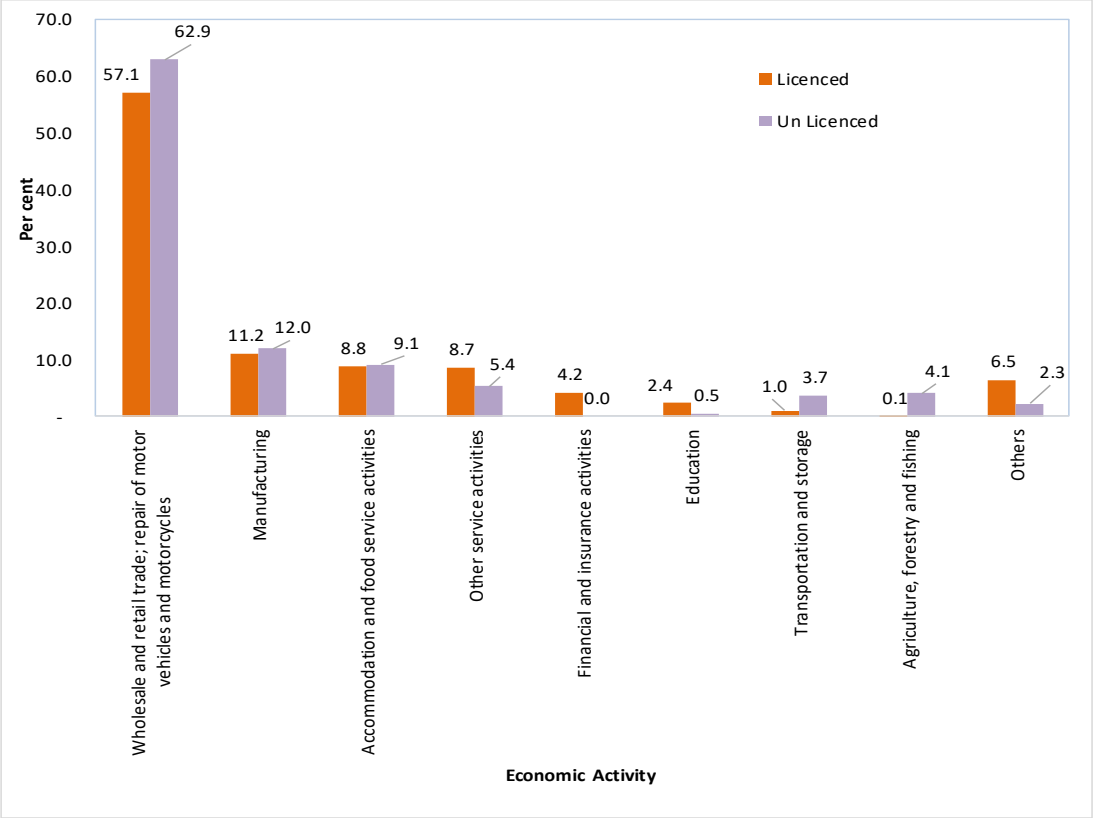
**Key Survey Findings**

## Magnitude of the MSME Sector

18.6. The survey established that there were about 1.56 million licensed MSMEs and 5.85 million unlicensed businesses. These establishments were both in the formal and informal sectors. Most of the unlicensed establishments were being operated at the household level. As indicated in Figure 18.1, wholesale and retail trade; repair of motor vehicles and motorcycles accounted for more than half of licensed (57.1%) and unlicensed (62.9%) businesses. Most MSMEs were operated/owned by individuals who ran retail businesses of buying and selling

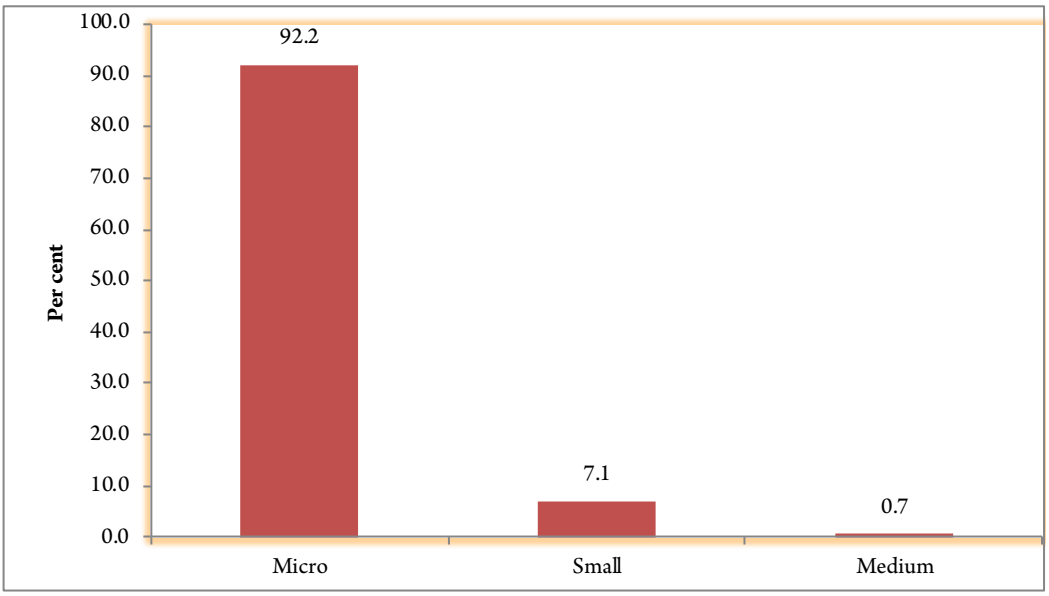
of goods independently. The manufacturing sector contributed the second largest proportion of MSMEs, followed by accommodation and food service activities sector.

**Figure 18.1: Distribution of Establishments by Economic Activity and Licensing Status, 2016**




18.7. Figure 18.2 presents distribution of MSMEs for the licensed businesses. Micro establishments employing between 1 to 9 employees accounted for majority of MSMEs at 92.2 per cent. This implies that most MSMEs are operated by own account workers with few or no employees engaged. Small licensed businesses accounted for 7.1 per cent. Medium establishments employing between 50 and 99 employees accounted for 0.7 per cent of the total number of licensed MSMEs in the country.

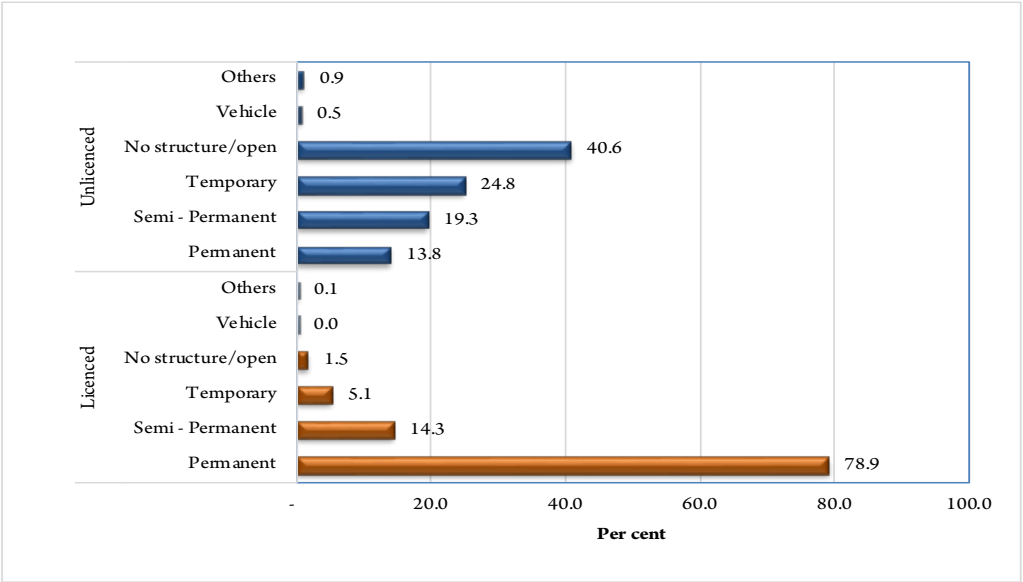
**Figure 18.2: Distribution of Licensed MSMEs, 2016**



**Distribution of Licensed MSMEs**

18.8. As shown in Figure 18.3, 78.9 per cent of licensed MSMEs operated in permanent structures. These were mostly in rented buildings in either commercial centres or within residential buildings. The largest proportion of unlicensed businesses (40.6 per cent) operated in open places or where there were no structures. Only 44.1 per cent operated businesses in either temporary or semi-permanent structures and 13.8 per cent of unlicensed businesses operated in permanent structures.

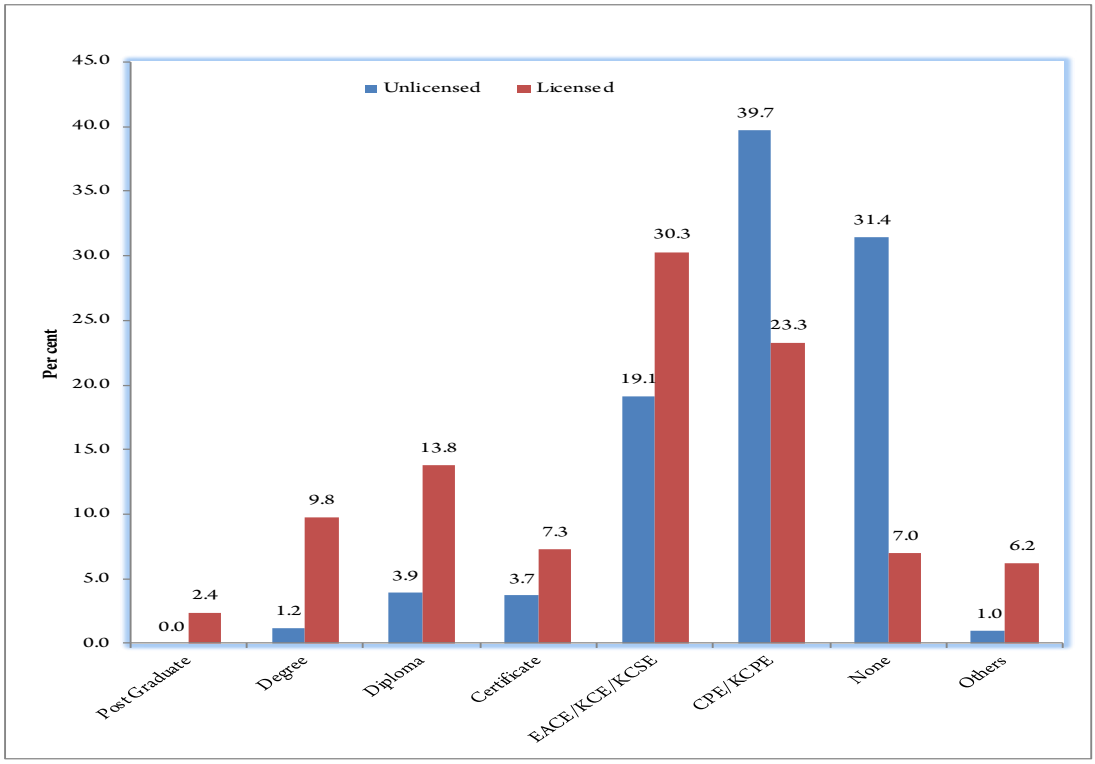
**Figure 18.3: Distribution of MSMEs by Type of Structure of operation, 2016**




**Education Qualification of Business Owners/ Operators**

18.9. Details of education qualifications of business owners/operators are shown in Figure 18.4. About one third of business owners/operators in licensed MSMEs had attained secondary school education, while 23.3 per cent of business owners had attained CPE/KCPE certificate. Further, 9.8 per cent of business owners or operators were university degree holders. Most of these graduates were working in human health and social work activities; electricity, gas, steam and air conditioning supply; professional, scientific and technical activities; and in education sectors. In unlicensed MSMEs, 39.7 per cent of the business owners/operators had attained primary education while 31.4 per cent had no education.

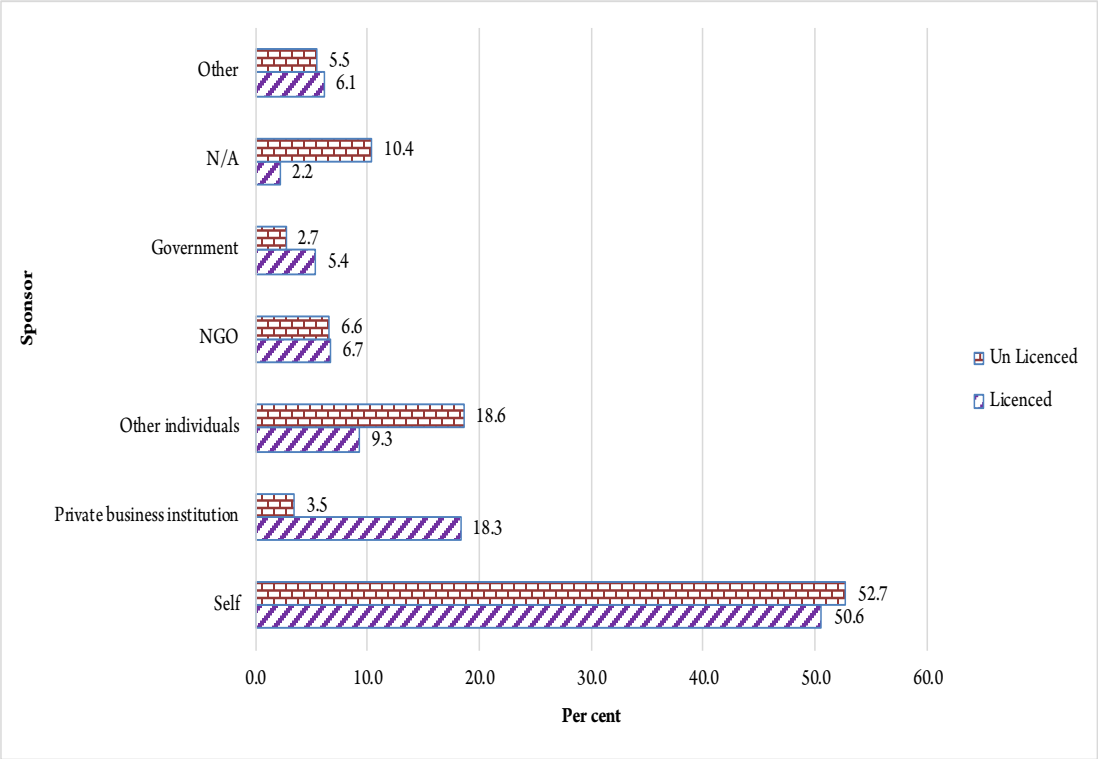
Figure 18.4: Education Qualification of Business Owners/Operators, 2016




**Funding of MSMEs Owners' Training**

18.10. Figure 18.5 gives information on the main sponsor of MSME business owners' training. From the survey results, in the licensed business category, 50.6 per cent of all trainings were self-sponsored, while 18.3 per cent of the training was funded by private business institutions. In the unlicensed business category, 52.7 per cent of the training was self-funded while 18.6 per cent of the trainings were funded by other individuals.

Figure 18.5: Main Sponsor of MSMEs Business Owners' Training, 2016



**Start-up Capital by of MSMEs by Size**

18.11. Table 18.1 presents information on start-up capital by size of establishment. The survey findings showed that 57.2 per cent of the licensed establishments required a start-up capital of KSh 50,000 or less. Licensed establishments which required above KSh 1 million as a start-up capital were mainly small and medium sized. Unlicensed establishments which required a start-up capital of KSh 50,000 or less, accounted for 94.5 per cent of the total.

**Table 18.1: Start-up Capital by Size of Establishments, 2016**

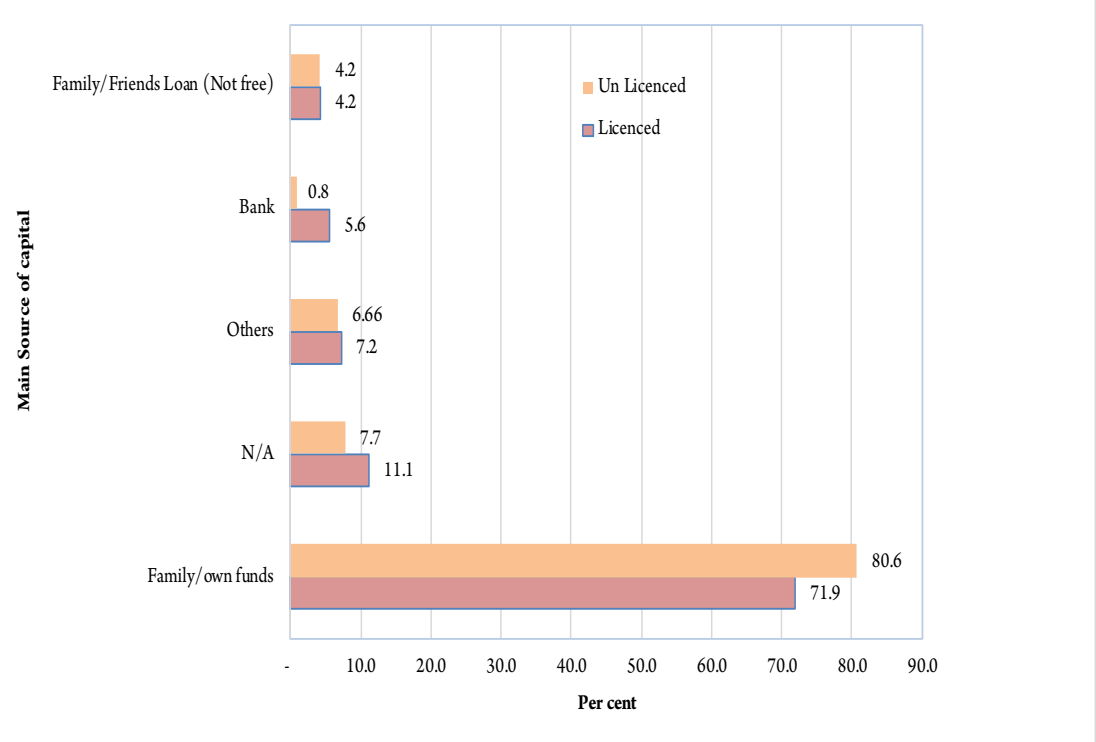
Per cent

| | KSh | Total | Micro | Small | Medium |
|---|---|---|---|---|---|
| Licensed | 50,000 or less | 57.2 | 59.0 | 26.4 | 33.6 |
| | 50,001 - 200,000 | 27.6 | 28.0 | 22.0 | 13.2 |
| | 200,001 - 1,000,000 | 11.5 | 10.9 | 21.8 | 25.4 |
| | Above 1,000,000 | 3.7 | 2.1 | 29.8 | 27.9 |
| Unlicensed | 50,000 or less | 94.5 | 94.5 | - | - |
| | 50,001 - 200,000 | 4.8 | 4.8 | - | - |
| | 200,001 - 1,000,000 | 0.7 | 0.7 | - | - |
| | Above 1,000,000 | - | - | - | - |

**Sources of Start-up Capital for MSMEs**

18.12. Overall, 71.9 per cent and 80.6 per cent of licensed and unlicensed establishments reported family/own funds as the main source of start-up capital, respectively. Loans from family/friends accounted for 4.2 per cent of the capital sources for both licensed and unlicensed MSMEs. On the other hand, banks financed 5.6 per cent of licensed MSMEs.

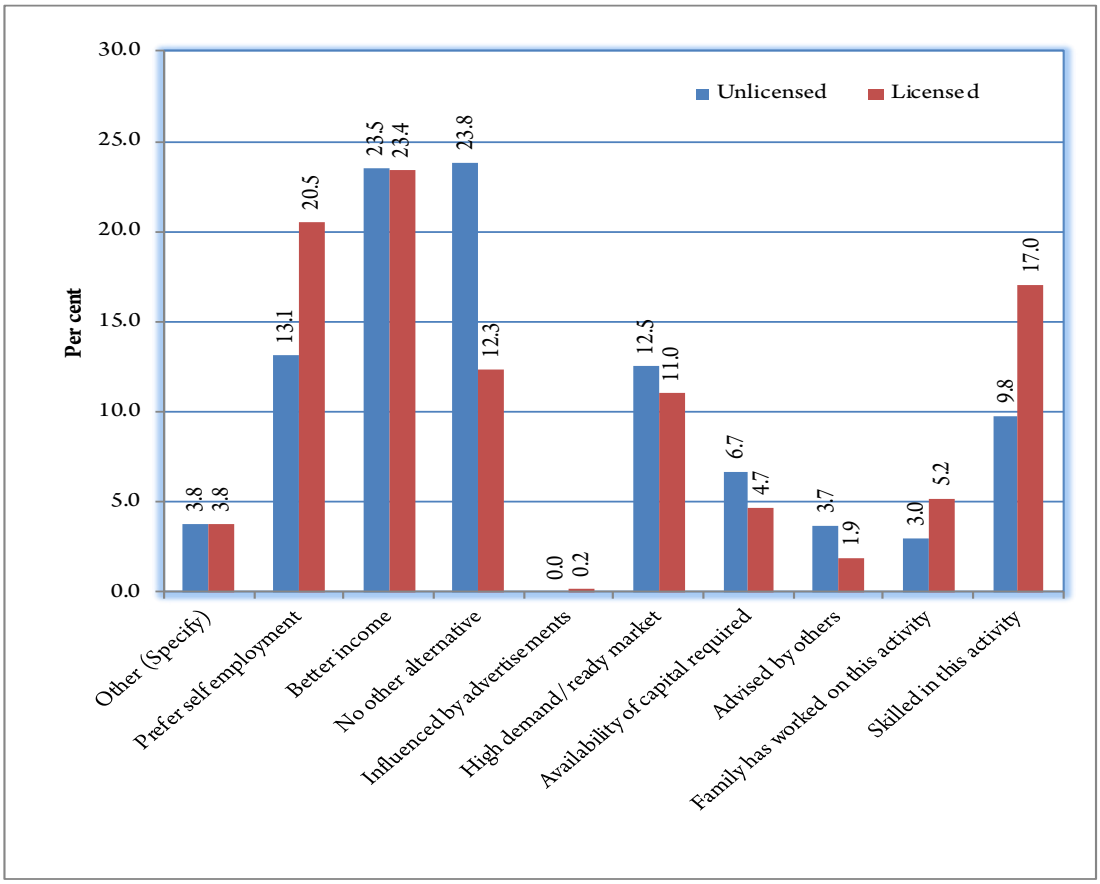
**Figure 18.6: Main Source of Capital for the Business, 2016**




**Reasons for Starting a Business**

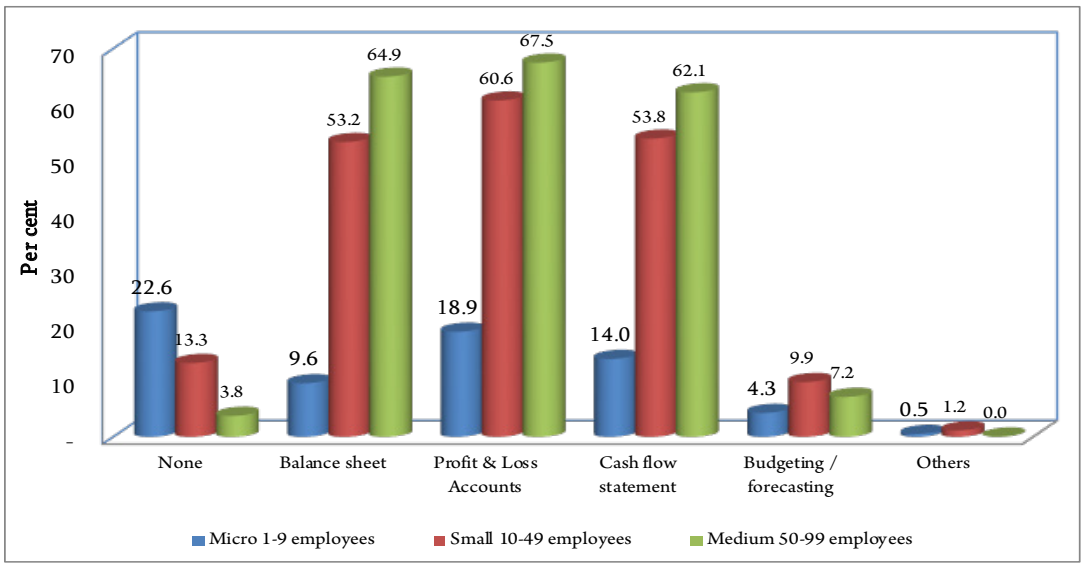
18.13. Reasons for starting a business by licensed and unlicensed MSMEs are depicted in Figure 18.7. The three main reasons cited by licensed MSMEs for starting a business were: better income (23.4%), preference for self-employment (20.5%) and having the requisite skills (17.0%). On the other hand, owners/operators of unlicensed MSMEs cited lack of other alternative (23.8%), better income (23.5%) and preference for self-employment (13.1%) as main reasons for starting a business.

**Figure 18.7: Reasons for Starting a Business, 2016**




18.14. Most licensed MSMEs were found to generate financial reports from the business records that they keep as indicated in Figure 18.8. The most common type of reports generated were balance sheets; profit and loss accounts; and cash flow statements. However, only 22.6 per cent of micro sized establishments did not generate any business reports.

**Figure 18.8: Type of Reports Generated from Business Records, 2016**



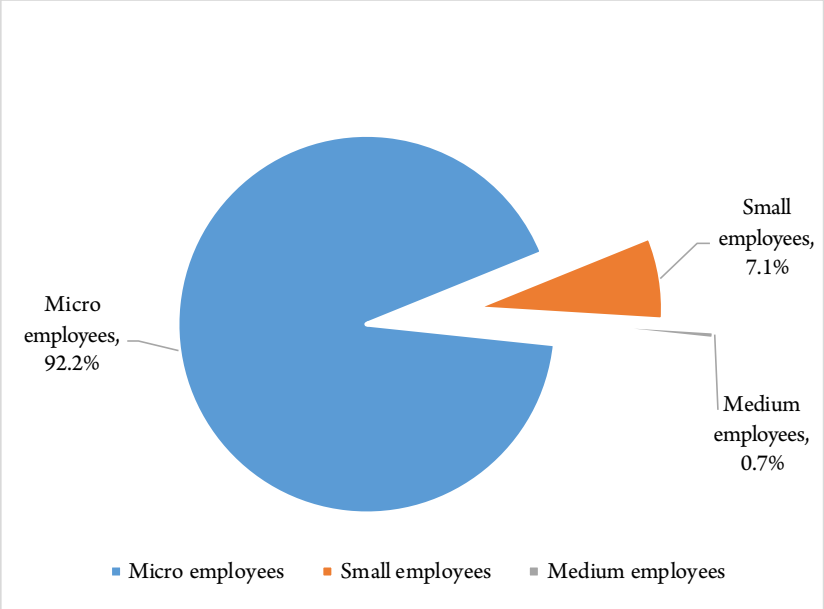
**Establishments by Location of Business**

18.15. Over 70 per cent of all licensed MSMEs operated from commercial premises while 28 per cent of the unlicensed enterprises operated at the residential areas. On the other hand, most of the unlicensed businesses operated in residential areas with no special outfits for the business or were mobile with no fixed location.

**Employment Characteristics in MSMEs**

18.16. Details on distribution of employment establishment in licensed establishments by size are presented in Figure 18.9. The micro, small and medium sized establishments accounted for 92.2, 7.1 and 0.7 per cent, respectively, of employment (persons engaged) in licensed businesses.

**Figure 18.9: Percentage Distribution of Employment in Licensed Establishments, 2016**




**Employment by Economic Activity**

18.17. As shown in Table 18.2, MSMEs engaged 14.9 million persons. Wholesale and retail trade; repair of motor vehicles and motor cycles accounted for more than half of the total persons working in MSMEs (over 8 million). Manufacturing; accommodation and food service activities accounted for 11.8 per cent and 11.1 per cent of all persons engaged in MSMEs, respectively.

**Table 18.2: Employment by Economic Activity, 2016**

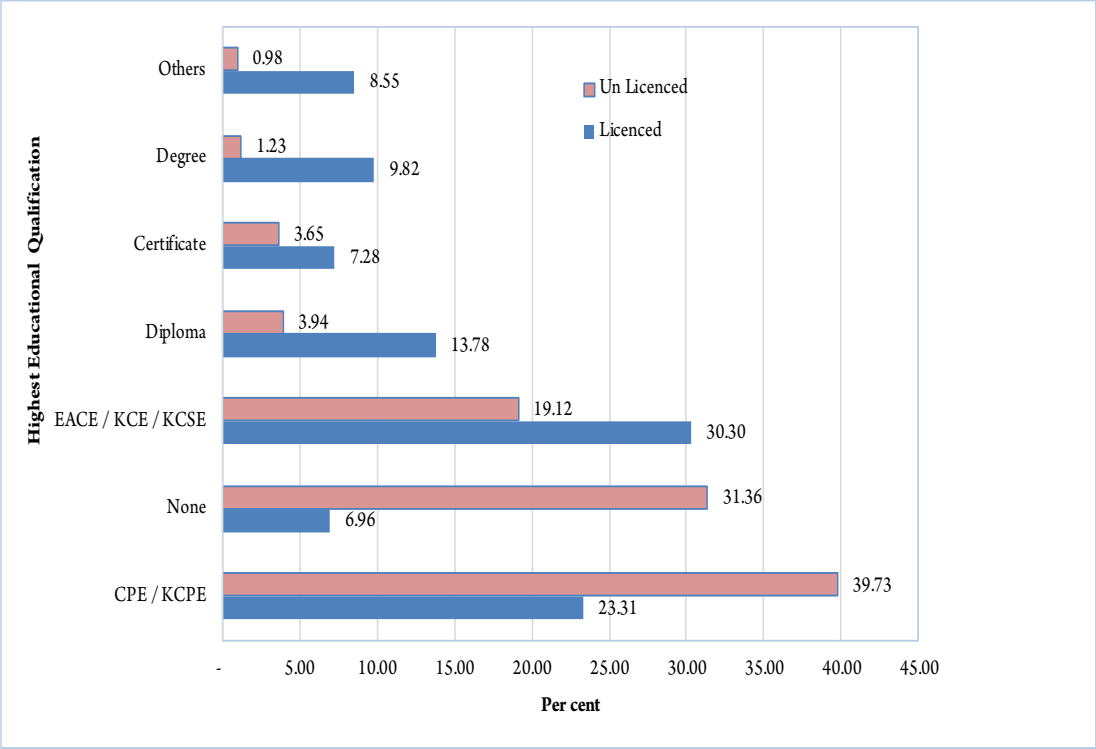
Number '000

| Economic Activity | Licensed | Unlicensed | Total |
|---|---|---|---|
| Agriculture, forestry and fishing | 13.1 | 383.0 | 396.2 |
| Mining and quarrying | 22.4 | 32.0 | 54.4 |
| Manufacturing | 666.1 | 1,094.3 | 1,760.4 |
| Electricity, gas, steam and air conditioning supply | 9.5 | - | 9.5 |
| Water supply; sewerage, waste management and remediation activities | 19.0 | 11.6 | 30.6 |
| Construction | 81.6 | 16.0 | 97.7 |
| Wholesale and retail trade; repair of motor vehicles and motorcycles | 2,609.1 | 5,404.7 | 8,013.7 |
| Transportation and storage | 168.1 | 244.8 | 412.9 |
| Accommodation and food service activities | 870.0 | 779.7 | 1,649.7 |
| Information and communication | 88.9 | - | 88.9 |
| Financial and insurance activities | 255.3 | - | 255.3 |
| Real estate activities | 51.9 | 64.7 | 116.6 |
| Professional, scientific and technical activities | 154.9 | 2.8 | 157.7 |
| Administrative and support service activities | 120.2 | - | 120.2 |
| Education | 601.5 | 112.9 | 714.4 |
| Human health and social work activities | 115.8 | 6.5 | 122.3 |
| Arts, entertainment and recreation | 46.0 | 48.4 | 94.3 |
| Other service activities | 387.2 | 416.3 | 803.6 |
| **Total** | **6,280.5** | **8,617.8** | **14,898.3** |

**Distribution of Employees by Highest Educational Qualification**

18.18. As can be observed in Figure 18.10, the highest proportion of MSME employees in both unlicensed and licensed businesses had primary level of education. Those with KCPE/CPE qualification accounted for 93.5 per cent and 48.2 per cent in unlicensed and licensed establishments, respectively. Only 3.0 per cent of the employees in licensed MSMEs with a degree as the highest educational qualification.

**Figure 18.10: Percentage Distribution of Employees by Highest Educational Qualification Acquired and Establishment Licensing Status, 2016**




**Proportion of Income Generated by MSME by Type and Most Important Use**

18.19. Licensed micro establishments reported spending 45.3 per cent of their net income on investments, either as re-investment or investing in new businesses and investment in agriculture, while expenditure on household and family needs accounted for 44.5 per cent. Small and Medium establishments spent significantly high part of their net income on investment at 63.4 per cent and 69.7 per cent, respectively. This in essence indicates a positive correlation between the proportion of savings and the size of the establishment.

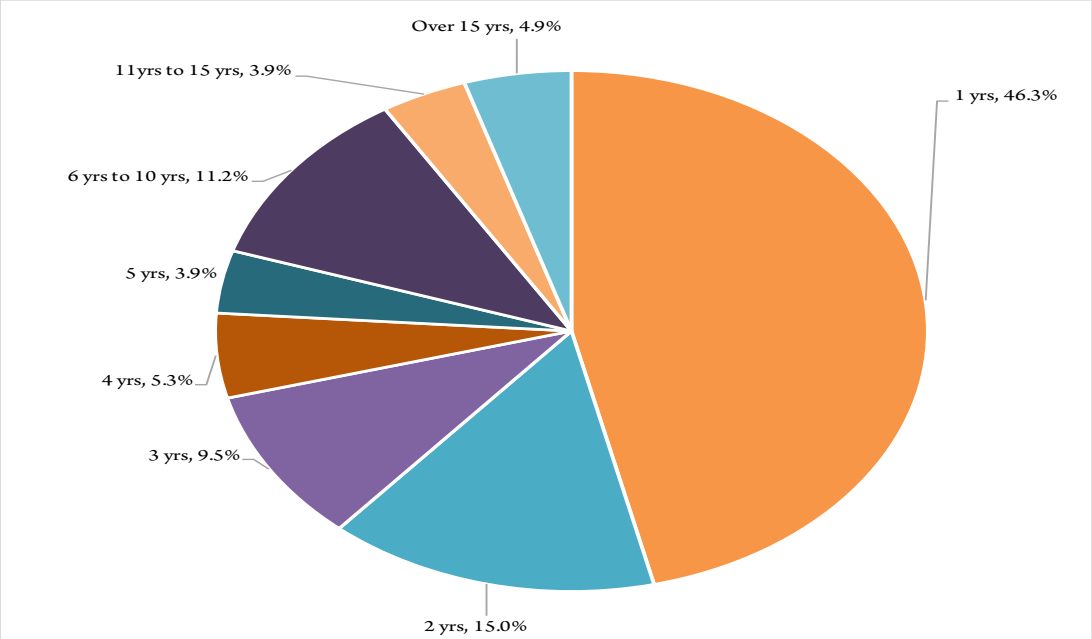
**Expenditure by Size of Establishment**

18.20. Monthly expenditure on salaries and wages for licensed businesses was reported at KSh 64.1 billion, while unlicensed MSMEs spent KSh 9.0 billion which translates to approximately 25.0 per cent of total outlays. A look at the expenditure components revealed that unlicensed businesses are poor in remitting social security payments. Results of the survey further indicated that licensed MSMEs spent about KSh 1.0 billion on all forms of innovation.

**Closure of Businesses**

18.21. The survey findings revealed 46.3 per cent of the businesses that closed did so during the first year of operation as shown in Figure 18.11. The proportion of businesses that closed between 6 and 10 years was 11.2 per cent, while those closing within 3 years were 9.5 per cent. The smallest proportion was recorded in the businesses closing down within 5 years and between 11 and 15 years at 3.9 per cent.

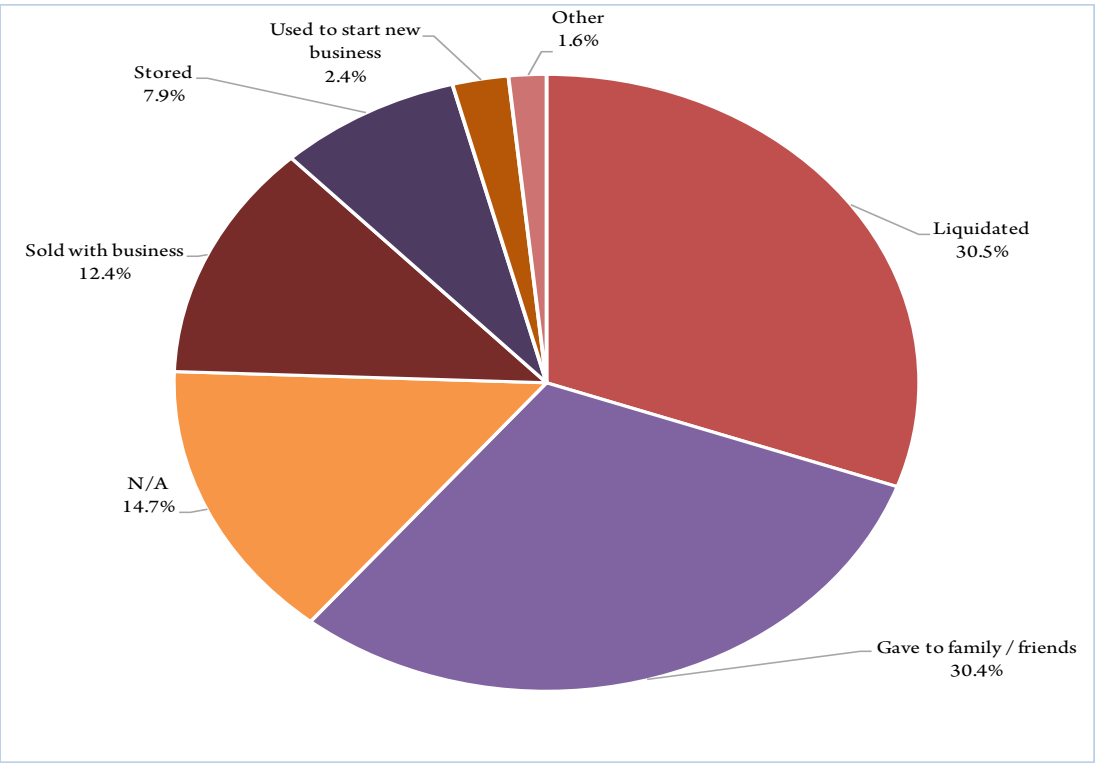
**Figure 18.11: Distribution of Closed Establishments by Age at Closure, 2016**




**Disposal of Stock after Business Closure**

18.22. Figure 18.12 shows the proportion that disposed by liquidation was 30.5 per cent. This was followed by disposal by giving to family or friends at 30.4 per cent. Twelve per cent (12) of business owners sold the stock with business, while 7.9 per cent stored business stock.

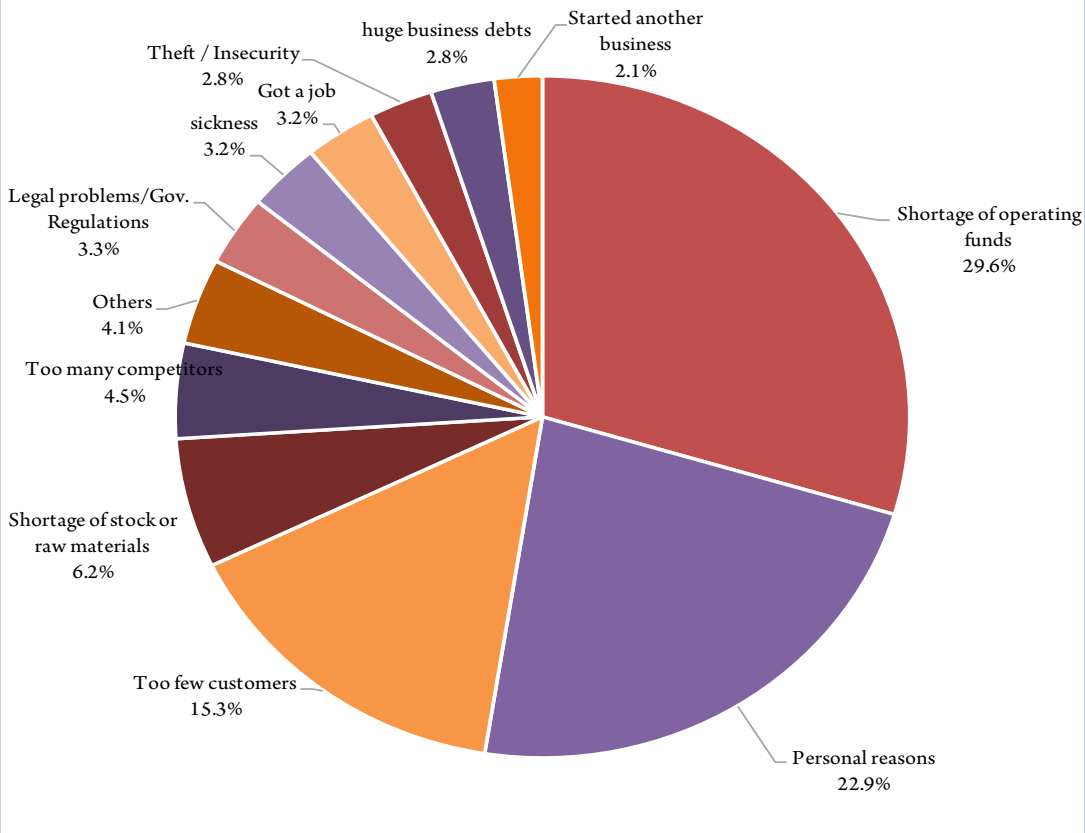
**Figure 18.12: Disposal of Stock after Business Closure, 2016**



**Reasons for Closure of Establishment**

18.23. Figure 18.13 shows reasons for closure of businesses from the MSMEs survey results. The main reasons reported why establishments closed down were: shortage of operating funds, personal reasons and few customers at 29.6, 22.9 and 15.3 per cent, respectively.

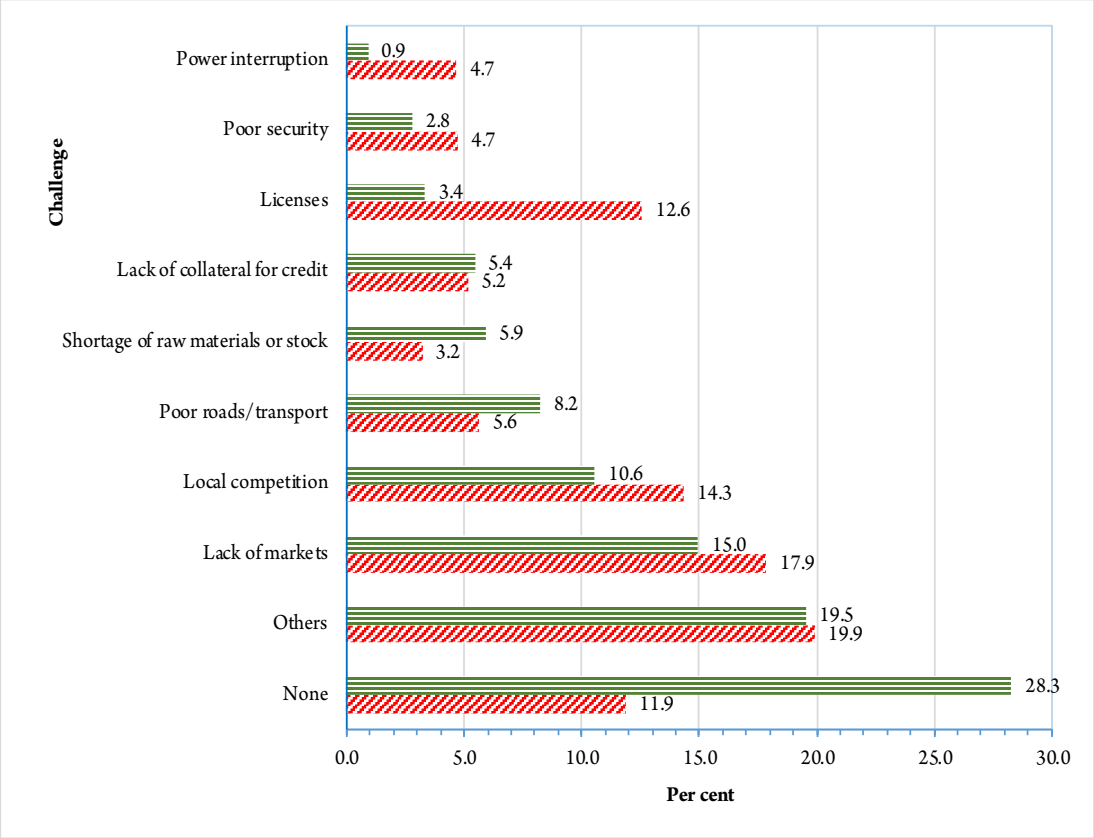
**Figure 18.13: Reasons for Closure of Establishments, 2016**




**Challenges faced by MSMEs in Accessing Amenities and Support Services**

18.24. Information on challenges faced by MSMEs in accessing amenities and support services are shown in Figure 18.14. The most common challenges cited by licensed business included; lack of markets (17.9%) and local competition (14.3%). Impact of HIV-AIDS, foreign competition and lack of skilled manpower were the least common challenges faced by MSMEs. Likewise, the unlicensed businesses had challenges like lack of markets (15.0%) and local competition (10.6%).

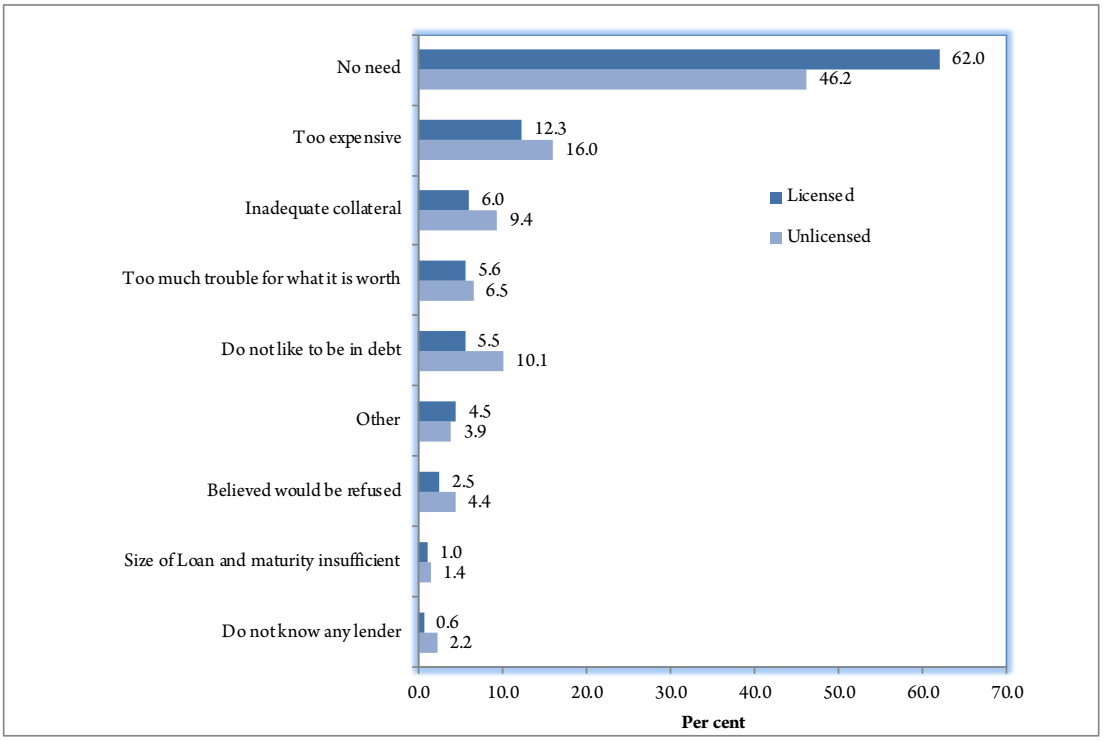
Figure 18.14: Challenges faced by MSMEs in Accessing Amenities and Support Services, 2016




**Reasons for Low Uptake of Loans by MSMEs**

18.25. As indicated in Figure 18.15 a large proportion of licensed (62.0 per cent) and unlicensed (46.2 per cent) businesses indicated that they did not require a loan. The proportion of MSMEs that reported that loans were too expensive was 12.3 per cent for the licensed and 16.0 per cent for the unlicensed. Further, inadequate collateral was also cited by 6.0 per cent and 9.4 per cent of licensed and unlicensed MSMEs, respectively.

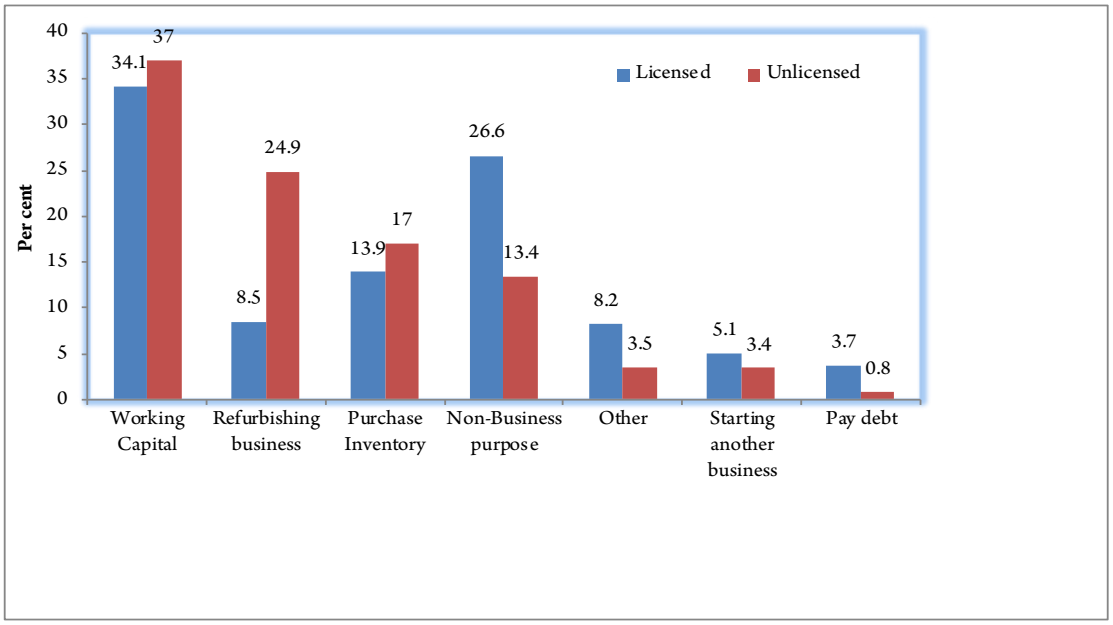
Figure 18.15: Reasons for Low Uptake of Loans by MSMEs, 2016



**MSMEs Reasons for Taking Loans**

18.26. The survey results as shown in Figure 18.16 indicated that of those who took loans, working capital was the main reason given for taking loans at 37.0 per cent and 34.1 per cent by licensed and unlicensed businesses, respectively. The proportion of the licensed businesses who took loans to refurbish their establishments was 24.9 per cent. It was noted that a large proportion of the unlicensed establishments took loans for non-business purposes at 26.6 per cent compared to 13.4 per cent for licensed establishments.

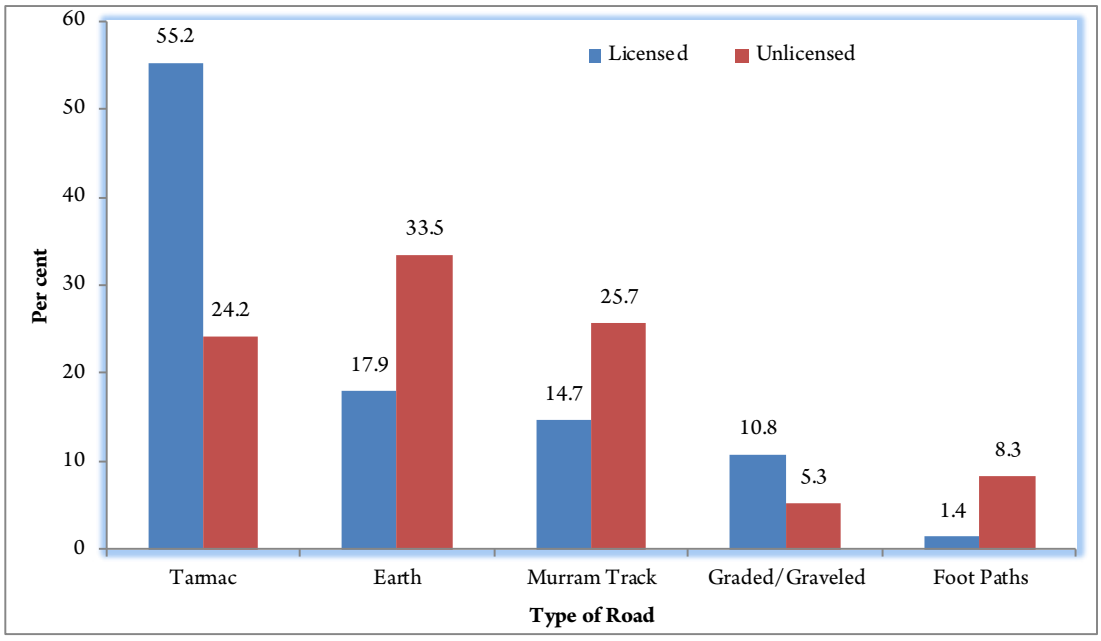
**Figure 18.16: MSMEs Reasons for Taking Loans, 2016**




**Accessibility to MSMEs' Premises by Type of Roads**

18.27. Most of the licensed MSMEs (55.2%) as shown in Figure 18.17 had access to tarmac roads, while 33.5 per cent of unlicensed MSME's had access to their businesses by earth road.

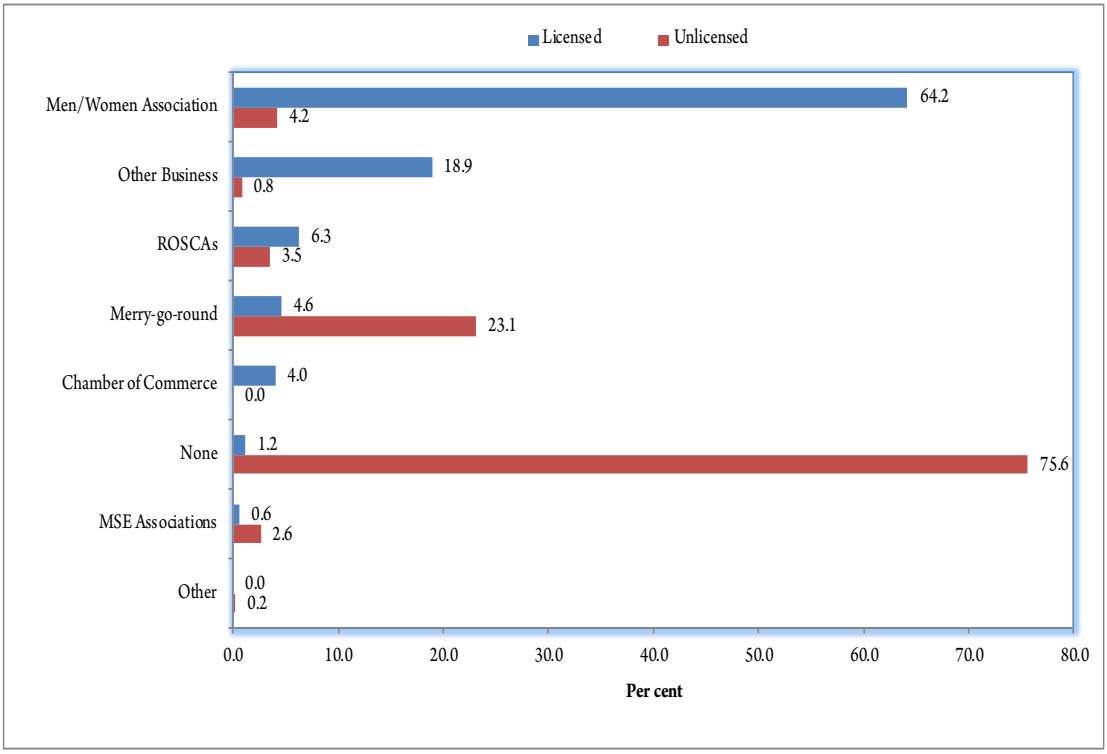
**Figure 18.17: Accessibility to MSMEs' Premises by Type of Roads, 2016**



**Support Groups for MSMEs**

18.28. Figure 18.18 shows that, 1.2 per cent of the licensed and 75.6 per cent of unlicensed MSMEs did not belong to any support group. The survey also revealed that 64.2 per cent of licensed and 4.2 per cent of unlicensed businesses belonged to men/women association. The survey results showed that 23.1 per cent and 4.6 per cent of unlicensed and licensed MSMEs, respectively, belonged to merry-go-round support groups.

**Figure 18.18: Support Groups for MSMEs, 2016**



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