Resource Mobilization for Sustainable Development of Kenya
KENYA ECONOMIC REPORT 2019
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KENYA ECONOMIC REPORT 2019

Resource Mobilization for Sustainable Development of Kenya

To create a globally competitive and prosperous nation with a high quality of life by 2030

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STATEMENT BY CABINET SECRETARY, THE NATIONAL TREASURY AND PLANNING

The theme for the Kenya Economic Report (KER) 2019 is "Resource Mobilization for Sustainable Development of Kenya". It explores the strategies for mobilizing resources to implement the Medium-Term Plan (MTP) III for the Kenya Vision 2030, which includes the government's "Big Four" agenda. The agenda targets to improve the general welfare of Kenyans by creating quality employment opportunities and eventually reduce poverty levels. The report is driven by the findings in the Kenya Economic Report (KER) 2018 which identify the need to enhance resource mobilization to sustain high investments levels (30% of GDP) to achieve the desired economic growth. The resources emphasized include finance, land, extractives, human capital, technology and innovation. It is worth noting that delivery of the "Big Four" agenda requires significant resources to achieve sustainable development for Kenya.

Kenya's economy rebounded in 2018 with a growth of 6.3 per cent due to a stable macroeconomic environment, favourable weather conditions, political stability after the "Handshake" and improved security. Similarly, the current account deficit at 5.8 per cent of GDP in 2018 improved due to earnings from exports of tea, horticulture, freight transport, tourism and strong Diaspora remittances. The fiscal deficit at 6.0 per cent of GDP improved in absolute terms during the period mainly due to government commitment to fiscal consolidation and completion of major infrastructure projects.

Despite various tax reforms and subsequent increase in revenue performance, the rate of growth of revenue remained lower than that of GDP. Low tax buoyancy undermines sustainability of domestic financing for investments. External financial resources, mainly external loans, grants, FDI and remittances continue to play a significant role in filling the investment financing gap.

To ensure continued macroeconomic stability, the government will focus on maintaining external stability by promoting exports growth and increasing reliance on non-debt creating instruments such as external grants, foreign direct investments, and remittances to ease the debt burden while mobilizing long term investment financing. In addition, measures will be put in place to promote a savings culture, review the interest rate policy, and roll out a guarantee scheme to support small scale enterprises to fund and enhance domestic revenue collections to increase investment financing.

Agriculture at 34 per cent of GDP in 2018 has continued to be the largest contributor to GDP, employment and sustainable livelihoods. In this regard, the government will focus on attaining the target for the Malabo Declaration set at 10 per cent of total government expenditure. In addition, there is need to fast-track the development of a consolidated agriculture policy to enhance effective coordination and management of the sector in realizing its full potential.

The role of productive human capital cannot be over-emphasized. The skills-mix-approach is key in ensuring that the required human capital is available for all sectors to support development activities. This requires improving the quality of education and training to match the changing needs of the Kenyan and global markets. As such, effective implementation of the newly adopted competence-based curriculum is instrumental in realizing the required human resource pool.

To achieve higher productivity of the economy, enhanced uptake of innovations and modern technology is crucial. Emphasis will be put on education and research institutions to deliver on their core mandates.

The contribution of diaspora in national development is gaining momentum and this is a resource that needs to be harnessed through financial remittances (at US$ 2.7 billion in 2018), skills, expertise, knowledge and incentives. A key focus therefore will be to continue with efforts to reduce the cost of transactions, review regulatory practices and improve data and information management.

Land is a critical resource in support of all sectors of the economy, thus its proper management and utilization has potential to enhance growth and development. To ensure optimal utilization of land resources, it is critical to address the challenges of physical planning, cost of acquisition, illegal and irregular allocation, low utilization, uncontrolled subdivision, and competing land uses which hinder its full exploitation.

In addition, improved exploitation of mineral and hydrocarbon resources can immensely contribute towards sustainable economic growth and development. The sector has the potential to contribute up to 10 per cent of GDP from the 1.3 per cent in 2018. This will be achieved by fast-tracking establishment of institutional and administrative structures to support full exploitation of the extractives sector.

Finally, to ensure the "Big Four" agenda is adequately resourced, an integrated approach to planning, resource pooling, information sharing, and monitoring and evaluation framework will be adopted to coordinate all the stakeholders with mandate to mobilize the required resources.

Hon. (Amb.) Ukur Yatani, EGH
Cabinet Secretary
National Treasury and Planning

FOREWORD

The 11th edition of the annual Kenya Economic Report (KER) is published by KIPPRA to fulfil its statutory obligation as set out in Part V, Section 23(3) of the KIPPRA Act 2006. Each year, KIPPRA assesses the country's economic performance and provides medium term prospects for the next three-years. In the initial conceptualization of the report, KIPPRA holds consultative forums with stakeholders to capture issues that may require to be addressed in the report. In addition, prior to finalization of the report, KIPPRA shares the report with statutory stakeholders and other stakeholders for their views and validation.

The Kenya Economic Report 2019 focuses on the strategies needed to mobilize adequate resources to help achieve the government's development agenda. The report takes into account both international and regional development agenda such as the United Nations Sustainable Development Goals, which aim to reduce poverty in all its forms, protect the planet and ensure that all people enjoy peace and prosperity; the African Union Agenda 2063 which seeks socio-economic transformation of the continent based on inclusive growth and sustainable development; and the East African Community Vision 2050, which aims to ensure that the region optimizes the utility of its resources to narrow the gap in social well-being and productivity.

This report is timely and comes at a time when the government is implementing the MTP III with special focus on delivering the "Big Four" agenda. The agenda is aimed at improving the economic and social welfare of Kenyans in the next five years. Implementation of this agenda will require immense resources, and this report is useful in pinpointing the areas of focus in resource mobilization. It also points out the reform measures required to enhance mobilization of the resources.

On behalf of the KIPPRA Board of Directors and on my own behalf, I wish to sincerely commend KIPPRA staff for their devotion, dedication and timely production of this report. A lot of time and resources have been spent towards the effort. I also wish to express our gratitude to all the stakeholders for their treasured comments and suggestions which helped to improve the report.

Lastly, I wish to take this opportunity to more sincerely thank the Government of Kenya and the Think Tank Initiative of IDRC for their continued financial support to KIPPRA. The support by our partners has not only enabled the Institute to fulfil its mandate as stipulated in the KIPPRA Act 2006, but also enabled the Institute to create new and useful networks and partnerships.

Dr Linda Musumba
Chairperson
KIPPRA Board of Directors

PREFACE

The Institute is mandated by the KIPPRA Act 2006 to produce an annual Kenya Economic Report that analyses the performance of the economy and provides medium term prospects for three (3) years. Over the years, the in-depth analysis conducted in the Kenya Economic Report has been guided by a central policy theme which the Institute considers as impactful in supporting implementation of government development agenda. The Report has become a significant government document that offers policy direction on various national issues that demand the attention of the government and its stakeholders, including the public.

The theme of the Kenya Economic Report 2019 is "Resource Mobilization for Sustainable Development of Kenya". This theme has been informed by the huge savings-investment gap the country has persistently experienced over time, in addition to other key economic resources. The analysis is conceptualized around four main categories of resources, namely: capital, labour, land and technology, of course complemented by the foundations of national transformation/enablers.

The focus of this report is on how the country can mobilize sufficient resources to ensure successful implementation of the Kenya Vision 2030 and its medium-term plans and the "Big Four" agenda. Adequate resources are required to propel the economy towards achievement of the long-term growth targets. The level of investments required to accelerate development towards the Vision 2030 targets is at least 30 per cent of GDP to yield the desired 10 per cent economic growth. Such investments are also expected to translate to higher economic productivity, job creation and inclusive growth through socio-economic transformation.

This report analyses the critical issues that undermine productive use of land, extractives, financial and skills remittances, agriculture and environment, technology and innovations, and human capital, which are fundamental resources for the economy. In addition, the report focuses on mobilization of fiscal resources while keeping a stable macroeconomic environment. The prospects on the macroeconomic environment in the medium term are promising.

The Report proposes having in place relevant institutional, policy and regulatory frameworks as necessary for impactful resource mobilization. This includes reviewing various policies to create synergies, harmony and coherence in unlocking the potential of the various resources the country needs to enhance its productivity for growth and development. All stakeholders including the national government, county governments, private sector, development partners and communities are instrumental in harnessing the opportunities that abound.

Dr Rose W. Ngugi
Executive Director
KIPPRA

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This report would not have been possible without the leadership and oversight of the KIPPRA Board of Directors and the Executive Director, Dr Rose W. Ngugi.

Special thanks to the Kenya Economic Report Technical Committee comprising Mr Benson Kiriga (Chair), Ms Beverly Musili (Secretary), Dr Christopher Onyango, Mr Phares Kirii, Mr Victor Mose, Ms Nancy Laibuni and Dr Moses Njenga for their dedication and teamwork. To the other contributors including Mr Joshua Laichena and Mr James Ochieng', your inputs are highly recognized. The Institute also wishes to thank all KIPPRA researchers from all departments for their contributions to various chapters of the report, together with the Human Resources, Finance, Supply Chain Management and Knowledge Management departments who tirelessly provided valuable support to ensure timely completion of the report.

KIPPRA also wishes to extend, most sincerely, special appreciation to all State Departments and Government Agencies that availed the data and information used in this report. We are particularly grateful for the expert advice by statutory partners including The National Treasury and Planning, Central Bank of Kenya, Kenya Revenue Authority, and Kenya National Bureau of Statistics.

To all other stakeholders who participated in the various workshops, your contributions are highly appreciated.

The preparation of this report was made possible through financial support to KIPPRA by the Government of Kenya, and the Think Tank Initiative (TTI) of IDRC.

ABBREVIATIONS AND ACRONYMS

ABS	Assets Backed Securities
ADF	Asian Development Bank
ADLAs	Authorized Dealers with Limited Authority
ADNE	African Diaspora Network in Europe
AFA	Agriculture Food Authority
AfDB	African Development Bank
AFFA	Agriculture, Fisheries and Food Act
AgGDP	Agriculture Gross Domestic Product
AGOA	African Growth and Opportunity Act
AIA	Appropriation-in-Aid
AIDS	Acquired Immuno-Deficiency Syndrome
AISWAG	Agriculture and Irrigation Sector Working Group
APR	Annual Percentage Rate
ASAL	Arid and Semi-Arid Land
ASDS	Agricultural Sector Development Strategy
ASDSP	Agricultural Sector Development Support Programme
ASGTS	Agriculture Sector Transformation and Growth Strategy
BCM	Billion Cubic Meters
BMP	Budget Rationalization Programme
BPO	Business Process Outsourcing
CAADP	Comprehensive Africa Agriculture Development Programme
CANCO	Community Action for Nature Conservation
CBHF	Community-Based Health Financing
CBOs	Community-Based Organizations
CBR	Central Bank Rate
CPIA	Country Policy and Institutional Assessment
CRB	Credit Reference Bureau
DANIDA	Danish International Development Agency
DFZs	Disease Free Zones
DRSLP	Drought Resilience and Sustainable Livelihood
DTD	Domestic Taxes Department
EAAPP	East African Agriculture Productivity Project
EASRA	East African Securities Regulatory Authorities
EGMS	Excisable Goods Management System
EMCA	Environmental Management and Coordination Act
ETFs	Exchange Traded Funds
ETR	Electronic Tax Register
FBOs	Faith-Based Organizations
FDI	Foreign Direct Investment

FTSE	Financial Times Stock Exchange
GDP	Gross Domestic Product
GEMS	Growth Enterprise Market Segment
GFCF	Gross Fixed Capital Formation
GHGs	Greenhouse Gases
GNS	Gross National Savings
HCI	Human Capital Index
HDI	Human Development Index
HIV	Human Immunodeficiency Virus
ICMS	Integrated Customs Management System
ICT	Information and Communication Technology
IDA	International Development Association
IFAD	International Fund for Agricultural Development
IGAD	Inter-Governmental Authority on Development
ILO	International Labour Organization
IMF	International Monetary Fund
IPOs	Initial Public Offers
IRA	Insurance Regulatory Authority
ITMS	Integrated Tax Management System
JRC	Joint Research Centre
KALRO	Kenya Agriculture Livestock Research Organization
KAPAP	Kenya Agricultural Productivity and Agribusiness Project
KBRR	Kenya Banks Reference Rate
KCDP	Kenya Coastal Development Project
KCSE	Kenya Certificate of Secondary Education
KCSPOG	Kenya Civil Society Platform on Oil and Gas
KEBS	Kenya Bureau of Standards
KER	Kenya Economic Report
KETRACO	Kenya Electricity Transmission Company
KEVEVAPI	Kenya Veterinary Vaccine Production Institute
KIPI	Kenya Industrial Property Institute
KIPPRA	Kenya Institute for Public Policy Research and Analysis
KNBS	Kenya National Bureau of Statistics
KOGA	Kenya Oil and Gas Association
KRA	Kenya Revenue Authority
KTMM	KIPPRA-Treasury Macroeconomic Model
LAPSSET	Lamu Port, South Sudan, Ethiopia Transport
LMB	Livestock Marketing Board
LRTU	Land Reform Technical Unit
LSE	London Stock Exchange
MFBs	Micro-finance Banks
MNCs	Multi-National Companies
MTP	Medium-Term Plan
NAAIAP	National Accelerated Agricultural Inputs Access Programme
NAFFAC	National Fossil Fuels Advisory Committee
NAIP	National Agriculture Investment Plan
NASEP	National Agricultural Sector Extension Programme
NCDs	Non-Communicable Diseases

NCPB	National Cereals and Produce Board
NDMA	National Drought Management Authority
NEMA	National Environment Management Authority
NESC	National Economic and Social Council
NFSPN	National Food Security and Nutrition Policy
NGOs	Non-Governmental Organizations
NHIF	National Hospital Insurance Fund
NKIF	Northern Kenya Investment Fund
NLC	National Land Commission
NLIMS	National Lands Information Management System
NNAP	National Nutrition Action Plan
NOCK	National Oil Corporation of Kenya
NPLs	Non-Performing Loans
NRF	National Research Fund
NSE	Nairobi Securities Exchange
NSSF	National Social Security Fund
PAYE	Pay As You Earn
PEAS	Public Expenditures in Support of Agriculture Sector
PFM	Public Finance Management
PIEA	Petroleum Institute of East Africa
PMI	Purchasing Managers Index
PPI	Producer Price Index
PPPs	Public Private Partnerships
RARMP	Revenue Administration Reform and Modernization Programme
RECTS	Regional Electronic Cargo Tracking System
REITs	Real Estate Investment Trusts
REPO	Repurchase Agreement
RPRL	Regional Pastoral Livelihood Resilience
SACCOS	Savings and Credit Cooperative Societies
SAGA	Semi-Autonomous Government Agency
SAM	Social Accounting Matrix
SAPs	Structural Adjustment Programmes
SASRA	SACCO Societies Regulatory Authority
SDCP	Smallholder Dairy Commercialization Project
SDGs	Sustainable Development Goals
SGR	Standard Gauge Railway
SMEs	Small and Medium Enterprises
SPV	Special Purpose Vehicle
SSA	Sub-Saharan Africa
TFR	Total Fertility Rate
TLUs	Tropical Livestock Units
TMP	Tax Modernization Programme
TVET	Technical and Vocational Education and Training
UHC	Universal Health Care
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
USAID	United States Agency for International Development
VAT	Value Added Tax

EXECUTIVE SUMMARY

Introduction

The theme of the Kenya Economic Report (KER) 2019 is "Resource Mobilization for Sustainable Development of Kenya". The report focuses on strategies for mobilizing resources required for effective implementation of the "Big Four" agenda in transforming Kenya into a newly industrializing middle-income country by the year 2030. The resources under consideration include finance, land, human capital, technology and innovation.

There are several compelling reasons for accelerated injection of investments into the priority projects of the Kenya Vision 2030. Most importantly, there are numerous targets set during the first and second medium-term plans yet to be met. For instance, whereas the Vision envisaged sustained rapid economic growth rates averaging 10 per cent per annum beginning 2012, the highest economic growth rate achieved so far has been 8.4 per cent during the year 2010. Additionally, the average growth rate over the period 2012-2018 has been 5.5 per cent. The development blueprint also envisions structural transformation and diversified economic activities as drivers of economic growth and creation of decent jobs. The adoption of the devolved system of government has brought about a shift of power, resources and responsibilities between the national and county governments, hence the need for consolidation and prudent management of available resources.

In addition, there are emerging externally driven developments which have implications on investment resources and cannot therefore be ignored during implementation of the Vision 2030 and its medium-term plans. Specifically, the opportunities presented by regional and global economic integration, including the East African Community's Vision 2050, African Union's Agenda 2063, and the United Nation's Sustainable Development Goals (SDGs) cannot be fully exploited in the absence of adequate resources. At the same time, external factors such as re-balancing of China and the global economy, increased protectionist policies affecting international trade, protracted effects of global financial crisis, climate change, and global terrorism have direct and indirect effects on the economy and can no longer be ignored.

Macroeconomic Performance

Kenya's economy recovered during 2018 largely due to improved performance of the agricultural sector as a result of favourable weather conditions and improved political stability. The economy grew by 6.3 per cent in 2018 compared to 4.9 per cent in 2017. The average growth of the agricultural sector was 6.2 per cent in 2018 compared to an average of 1.7 per cent in 2017.

The growth momentum in 2018 was also supported by a stable macroeconomic environment. For example, overall average annual inflation in 2018 remained within the government target band of 5%±2.5% despite pressure from fuel, and food inflation.

The government sustained its commitment to the fiscal consolidation path. However, government revenue to Gross Domestic Product (GDP) remained below the 25 per cent

target stipulated in the MTP II. Furthermore, government revenue to GDP fell from 19.5 per cent in 2016/17 to 19.1 per cent in 2018/19. Reviewing existing tax policies and further deepening tax reforms is a step in the right direction.

Medium Term Prospects

To achieve the desired economic growth in the Vision 2030, Kenya needs to increase its total investments to at least 30 per cent of GDP. These investments require funding, thus necessitating enhanced domestic resource mobilization. Implementation of the third Medium-Term Plan that includes the "Big Four" agenda is expected to spur growth in economic activity. The current stable macroeconomic conditions are expected to continue in the medium term, with implementation of prudent fiscal policy that includes containing public debt at sustainable levels. It is notable that while demand on fiscal space is still high, exports are not growing at the desired rates, against a steadily increasing imports bill.

The savings-investment gap remains wide, ranging from 7.1 per cent to 12.1 per cent of GDP for the period 2012 to 2017 but recorded 10.2 per cent in 2018. These levels of gross national savings are not enough to adequately finance the required investment levels, and this calls for gradual acceleration of gross national savings (to even doubling the current levels) to 25 per cent of GDP by 2022. With the expectation of high levels of investments in the medium term, this gap will widen if mobilization of gross national savings is not prioritized. Maintaining fiscal prudence remains key in closing the financing gap, in addition to boosting private savings and expanding the exports base to improve the current account balance.

Mobilizing Fiscal Resources

The Government of Kenya has over the years implemented several domestic tax administration and policy reforms. The aim has been to improve domestic revenue administration, reduce administrative and compliance costs, increase tax compliance, improve transparency in revenue administration, and improve customer service. Some of the tax administration reforms include the establishment of a semi-autonomous revenue collection agency, the Kenya Revenue Authority (KRA) in 1995, the merger of Income Tax and Value Added Tax (VAT) to form Domestic Taxes Department (DTD) in 2004, taking over of administration of Domestic Excise from Customs and Excise in 2005 by the DTD, establishment of Electronic Tax Register (ETR) system in 2005, and the introduction of and implementation of a web-based Integrated Tax Management System (ITMS) in 2008. Generally, the objective of tax reforms has been to widen the tax base, increase revenue collection, decrease inequality in terms of redistributing wealth and income, and discourage the consumption of certain commodities.

Total cumulative revenue including Appropriation-in-Aid (AIA) collected as at end of June 2018 was Ksh 1,487.23 billion, which fell short of the target of Ksh 1,659.6 billion. The performance missed the target by Ksh 172.4 billion mainly due to prolonged elections and drought-related challenges in the first half of the year. External grants have been performing dismally at Ksh 27.6 billion against a target of Ksh 43.0 billion. This low performance of grants has been persistent for a long time, and new strategies are required to increase absorption rates, attract more grants, and to contribute significantly to resource mobilization. The counties total own source revenue collected was only Ksh 26 billion (0.48% of GDP) in 2013/14, Ksh 33 billion (0.54% of GDP) in 2014/15, Ksh 35 billion (0.49% of GDP) in 2015/16 and Ksh 33 billion (0.44% of GDP) in 2016/17. The amount collected all through was below one per cent of GDP, signifying that own source revenues will take time to constitute significant resource mobilization.

Kenya's public debt has been increasing over time and reached the Ksh 5.0 trillion mark in June 2018 and Ksh 5.8 trillion in June 2019, reflecting the government's increasing appetite to borrow to fund infrastructure projects across the country. This has seen the composition of debt change, with a declining proportion of multilateral and concessional debt and a growing share of bilateral debt especially from China. Total public debt for 2017/18 was 57.1 per cent of GDP compared to 57.2 per cent of GDP in 2016/17. Globally, public-private partnerships (PPPs) have emerged to be an important source of resource mobilization, but Kenya is yet to exploit them fully. Maintaining fiscal consolidation while ensuring a growth-enhancing fiscal policy and enhancing debt management will go a long way in ensuring debt sustainability.

Financial Institutions and Markets in Mobilizing Financial Resources

Despite the slow growth of the financial sector in Kenya, its contribution to GDP remains stable. The banking, capital markets, insurance, pension and Savings and Credit Cooperative Societies (SACCOs) sub-sectors have realized notable performance mainly attributable to reforms introduced by the government, such as introduction of Islamic financial products, and adoption of technology in enhancing efficiency in operations. However, there is need to create public awareness to improve uptake of the various services.

Although banks in Kenya are not constrained by resources in the provision of private sector credit, private sector credit to GDP remains low at 44 per cent compared to a ratio of above 100 per cent in most aspirator countries. Further, persistently high non-performing loans coupled with an interest rate cap has made it a challenge to appropriately capture the risk premium in loan pricing. As such, growth in private sector credit has continued to slow down, and preference for public sector credit is emerging in the banking sector. There is need to review the interest rate policy as it does not seem to have achieved its intended outcome, while putting in place mechanisms to enhance small and medium enterprises' (SMEs') access to credit and stabilizing the financial market. In addition, there is need to enhance utilization of quality Credit Reference Bureau (CRB) data in managing loan portfolios.

The capital market has performed dismally in raising new funds despite the various reforms to increase efficiency, investors' confidence, products and liquidity. The market is characterized by low new listings even with introduction of Growth Enterprise Market Segment (GEMS) targeting SMEs. Further, Real Estate Investment Trusts (REITs) which allow for mobilization of capital for housing development have also seen slow participation. Further, the corporate bond market has slowed, with waning investor confidence, and quick action is required to restore confidence. Deepening of the capital market remains a priority in expanding the sources of external financing for the private sector.

Although the insurance industry in Kenya has witnessed a growth of about 1.7 times in premiums, the general insurance business dominates the premiums at about 68 per cent compared to long term insurance business at 32 per cent. This reduces the insurance industry's capacity to avail capital for long investment horizons. Further, the potential in the pension sector to mobilize savings is not fully exploited, since many Kenyans, especially those in the informal sector which employ over 12 million people are left out. Creating public awareness remains critical in enhancing insurance penetration.

Harnessing Diaspora Resources for Sustainable Development

The Kenya Diaspora Policy 2014 seeks to empower Kenyans abroad to effectively make greater contribution to the development of the country. Specifically, the policy aims to tap into remittances, skills, expertise and transfer

of knowledge. Thus, the role of the diaspora in mobilization of resources, and realization of the Kenya Vision 2030 is geared towards driving investments in the priority sectors of the "Big Four" agenda. Besides, diaspora remittances play an important role in enhancing macroeconomic stability through enhanced savings and investments, improving fiscal and current deficits, and debt sustainability. At household level, remittances improve the livelihoods of migrant families in meeting basic needs, increasing savings and building assets for future stability.

The regulatory reforms undertaken so far have resulted in improvements in facilitating mobilization of diaspora remittances and greater use of formal channels for conducting financial transactions. However, the cost of sending remittances has remained high, with a global average estimated at 7.1 per cent compared to the SDG target of 3 per cent. Besides, restrictive laws, unfavourable working conditions in migrant countries, unfair business practices by remittance services providers, and poor information and data management hinder effective mobilization and management of diaspora resources.

Greater efforts are therefore required to strengthen collaboration and coordination between the government, migrant destination countries, private sector and diaspora groups/ associations to fully tap into the financial resources, skills and expertise of Kenyans living abroad. In addition, there is need to continue improving the existing regulatory environment and protect workers' rights in destination countries. The government could develop savings and investment facilities and tax discounts to encourage formal remittances. Furthermore, the government could consider introducing diaspora bonds as alternative means for raising funds for long-term investments. Such strategy has worked well in countries such as the Philippines, China, India and Israel.

Extractives Sector

Kenya is endowed with abundant, largely untapped minerals, petroleum and natural gas resources. There have been discoveries of oil and natural gas in Turkana, Mandera and Lamu, largest water aquifer in Turkana, discovery of rare earth minerals (Niobium) in Kwale and coal in Kitui after many years of exploration. Kenya has witnessed increased exploration activities and huge interests by multinational companies following the discoveries. However, despite the existence of these resources, the county is yet to meaningfully benefit from exploitation of the resources. The sector is predominantly dominated by nonmetallic low value minerals. Moreover, the sector contributes a paltry 1 per cent to GDP annually, yet it has the potential to contribute up to 10 per cent to GDP as envisaged in the Kenya Vision 2030. It is also expected to provide opportunities for employment creation, linkage to other sectors of the economy, and promote value addition.

A salient feature of the extractives sector is the dominance of mining and oil industry by Multi-National Companies (MNCs), which are an indispensable source of capital and technology investment. The MNCs import their inputs and other machineries required for exploration and mining activities. They also repatriate much of their incomes to their home countries. The enactment of Local Content Bill into law will greatly support the participation of local enterprises in the value chain, increase consumption of local goods, provide employment at the local level, and provide revenue for the government through corporate taxation. Besides, revenue streams from royalties are not in tandem with total incomes generated in the sector. For example, while revenue from the mining sub-sector between 2014 and 2018 increased by Ksh 12.965 billion, royalties to the government declined by Ksh 386.67 million in the same period. This may indicate challenges in royalty revenue collection and therefore revenue leakage that otherwise would flow to the government.

Although most of the institutions envisaged in the Mining Act 2016 have been set up, there are challenges in discharging their mandate. These institutions require more facilitation and capacitation to enable them perform their roles transparently, effectively and efficiently. The Income Tax Act 2014 and Tax Procedure Code 2015 clearly outline how revenue from the extractives will be shared. However, a mechanism to provide for the procedure on how the revenue generated from extractives is transmitted to the counties and the communities for transparency and accountability especially in the mining sub-sector is yet to be developed.

To move the sector forward, there is need to strengthen the institutions mandated to determine royalty and revenue levels, and those charged with revenue collection by allocating adequate resources to enable them perform their functions effectively and efficiently. Resource planning will also be necessary to catalyse links between and within other sectors of the economy, including production, and fiscal and consumption linkages that will foster economic diversification. Formalization of the Artisanal and Smallscale Miners (ASM) will ensure increased revenue for the government through taxation, increased ASM earnings from their products through elimination of middlemen, and ensure good environmental stewardship. Sealing loopholes through strict enforcement of royalties and tax collection will ensure there is no leakage, and thus increase revenue collection from the sector. Fast-tracking of the enactment of the Local Content Bill into law will ensure more use of local products and will create more jobs at the local level and attract more investment by local industries. This will in turn optimize the resources generated from natural resource rents and expand the revenue base for the government.

Enhancing Mobilization of Land Resources

The Constitution of Kenya categorizes land into public, private and community. Public land comprises 77,792 km^2 (13%), community land 396,315 km^2 (68%) and private ownership 107,953 km^2 (19%). Land is critical in supporting affordable housing, infrastructural development, manufacturing, food security and agriculture, which form the "Big Four" development agenda of the government.

The mechanisms available for the government to alienate land include transfer of land to the State by way of sale, transfer, surrender or reversion of leasehold interest, and compulsory acquisition. However, compulsory acquisition often faces challenges related to disputes on compensation, and failure by acquiring agencies to follow procedures. There is need for clear and consistent application of land alienation procedures to minimize disputes.

The stock of public land in Kenya has diminished over time, partly due to irregular and illegal allocations, which the National Land Commission (NLC) has not been able to recover. For example, the affordable housing agenda could be heavily impacted by scarcity of land, among other factors such as high cost of construction, and lack of titles for most county government land. For future planning of urban centres, counties could ensure that land is set aside and reserved for housing through spatial plans.

In the manufacturing sector, ample land is required for establishment of technology and innovation centres, industrial parks and worksites for the Medium and Small Enterprises (MSEs). However, most land that was initially reserved for development of markets and MSE worksites has been irregularly re-allocated and diverted for other purposes, including residential, commercial, and private use. Provisioning for adequate public land remains a priority.

In agriculture, and related issues of food security, it is important to point out that uncontrolled subdivision of land, poor utilization of land and competing land uses have led to encroachment into agricultural land. The laws regulating transactions on agricultural land need to be reviewed to effectively control sub-divisions

and other transactions, and unsustainable land use practices. There is also need to put greater emphasis on the need to protect the environment and the blue economy while undertaking land-based activities.

Speculative land holding and hoarding of land has hampered land availability due to lack of a framework regulating minimum and maximum acreage of land holding. Land banking could be explored to enable government access to unutilized land and make it available for investment and development. There is also need to regulate minimum and maximum acreage of land holding, and establish land value capture mechanisms. Finally, all land in the country needs to be titled to facilitate alienation for development purposes.

Agriculture and Sustainable Development

The contribution of the agriculture sector to GDP increased from 26.3 per cent in 2012 to 34.6 per cent in 2017, despite its vulnerability to weather-related shocks. The increase in the share of agriculture in GDP, however, signifies the slow progress in structural transformation of the economy, as long-term development is associated with decline in the share of agriculture in GDP. Devolution has brought about unique challenges occasioned by lack of over-arching guiding policies, such as the agriculture policy and veterinary policy, which are still in the legislative process. According to the Agriculture Sector Growth and Transformation Strategy (ASGTS) 2018-2028, 80 per cent of the financing for the strategy is expected to come from the private sector and other types of financing. However, public spending in the sector has remained below 10 per cent of total expenditure, contrary to the Malabo Declaration. In addition, several functions that were expected to be championed by counties have not been adequately realized, for example extension services and maintaining food and nutrition security reserves, due to systemic challenges. Therefore, there is need to consolidate the agricultural development policy to avoid fragmentation of strategies and interventions. Besides, there in need to increase productivity by adopting technology and enhancing access to markets to spur growth of the sector. Increased investments in livestock production are also necessary, and ensuring that land, water and forest resources are used sustainably. The forest ecosystem, which is critical for enhancing resilience to climate change must be protected; it provides, environmental services that include water quality and quantity, reduces soil erosion, and creates micro-climatic conditions that maintain and/or improve productivity.

Innovation and Technology

Kenya has created a conducive policy environment for technological transformation, as manifested in the establishment of critical institutions with regulatory and developmental roles, encouragement of public investments, and provision of incentives for private sector investments. This has contributed to the high global and regional ranking in terms of competitiveness of innovations. There is evidence that most sectors are embracing technological change and uptake of modern technology, which will accelerate growth and development.

However, several challenges have continued to slow down the uptake of technology and innovations in the country. These include low productivity of education and research institutions, inadequate planning and funding, capacity challenges among innovators especially on non-technical skills such as patenting, entrepreneurship, and manufacturing skewed against production of intermediary products such as machines and equipment. The productivity of micro small and medium enterprises engaged in manufacturing is low, with the net effect of high level of imports and low exports of technology, machines and equipment, where imports are over 20 times more than exports, thus exposing the economy to imbalances in international

trade, dumping, and unfair competition against local manufacturers.

A more integrated approach needs to be adopted among the institutions regulating, supervising, planning and promoting innovation and technology to improve their productivity through synergies. Education and research institutions need to be capacitated to take lead in innovation and prepare the country for technological change. This will require specialization, pooling of resources and integration of data and information for impactful research and training. Capacity development for innovators in both technical and non-technical skills are important to improve quality and standardization, and mass production and marketing of the innovations. Continued uptake of modern technology by the public sector through development expenditure has potential to ensure technological development. Promotion of research and clustering of innovation and incubation hubs will add impetus to innovation and technology by boosting generation of innovations and promoting data and information sharing. The sector is expected to gain momentum from the policy, legal and institutional reforms anticipated in the Medium-Term Plan (MTP) III (2018-2022), which are also an extension of aspirations in the Science, Technology and Innovation (ST&I) sector plan (2013-2018), including policies and bills in: science technology and innovations; biotechnology development; biosciences; atomic energy; nanotechnology; space science and technology; natural products; intellectual property; innovation; research in health policy; and indigenous knowledge and technology.

Human Resource Mobilization for Sustainable Development

The realization of the "Big Four" agenda in Kenya largely depends on an efficient, competitive and adaptive human capital that meets the demands of a dynamic market. Human development considers human capital in terms of the people (human resource) and skills inputs used in accomplishing national development goals and aspirations. Human capital in the context of resource mobilization is broadly considered as the resources in terms of the people and the variety of skills (at all levels that include professionals, technical, semi-skilled and basic skills) acquired.

The country's stock of human capital has improved remarkably due to investments in health, skills training, education and quality of living over the years compared to other countries in Africa. The Technical and Vocational Education and Training (TVET) programme is expected to enhance and accelerate development by providing practical entrepreneurial skills to the youth, especially those in rural areas. These skills will enable the youth to engage in mainly self-employment that can assure them of reasonable income and facilitate the provision of basic goods and or services to their local communities. However, there is need to monitor the courses being offered in technical institutions to ensure that the institutions are focusing on their core mandate.

Compared to other countries, cash transfers in Kenya are yet to have significant impact on poverty. Thus, the government needs to link cash transfer programmes with complementary programmes, including nutrition support for young children, covering other direct education costs that constrain children from poor households from attending school, for example school uniform and food-related costs.

Governance in Resource Mobilization

Effective management of public resources results in efficiency, realization of value for money, and use of resources for intended purposes as provided for in the Constitution of Kenya 2010 and the Public Finance Management Act 2012. However, breach of existing laws has led to misuse, misappropriation and loss of public funds, revenue and property, thereby undermining development activities, including

implementation of some flagship Vision 2030 projects. Furthermore, illicit financial flows, leakages in tax system, money laundering and concealment of proceeds of crime undermine the potential of revenue collection and domestic resource mobilization. Moreover, the gambling industry is susceptible to money laundering by criminals, yet it is not adequately regulated to mitigate such risks.

There is need to strengthen and effectively enforce Public Finance Management (PFM) rules and regulations to enhance efficiency, realization of value for money, and use of resources for intended purposes and reduce theft and other forms of leakages from project implementation. Therefore, accounting officers should comply with financial reporting standards as recommended by the PFM Act and International Public Sector Accounting Standards developed by the Public Sector Accounting Standards Board. Professionals implicated in audit queries should be sanctioned and subjected to a disciplinary process. Besides, surveillance of illicit financial flows should be scaled up through collaboration among other institutions including the Kenya Revenue Authority, Financial Reporting Centre, Asset Recovery Agency and all anti-corruption and tax enforcement agencies.

CHAPTER 1

INTRODUCTION

The theme of the Kenya Economic Report (KER) 2019 is "Resource Mobilization for Sustainable Development of Kenya", focusing on strategies for mobilizing resources required for effective implementation of the "Big Four" initiatives in achieving the development status of the country as envisioned in the Kenya Vision 2030 and its medium-term plans. The "Big Four" initiatives focus on key basic needs that are critical in uplifting the standard of living of all Kenyans as the country aims to become a middle-income country by the year 2030. Prioritized areas of focus include employment through manufacturing, universal health care, affordable and decent housing, and food and nutritional security.

The theme is motivated from findings of the previous report which strongly recommended the need to enhance resource mobilization to meet the envisaged investment levels (30% of GDP) towards realization of the Kenya Vision 2030. Acceleration of investments into the Vision's priority projects is necessary for attainment of missed targets experienced during the first and second medium term plans. For instance, whereas the Vision envisaged sustained rapid economic growth rates averaging 10 per cent per annum beginning 2012, the highest economic growth rate achieved so far has been 8.4 per cent during the year 2010. Additionally, the average growth rate over the period 2012-2018 has been 5.5 per cent. The development blueprint also envisions structural transformation and diversified economic activities as drivers of economic growth and creation of decent jobs.

Besides, there are emerging externally driven developments which ought not to be ignored during implementation of the Vision 2030. These include opportunities presented by regional and global economic integration, including the East African Community's Vision 2050, African Union's Agenda 2063 and the United Nations' Sustainable Development Goals (SDGs). At the same time, external factors such as the re-balancing of China and the global economy, increase in international trade protectionist policies, prolonged impacts of global financial crisis, climate change, and global terrorism have direct and indirect effects on the economy and can no longer be ignored.

The Kenya Vision 2030 and the "Big Four" agenda underscore the need for huge investment and infrastructure projects including roads, housing, power projects and health facilities. At the same time, there exists a significant investment-savings gap which is hampering and delaying the realization of Kenya's development goals. This gap raises a fundamental question as to how the country can address infrastructure gaps and implement other key Vision 2030 flagship projects in meeting the targeted goals and aspirations. Thus, the report seeks to identify the major resources, how much of these exist, how much of them is required, and whether any alternative sources exist. The analysis is guided by the framework detailed in Annex 1.

This report therefore investigates two broad categories of resources, namely financial and non-financial resources. The latter includes land, agriculture, extractives and human resources.

Regarding financial capital resources, the focus is on raising public and private financing through equity, external grants and loans, domestic borrowing, tax and non-tax revenues, county revenues, foreign reserves, diaspora remittances, public-private partnerships, and from extractives. This is against a backdrop of persistent fiscal deficit, unfavourable current account balances, external debt burdens and low productivity.

Land is a fundamental resource and the foundation of any State's sovereignty as it delineates the State's jurisdictional boundaries. Land is critical in achieving the food security agenda as most of food is grown on land, thus there is a close link between the delivery of food security and land use. Availability, access, and utilization of food depends on land tenure security, sustainable land use practices, and an enabling environment for sustained agricultural growth. Further, achievement of affordable housing is dependent on availability, affordability and accessibility of land that is registered and free of encumbrances. Land is also critical for establishment of technology and innovation centres, industrial parks and required infrastructure as envisioned under the manufacturing agenda. Enforcement and compliance with the laws and regulations governing management, utilization, disposal and administration of land in Kenya is also significant in guiding the acquisition, allocation and utilization of land.

Technology and innovation play a fundamental role in economic development and are critical for industrialization and sustainable development. Investments and integration of technology in the education system will increase the country's global competitiveness, create employment and increase productivity. It is therefore critical that the capacities of universities, technical and vocational training institutions be enhanced through advanced training of personnel, improved infrastructure, equipment and by strengthening linkages with actors in the productive sector. In addition, technology transfer which enables passing of knowledge, technical skills and know-how from experts to local players is of essence. Some of the priority areas for the country in technology transfer include oil and gas, agriculture, mining, construction, health and industry (manufacturing and processing).

Human capital is an important enabler for the attainment of the "Big Four" agenda and the country's sustainable development in terms of the people themselves and the variety of skills (at all levels that include professionals, technical, semi-skilled and basic skills) acquired. This includes their capacities and capabilities, education, creativity and innovativeness, health and well-being, capacity for service delivery and empowerment, availability of required skills, and effective participation in various economic activities. Investments in health, skills training, education and quality of living over the years are important in improving the stock of human capital.

Finally, the report looks at governance structures that could constrain resource mobilization. Key among them is public finance management, which ensures that all government entities adhere to laid down norms that govern mobilization and utilization of public resources. Illicit flows have seen leakages in resource mobilization, thus denying countries much needed resources to finance development. Further, there are channels of transaction that are susceptible to money laundering, terrorism financing, tax avoidance and evasion, and illicit flows in general. These include financial services, professionals such as lawyers, and gaming and betting services.

This report covers the status of resources, the gaps between targets and the need for resource mobilization, factors that have in the past inhibited exploitation of such resources for development and may continue to do so, and the opportunities for mobilization of additional resources, including county resource mobilization. The report also discusses the

existing institutional and regulatory framework for resource mobilization and makes some policy recommendations.

The rest of the report is organized as follows: Chapter Two contains a review of the macroeconomic performance. In Chapter Three, the medium-term prospects are analyzed and discussed. Mobilization of fiscal resources is discussed in Chapter Four whereas Chapter Five reviews financial institutions and markets in mobilizing financial resources. In Chapter Six the role of diaspora remittances for sustainable development is discussed. Chapter Seven covers extractives sector as a resource and a potential source of mobilizing resources while Chapter Eight is about the mobilization of land resources. Chapter Nine covers agriculture as a key resource in achieving sustainable development. The potential in innovations and technology for economic transformation is presented in Chapter Ten. Chapter Eleven covers issues of human resource mobilization for sustainable development and Chapter Twelve covers some key governance structures in resource mobilization. The last chapter, Chapter Thirteen, presents conclusions and policy recommendations.

CHAPTER

2

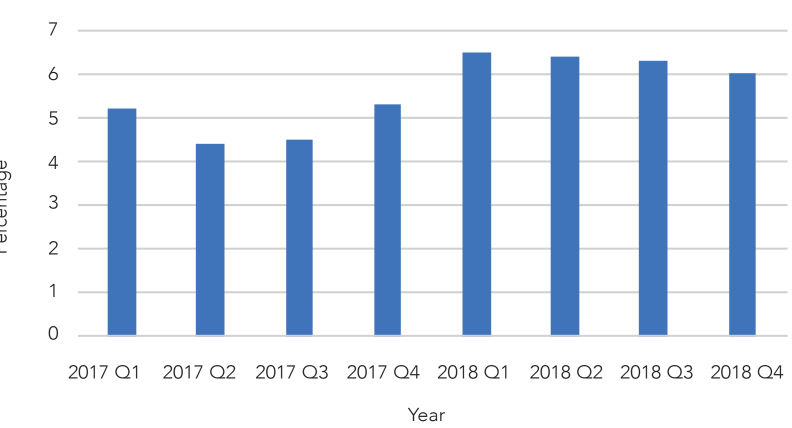
MACROECONOMIC PERFORMANCE

Kenya's economy rebounded in 2018 after a slow growth in 2017 attributed to prolonged electioneering period and adverse weather conditions. Fiscal deficit to GDP declined by 2.4 percentage points, but more efforts are required to boost government revenue mobilization. While easing of monetary policy stance and interest rate cap have seen continued decline in interest rates, it is important to remain vigilant on the growing preference for public sector credit by the banking sector to avoid crowding-out of the private sector. In addition, diversification of the exports' base and markets is crucial in strengthening resource mobilization.

2.1 Economic Growth

Kenya's economy rebounded in 2018 after a slow growth in 2017 attributed to prolonged electioneering period and adverse weather conditions. In 2018, the economy registered a growth of 6.3 per cent compared to 4.9 per cent in 2017. The economy expanded by 6.6 per cent, 6.3 per cent, 6.4 per cent and 5.9 per cent in the first, second, third and last quarters of 2018 compared to 5.2 per cent, 4.4 per cent, 4.5 per cent and 5.3 per cent, respectively, in the same period in 2017 (Figure 2.1). The recovery of the economy was supported by improved output from agriculture sub-sectors due to favourable weather conditions, and timely receipt of long rains at the beginning of 2018. In addition, the easing of political uncertainty restored investors' confidence, which contributed to improved performance of the other sectors of the economy, such as the services and industrial sectors.

Figure 2.1: Economic quarterly growth rates at market prices, 2017Q1 - 2018Q4 (%)

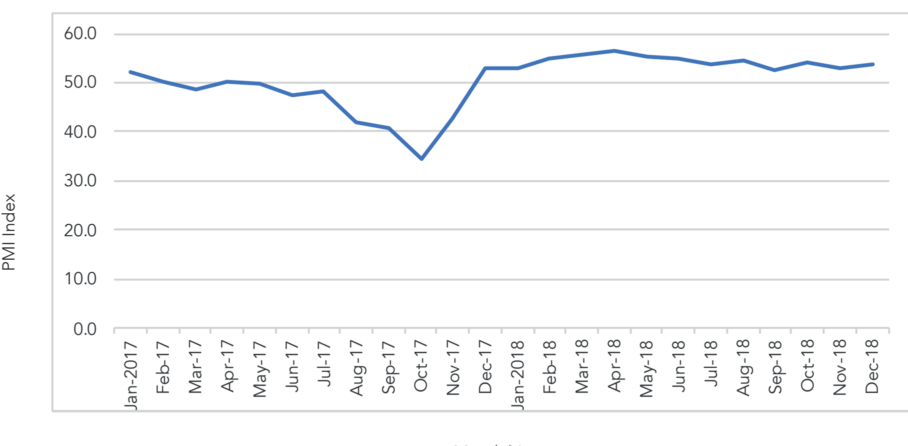


Source: Kenya National Bureau of Statistics (2019), Economic Survey

Further, business activity grew in 2018 characterized by a surge in new orders, a boost in employment numbers and an increase in business confidence. Figure 2.2 reports the Stanbic Kenya Purchasing Managers Index (PMI) for manufacturing and services. Political stability

and increase in demand for goods and services boosted business activities in the country from end of year 2017, with a sharp increase in PMI index to 53. Thereafter, business growth was relatively constant, with a PMI index of 53.6 registered in December 2018 due to increased market confidence.

Figure 2.2: Stanbic Kenya PMI Index, January 2017 - December 2018



Data Source: https://www.stanbicbank.co.ke

Box 2.1: Impact of droughts and political uncertainty on Kenya's economic performance

Economic growth in Kenya has been episodic. It can be deduced that growth prospects are dampened by drought, floods and political uncertainty. For drought, the overall effect on economic growth was a pullback on the growth that would have been realized. For example, during the drought of 2011, 0.2 per cent of GDP was lost, amounting to approximately Ksh 6.2 billion while the drought of 2017 caused a one per cent pullback on GDP, amounting to approximately Ksh 71.6 billion.

Further, the political uncertainty during the August 2017 general election, coupled with the effects of adverse weather conditions, slowed down the performance of most sectors of the economy. This led to a sluggish economic growth of 4.7 per cent in the first quarter of the 2017/2018 financial year. In addition, the Purchasing Managers Index (PMI) maintained a declining trend from June 2017 (47.3), signifying deteriorating conditions in the private-sector economic activities during the electioneering months. In October 2017, the PMI slumped to 34.4, its lowest level since the series began in January 2014, after the opposition boycotted a repeat presidential vote ordered by the Supreme Court.

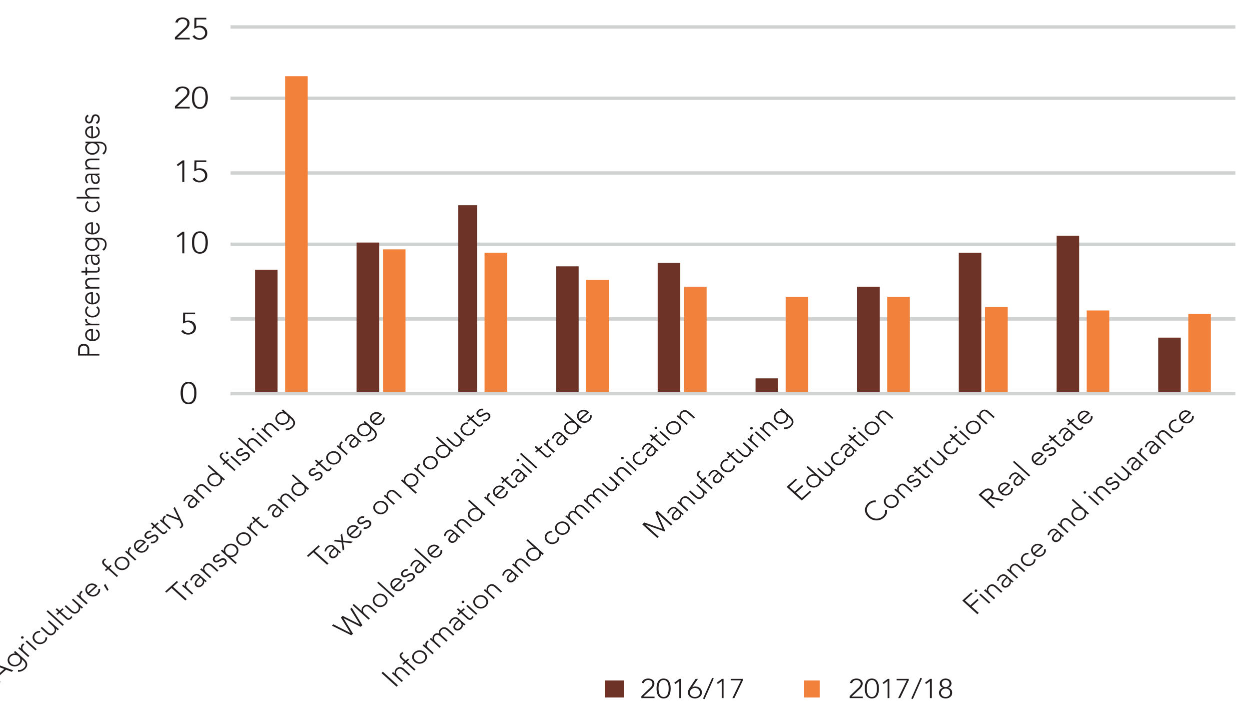
Sectoral contribution to GDP growth

In comparison to 2017, where taxes on products, real estate, transport and storage were the major sources of growth, there was a significant shift in the order of major contributors to growth in 2018. The agriculture, forestry and fishing sector was the highest and major contributor to economic growth in 2018, contributing 21.5 per cent (Figure 2.3). The other sectors that contributed significantly to growth include: transport and storage; taxes on products; wholesale and retail trade; information and communication; and manufacturing with 9.7 per cent, 9.5 per cent, 7.6 per cent, 7.3 per cent and 6.6 per cent, respectively. The ten sectors presented in Figure 2.3 were the only ones whose contribution to GDP was above 5 per cent, while the remaining ten had contribution below 5 per cent. There is need, therefore, to maintain the improved performance registered by the agriculture, forestry and fishing sector, manufacturing sector, and finance and insurance sector for the country to realize the 10 per cent economic growth envisioned in the Kenya Vision 2030. Similarly, it is imperative to tap into the potential held by the real estate sector, construction sector, taxes on products and the education sector based on their previous performance to realize the envisioned growth.

Sectoral growth

The services sector had the highest average growth in 2018 followed by agriculture and industry. Growth in the services sector averaged 6.7 in 2018 compared to 6.0 per cent in 2017. Specifically, accommodation and restaurant grew by 16.6 per cent in 2018, up from a growth of 14.3 per cent in 2017 mainly supported by improvement in the tourism sub-sector, which is partially attributed to a stable political environment, withdrawal of travel advisories, improved security, and investor confidence in the country. The number of bookings in hotels is directly related to the number of tourist arrivals registered. According to the Kenya Tourism Board, the number of tourist arrivals

Figure 2.3: Sectoral contribution to GDP growth (%), 2017-2018



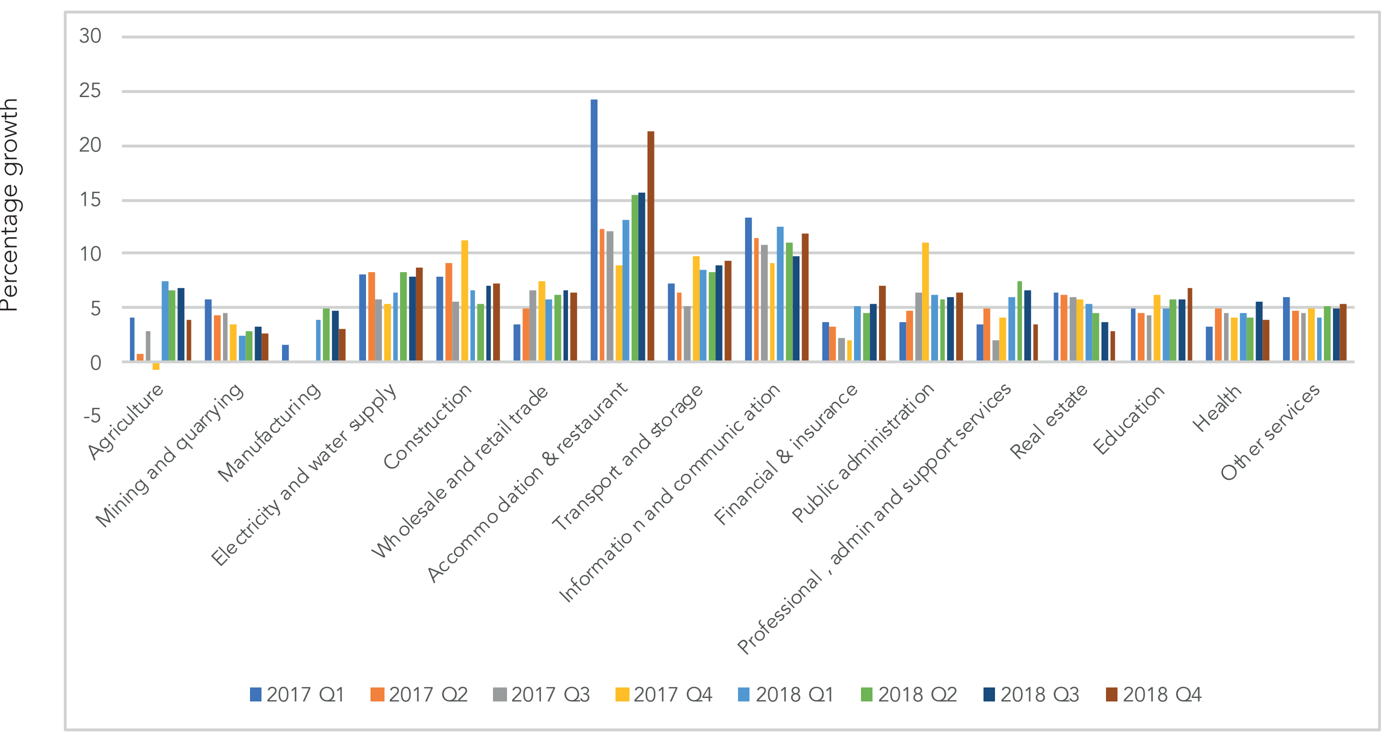
Source: Kenya National Bureau of Statistics (2019), Economic Survey

declined from 105,862 in December 2017 to 76,649 in January 2018. However, the number increased in the subsequent months, with July 2018 recording the highest number of 126,797 tourists. The growth in the number of tourist arrivals contributed significantly to the growth of the sector during the second quarter of 2018. In addition, information and communication registered growth to 11.4 per cent in 2018 from 11.0 per cent in 2017 as a result of expansion of the digital economy. Notwithstanding the decrease in growth of the insurance sector, the financial and insurance sector improved significantly to a growth of 5.6 per cent in 2018 from 2.8 per cent in 2017.

in 2018. The improved growth was because of timely onset of long rains in 2018 and favourable weather conditions, reflected in increased output of key food crops and livestock products such as maize and milk. The increased output enabled the agriculture sector to contribute 1.4 per cent in overall GDP in 2018, an improvement from 0.5 per cent in 2017.

The agriculture sector plays a key role in Kenya's growth process; it supports the agro-processing industries and contributes to exports. In this regard, resource mobilization towards the sector is imperative in boosting growth. The government's initiatives towards enhancing

Figure 2.4: Sectoral growth (%), 2017Q1-2018Q4



Source: Kenya National Bureau of Statistics (2019), Economic Survey

The growth of the agriculture sector in 2018 was significantly higher than in 2017. The sector's average growth in 2018 was 6.2 per cent compared to 1.7 per cent in 2017 (Figure 2.4). The sector grew from 4.1 per cent in the first quarter of 2017 to 7.5 per cent in a similar quarter

large scale production and boosting smallholder productivity is critical in developing the sector. More importantly, formation of the Agriculture and Irrigation Sector Working Group (AISWAG) to coordinate irrigation activities is expected to place an additional 700,000 acres under maize,

potato, rice, cotton, aquaculture and feeds production. This is expected to contribute towards achieving food security and improved nutrition for most citizens by 2022.

The manufacturing and construction sectors are the key contributors to growth in the industrial sector (KNBS, 2018). For example, recovery in the manufacturing sector with an average growth of 4.2 per cent in 2018 compared to 0.5 per cent in 2017 led to improved performance of the industrial sector. Growth in the industrial sector increased from 3.8 per cent in 2017 to 5.5 in 2018. The improvement in the sector was partly due to agro-processing activities which benefitted substantially from increased agricultural production during the period under review. The government has committed to increase the manufacturing sector's contribution to 15 per cent of GDP by 2022 as one of the "Big Four" agenda.

Inflation

The monthly inflation rates in 2018 to June 2019 remained within the government's target band of 5%±2.5% (Figure 2.5). However, overall inflation slightly rose from 4.3 per cent in June 2018 to 5.7 per cent in June 2019, driven by increase in international oil prices and some food commodities. Food inflation increased from 4.3 per cent in June 2018 to 6.6 per cent in June 2019 (Figure 2.5). Favourable weather conditions led to increased food production and subsequently to reduced prices for onions, tomatoes, spinach, maize grain loose of 31.05, 20.8, 17.51 and 8.26 per cent, respectively, in June 2019 compared with June 2018. However, prices of some other foodstuffs such as maize grain, beans, green grams and sifted maize flour increased significantly during the same period, resulting to increased food inflation. This is reflected in food inflation, which was the highest contributor to the Consumer Price Index (CPI) in June 2019, with a contribution of 3.17 percentage points to overall inflation.

Notably, in 2018, increase in fuel inflation due to increase in international oil prices and the introduction of 8 per cent Value Added Tax (VAT) on petroleum products exerted an upward pressure on domestic inflation. Specifically, housing, water, electricity, gas and other fuels were the highest contributor to CPI in December 2018, registering 2.12 percentage points, followed by the transportation sector contributing 1.18 percentage points to overall inflation. The analysis reflects the changes enacted in the Finance Act 2018 which saw introduction of various taxes on fuel. Core

Box 2.2: Impact of droughts on macroeconomic variables in Kenya

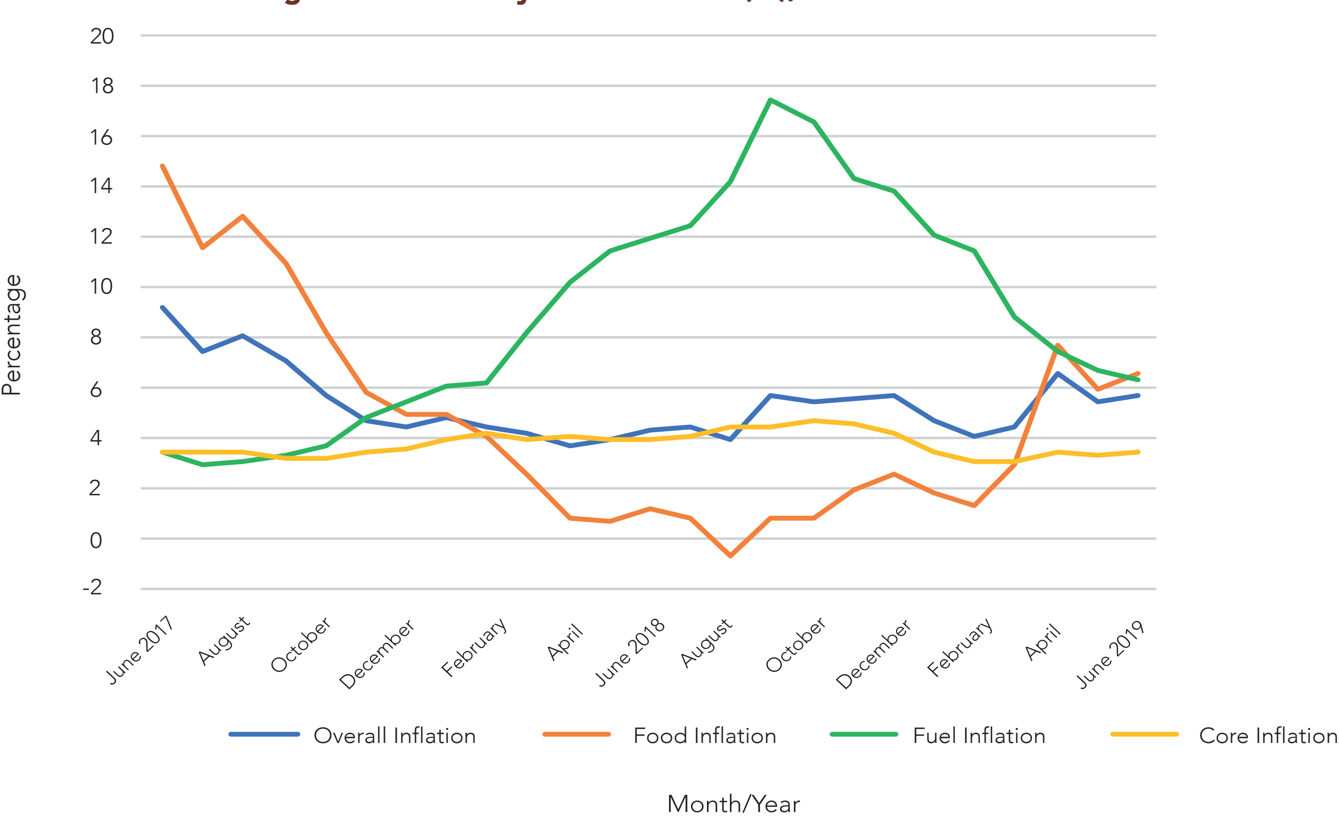
A study by KIPPRA on "Implications of drought and floods on key macroeconomic variables" established that overall inflation was higher during the drought period from January 2017 to May 2017 mainly because of increased food prices. This means that drought had an effect of lowering agricultural food production, which consequently lowered supply of agricultural produce. Lower supply than demand for agricultural produce had the effect of pushing up food prices, thus causing inflationary pressures.

The high food inflation in 2017 was attributed mainly to increase in prices of maize flour, sugar and beef. This necessitated government intervention of subsidizing the cost of maize flour to cushion consumers from price rise.

inflation, which excludes food and fuel prices, has remained below 5 per cent during the period under review, denoting an economy where underlying demand pressures are still manageable.

was supported by a 2.9 per cent decline in the price of 20 litres refined oil from Ksh 4,596 in December 2018 to Ksh 4,461 in March 2019 and 12.4 per cent decline in the price of a tonne of sugar from Ksh 95,041 to Ksh 83,284 over

Figure 2.5: Monthly inflation rates (%), June 2017 - June 2019



Source: Central Bank of Kenya (2019), Monthly Economic Indicators, June 2019

The Producer Price Index (PPI) increased by 0.44 per cent from 120.25 points in September 2018 to 120.78 in December 2018 (Table 2.1). This means that the prices of commodities at wholesale level rose by 0.44 per cent between September 2018 and December 2018. The increase reflected the higher costs in prices of timber following the six months extension on the 90-day ban on logging in community and public forests in May 2018. However, the index decreased from 120.78 points in December 2018 to 118.95 points in March 2019. This the same period. The 'year on year' producer inflation rate declined from 3.18 per cent in December 2017 to 1.47 per cent in December 2018. The decline was attributed to decrease in prices of electricity and manufacture of non-metallic products by 6.75 per cent and 3.02 per cent, respectively, over the twelve months period. Notably, the price of 20 litres of refined oil increased by 7.9 per cent from Ksh 4,367 in December 2017 to Ksh 4,596 in September 2018, reflecting the implementation of the changes proposed in the Finance Act 2018.

In March 2019, the producer inflation rate reduced further to -0.36 per cent. The decline was attributed to decrease in various prices, notably that of a bale of maize flour and 20 litres of refined oil. The price of a bale of maize flour decreased by 23.5 per cent from Ksh 1,278 in March 2018 to Ksh 978 in March 2019, whereas the price of 20 litres of refined oil decreased by 3.4 per cent from Ksh 4,620 to 4,461 over the same period. This reflects concerted efforts by the government to support producers and manufacturer, with an aim of growing the manufacturing sector's contribution to 15 per cent and achieving food security by 2022.

2.2 Fiscal Performance

Revenue

Total government revenue in 2018/19 grew both in absolute value and as a ratio of GDP, though in 2017/18 it grew in absolute terms but declined as a ratio of GDP. Government revenue as at end of 2017/18 financial year increased by 8.7 per cent from Ksh 1,400,578 million in 2016/17 to Ksh 1,522,455 million, which is Ksh 137,156 million below the target of Ksh 1,659,611 million (Table 2.2). This saw government revenue as a percentage of GDP decline to 17.3 per cent in 2017/18 from 19.5 per cent in 2016/17, with slight increase to 19.1 per cent in 2018/19.

The increase in government revenue in 2018/19 is attributed to increase in tax revenue, as indicated in Table 2.2, and enhanced administrative function for effective tax collection measures by the National Treasury. The fall in government revenue to GDP in 2016/17 and 2017/18 is reflected in a decline in growth of both tax and non-tax revenue of the government during the period under review. For example, investment revenue fell by 15.4 per cent between 2016/17 and 2017/18. Similarly, other income taxes also registered a decline of 9.8 per cent in the same period.

Table 2.1: Overall PPI and inflation rates, 2017-2019

Year	Indices	PPI-Inflation rate (%)
2017		
March	117.58	3.38
June	119.42	6.39
September	119.52	5.46
December	119.03	3.18
2018		
March	119.38	1.53
June	119.37	-0.04
September	120.25	0.61
December	120.78	1.47
2019		
March	118.95	-0.36

Source: Kenya National Bureau of Statistics (2019), Producer Price Index First Quarter 2019

Table 2.2: Government revenue (Ksh millions), 2016/17-2018/19

		2016/17			2017/18			2018/19		Growth in Tax Revenue (%)
	Target	Actual	% of GDP	Target	Actual	% of GDP	Target**	Actual*	% of GDP	
Import Duty	89,220	89,943	1.2	103,391	93,921	1.07	119,352	135,518	1.4	44.3
Excise Duty	170,258	165,474	2.2	179,413	167,777	1.91	218,960	230,301	2.4	37.3
PAYE	318,047	336,596	4.2	379,851	352,138	4.0	501,337	461,113	4.7	51.1
Other Income Tax	305,825	288,454	4.4	329,418	288,456	3.28	335,233	308,336	3.2	6.9
VAT Local	194,185	194,234	2.7	218,596	204,761	2.3	260,771	239,373	2.5	16.9
VAT Imports	143,385	144,800	2	159,435	152,095	1.7	203,443	186,749	1.9	22.8
Other Revenues	90,402	86,293	1.1	119,530	105,916	1.2	130,131	111,239	1.1	5.0
Appropriation in Aid	144,067	94,784	1.3	169,977	157,392	1.8	179,952	179,914	1.9	14.3
Total Revenue	1,455,390	1,400,578	19.5	1,659,611	1,522,455	17.3	1,949,181	1,852,572	19.1	21.7

*Source: Quarterly Economic and Budgetary Review: third Quarter 2018/19 * Revised budget estimates ** Budget estimates*

Import duty, excise duty, PAYE and VAT (local and imports) registered growth between 2017/18 and 2018/19 (Table 2.2). Other revenues decreased from 1.2 per cent in 2017/18 to 1.1 per cent in 2018/19, whereas other income taxes stagnated at 3.2 per cent during the period under review. Appropriation in Aid (A-I-A) increased by 14.3 per cent, though it fell short of target by 8.0 per cent in 2017/18. To enhance revenue mobilization in 2017/18, the Kenya Revenue Authority (KRA) put in place measures to improve on technology, such as utilization of data collected through iTax to net the non-compliant and deliberate evaders; enhanced cargo scanning by Customs following commissioning of a second container scanner at Mombasa Port; and revamped rental income programme. In 2018/19, KRA put in pace measures aimed at reducing the cost of revenue collection, such as through automation, and application of austerity measures. The revenue body attained automation level of 95.7 per cent.

Expenditure

Total expenditure and net lending for 2018/19 financial year amounted to Ksh 2,405.9 billion, equivalent to 25.3 per cent of GDP. Out of this, Ksh 1,496.2 billion (15.7% of GDP) was for recurrent expenditure and Ksh 549 billion (5.8% of GDP) was development expenditure. This was a 12.7 per cent increase relative to total expenditure and net lending for 2017/18 financial year, which amounted to Ksh 2,146.7 billion. The increase is reflected in increase in both development and recurrent expenditures by Ksh 79.3 billion and Ksh 146.5 billion, respectively. In the 2017/18 financial year, recurrent expenditure for the national

government amounted to Ksh 1,349.7 billion against a target of Ksh 1,410.1 billion, whereas development expenditure amounted to Ksh 469.7 billion. The shortfall in total expenditure reflects low absorption recorded in both recurrent and development expenditure by the national government. However, this was a 0.1 per cent growth relative to the actual total expenditure of Ksh 2,109 billion in the 2016/17 financial year.

Fiscal deficit

Fiscal deficit as a percentage of GDP fell during the period between 2016/17 and 2018/19. Based on the revenue and the expenditure, overall fiscal balance for 2018/19 financial year amounted to Ksh 656.5 billion, equivalent to 6.8 per cent of GDP. This was an improvement compared to 2016/17 when fiscal deficit stood at Ksh 708.4 billion, which was 9.2 per cent of GDP, reflecting growth in revenue and low expenditure absorption. During the period, the government maintained its fiscal policy stance on a fiscal consolidation path with efforts made to minimize revenue leakages and reorient public expenditure composition by prioritizing capital spending and gradually reducing non-priority expenditures. Further, it is expected that fiscal deficit will decline to Ksh 607.8 billion, equivalent to 5.6 per cent of GDP in the 2019/20 financial year. This is supported by government efforts to increase collected revenue through improved operating economic environment, expansion of the tax base, and improved revenue administrative measures put in place by the National Treasury.

Public debt

Total public debt in nominal terms decreased to 55.7 per cent in 2018/19 from 57.1 per cent of GDP in 2017/18. External debt rose from 29.0 per cent of GDP in 2017/18 to 31.8 per cent in 2018/19 while domestic debt fell to 24.0 per cent of GDP from 28.0 per cent during the same period. As of June 2018, domestic debt comprised 49.0 per cent of total public debt, of which Treasury-bills and bonds accounted for 35.4 per cent and 61.0 per cent, respectively. The main holders of domestic debt were commercial banks with 51.1 per cent share, and non-bank institutions and Central Bank with 44.4 and 4.5 per cent, respectively. External debt was 51.0 per cent of total debt, of which multilateral debt comprised 32.3 per cent, bilateral debt 31.7 per cent, commercial debt 35.3 per cent and 0.7 per cent suppliers' credits. IDA/IFAD holds the largest share of multilateral debt at 63.4 per cent followed by AfDB/ADF and IMF at 25.1 and 8.8 per cent, respectively. China is the largest holder of Kenya's bilateral debt with 67.4 per cent share as of June 2018. Japan and Germany come second and third with 12.3 and 4.2 per cent share, respectively. The high level of public debt is mainly due to increased public investments especially in the transport sector, which are largely financed from external borrowing.

County governments did not borrow during the period. However, total accumulated pending bills for the 47 counties in the 2017/18 financial year was Ksh 108.41 billion compared to Ksh 35.84 billion for 43 counties in 2016/2017 financial year. The rising levels of pending bills are attributed to declining levels of own-source revenue collections, failure to align procurement plans to cash flow plans, and delays in release of funds by the National Treasury.

2.3 Investment and Savings Performance

Total investment and savings show an increasing trend between 2014 and 2018, as indicated in Table 2.3. However, the savings and investment rates slowed down following the political uncertainty in the country that affected the business and consumers' environment. As a result, the savings-investment gap in 2017 widened by 1.7 percentage points relative to 2016.

Total investments in 2018 amounted to Ksh 1,639.48 billion, an increase of Ksh 108.52 billion from the investments in 2017. The investments in the various types of assets indicate that the value of dwellings, buildings, and other machinery and equipment registered the highest contribution to total Gross Fixed Capital Formation (GFCF). In 2018, buildings accounted for 23.7 per cent, dwellings 20.9 per cent while other machinery and equipment accounted for 16.9 per cent of total GFCF. Tea crop and plant resources yielding repeat products accounted for 0.5 per cent, the least contribution of the total GFCF.

Savings as a ratio of GDP in Kenya has been relatively low, ranging between 10.2 and 12.3 per cent between 2014 and 2018. This is partly attributable to persistent increase in final consumption expenditure. The low savings rate has led to widening of the savings-investment gap as shown in Table 2.3.

To boost investments and savings, resource mobilization across various sectors of the economy is important. An accelerated growth in investment will not only increase the national output but also increase the disposable income among citizens, thus creating an enabling environment for savings.

2.4 Current Account Balance

The current account balance registered a deficit of US$ 3,788.2 million as at end of June 2019, an improvement from a deficit of US$ 4,512.3 million registered as at end of June 2018 and US$ 4,753.3 million as at end of June 2017 (Table 2.4). However, the value of imports has persistently remained higher than the value of exports (Figure 2.6). The trade balance worsened during the year 2018 due to increased importation of food items resulting from the spill-over effects of the 2017 drought, and rising international oil prices due to production cuts in major producing countries.

It was also notable that current account deficit narrowed to 5.8 per cent in June 2018 from 6.4 per cent in June 2017. This was largely attributed to increased export values for tea and horticultural products as a result of increased production due to favourable weather conditions, and improved prices emanating from increased consumer demands. Besides, increased earnings from transport and tourism

Table 2.3: Total investment and savings in current prices, 2014-2018

	2014	2015	2016	2017	2018
Total Investment (Ksh billions)	1,221.90	1,348.96	1,282.07	1,530.96	1,639.48
Total Gross Savings (Ksh billions)	569.32	715.72	866.71	854.16	907.41
GDP (Ksh billions)	5,402.65	6,284.19	7,022.96	8,144.37	8,904.98
Investment as a % of GDP	22.4	21.5	18.3	18.8	18.4
Savings as a % of GDP	10.5	11.4	12.3	10.5	10.2
Savings-Investment Gap	-11.9	-10.1	-5.9	-8.3	-8.2

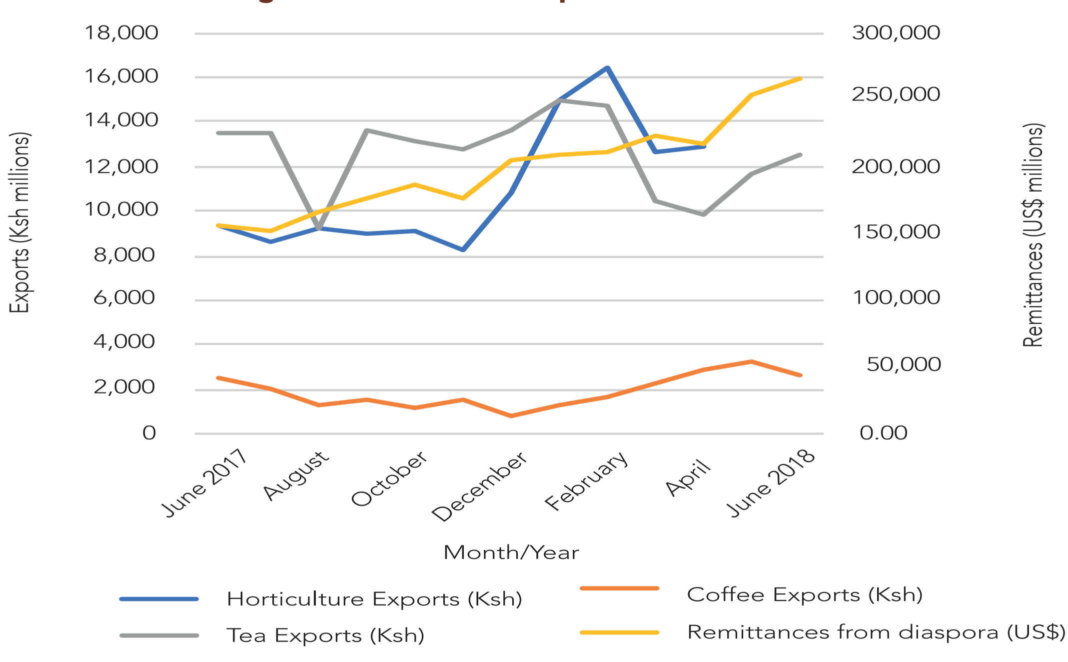
Source: Kenya National Bureau of Statistics (2019), Economic Survey

services significantly supported the slow-down in the current account deficit. The improvements in diaspora remittances during the year further contributed to narrowing of current account deficit (Figure 2.7). The capital account improved while the financial account deficit worsened between 2017 and June 2019. The capital account recorded an improvement from US$ 152.8 million in June 2017 to US$ 256.8 million in June 2019, reflecting an increase in project grants. However, the financial account deficit increased to US$ 6,674.3 million in June 2019 from US$ 5,670.6 million in June 2017. This was as a result of an increase in direct investment liabilities from US$ 1,196.5 million in June 2017 to US$ 1,806.7 million in June 2019 and an increase in portfolio liabilities from US$ 1777.2 million in June 2017 to US$ 1913.0 million in June 2019. However, net Foreign Direct Investment (FDI) registered substantial growth from US$ 273.1 in June 2017 to US$ 1,002.8 in June 2019 (Table 2.4). The strong performance was attributed to resilient domestic demand and inflows in the Information and Communication Technology (ICT) sub-sector. The issuance of the US$ 2.0 billion Eurobond in March 2018 played a key role in increasing portfolio investment.

Figure 2.6: Trade in goods and services, January 2017-June 2019

Central Bank of Kenya (Various), Monthly Economic Indicators

Figure 2.7: Trends in exports and remittances



Source: Central Bank of Kenya (2019), https://www.centralbank.go.ke/statistics/balance-of-payment-statistics/ accessed on 26th March 2019

2.5 Monetary Policy

The conduct of monetary policy in Kenya is geared towards maintaining price stability and low and stable inflation. At the beginning of 2017/18 financial year, the overall inflation target by the government was 5 per cent with a margin of ±2.5 per cent.

In the period, monetary policy stance was relaxed, with the policy rate reviewed downwards. The Central Bank Rate (CBR) was reduced from 10 per cent in September 2017 to 9.5 per cent in March 2018. To promote economic activities, the rate was further reduced to 9.0 per cent in July 2018 and maintained at 9 per cent up to end of May 2019. While there were instances of inflationary pressure in the period, these were mainly supply-driven given the drought condition experienced in 2017. The Kenya shilling exchange rate remained stable against major currencies, with foreign reserves maintained at 5.3 months of import cover as at January 2019 (Figure 2.8).

To manage liquidity in the market, the reverse Repurchase Agreements (REPOs) rate was increased from 10.1 per cent in June 2017 to 11.3 per cent in June 2018. Further, the 7 days REPO rate increased from 4.1 per cent in June 2017 to 7.7 per cent in December 2018. This ensures that price stability is maintained.

The interbank rate decreased to an average of 2.98 per cent in June 2019 compared to 5.03 per cent in June 2018 and 4.0 per cent in June 2017. The Treasury bill rate remained stable, declining to an average of 6.90 per cent and 7.64 per cent for the 91-day and 182-day Treasury bills, respectively, in June 2019, from an average of 7.87 per cent and 9.99 per cent for the 91-day and 182-day Treasury bills, respectively, in June 2018. The 364-day Treasury bill, however, declined from 10.87 per cent in June 2018 to 9.23 per cent in June 2019.

In 2017/18, the yield curve for government securities reflected a robust market demand for Treasury bonds compared to 2016/17. In

Table 2.4: Balance of payment cumulative flows (US$ millions), June 2017-June 2019

Cumulative 12 months	Current Account	Capital Account	Financial Account	FDI	Net errors & Omissions	Overall BOP
Jun-17	-4,753.3	152.8	-5,670.6	273.1	-656.9	-413.2
Jul-17	-4,925.8	149.6	-5,475.0	272.5	-632.9	-65.9
Aug-17	-5,009.3	153.0	-5,626.1	300.3	-904.7	135.0
Sep-17	-5,036.7	143.4	-5,536.9	353.7	-851.4	207.7
Oct-17	-5,141.8	161.8	-5,750.0	387	-1,260.5	490.5
Nov-17	-5,106.0	161.1	-5,550.7	391.8	-938.3	332.6
Dec-17	-5,016.4	184.6	-4,606.1	414.6	68.3	157.3
Jan-18	-4,919.6	161.6	-4,568.0	438.4	304.0	-114.0
Feb-18	-4,868.6	197.3	-4,725.7	457.7	75.8	-130.2
Mar-18	-4,910.2	187.8	-5,666.7	396.8	110.1	-1,054.3
Apr-18	-4,832.5	237.3	-5,131.0	441.4	301.5	-837.2
May-18	-4,746.8	270.9	-4,942.3	507.1	344.8	-811.3
Jun-18	-4,512.3	258.7	-4,555.5	583.6	194.7	-496.6
Jul-18	-5,004.4	275.5	-4,986.1	819.9	841.3	-1,098.6
Aug-18	-4,906.1	285.1	-5,322.2	828.3	539.9	-1,241.1
Sep-18	-4,791.6	296.5	-5,329.9	854.9	-50.5	-784.3
Oct-18	-4,715.8	293.1	-5,544.1	944.6	239.8	1,361.2
Nov-18	-4,653.8	272.9	-5,686.5	969.6	-232.6	1.073.0
Dec-18	-4,406.0	253.7	-6,155.5	1,011.8	-959.1	1,044.2
Jan-19	-4,056.5	246.4	-6,599.4	1,083.4	-1,859.3	-902.2
Feb-19	-4,114.3	232.7	-6,234.9	1,127.9	-1,087.0	-1,211.1
March-19	-3,916.9	223.9	-4,361.5	1,123.1	-1,320.3	721.0
Apr-19	-3,846.4	182.9	-4,347.0	1,110.7	-1,789.5	1,184.7
May-19	-3,725.4	183.4	-8,515.7	1,054.2	-1,364.8	-997.3
Jun-19	-3,788.2	256.8	-6,674.3	1,002.8	-2,618.4	-524.6

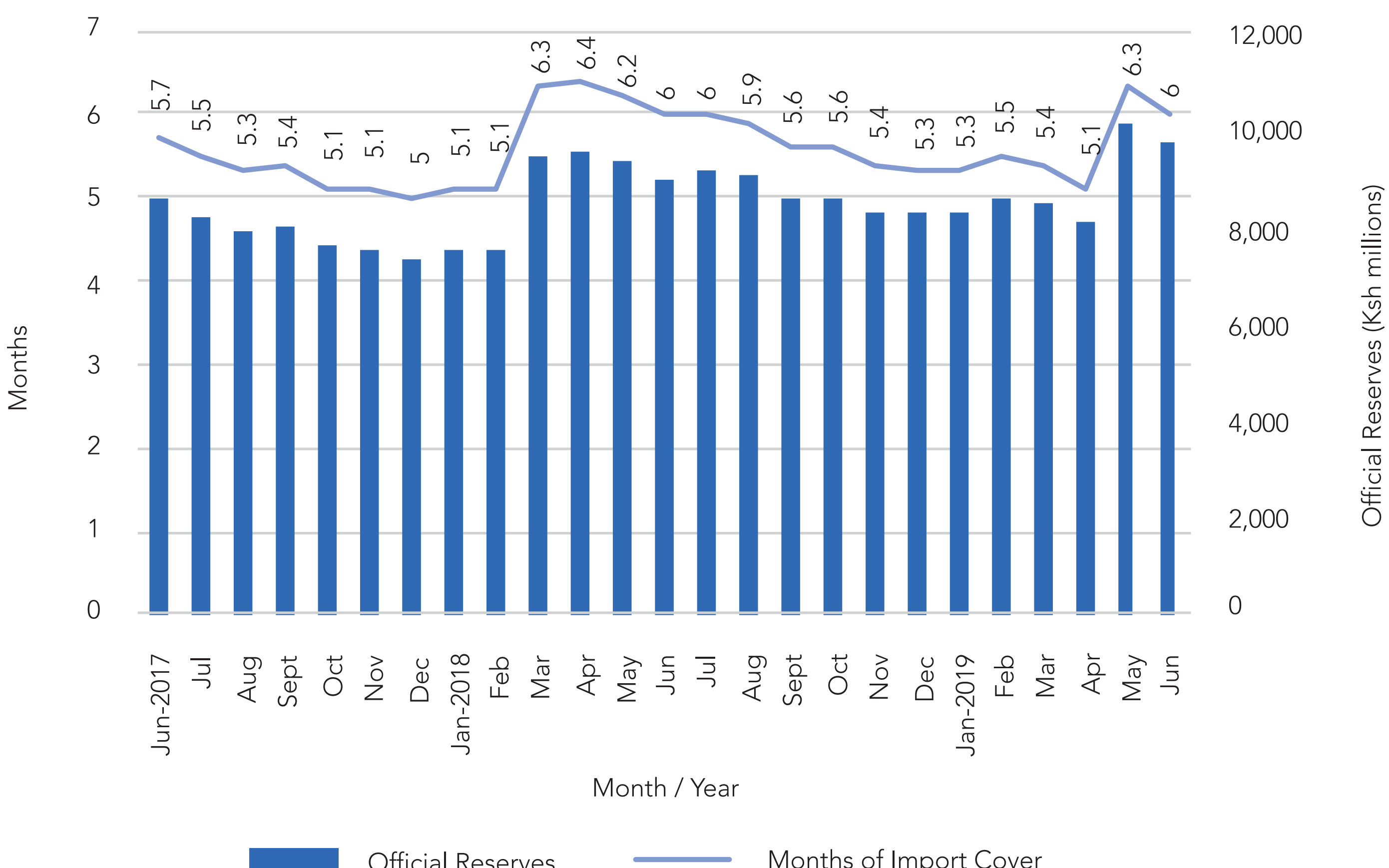
Source: Central Bank of Kenya (Various), Monthly Economic Indicators

2017/18, a stable lower yield curve was realized compared to 2016/17 due to a stable financial market environment and increased liquidity. Further, there was more spread on the short segment compared to the long end, implying stability in the long term segment.

The lending rates fell to 12.47 per cent in May 2019 compared to 13.6 per cent in December 2017. This was due to a decrease in CBR from 10 per cent in July 2017 to 9 per cent in May 2019. The deposit rate has persistently maintained a declining rate from 8.3 per cent in January 2018 to 7.2 per cent as at May 2019 (Figure 2.9).

Domestic credit grew by 7.8 per cent from Ksh 3,237.3 billion in June 2018 to stand at Ksh 3,491.0 billion in June 2019. Out of this, the government had Ksh 890.5 billion (25% share) in June 2019 from Ksh 745.1 billion (23% share) in

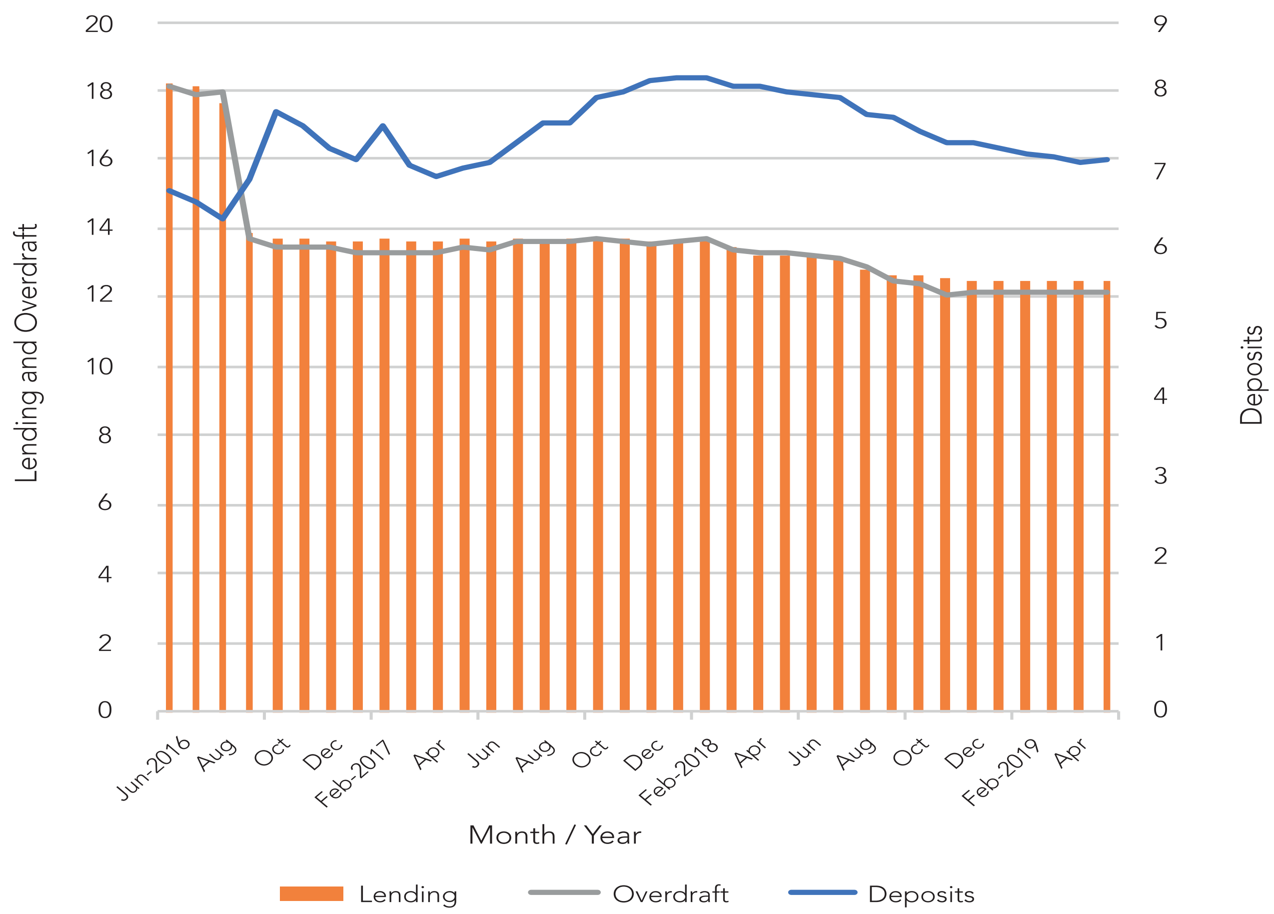
Figure 2.8: Trends in months of import cover and official reserves, June 2017 - June 2019



Source: Central Bank of Kenya (2019), Monthly Economic Indicators, June 2019

June 2018, representing 19.51 per cent growth. Domestic credit to private sector credit grew by 5.2 per cent from Ksh 2,380.4 billion (73% share) in June 2018 to Ksh 2,504.0 billion in June 2019 (72% share). Therefore, the share of government in domestic credit grew by 2 per cent while that of the private sector fell by 1 per cent between June 2018 and June 2019.

Figure 2.9: Trends in commercial banks interest rates, August 2016-June 2019



Source: Central Bank of Kenya (2019), Monthly Economic Indicators, June 2019

2.6 Key Messages and Recommendations

2.6.1 Key Messages

1. Kenya's economy rebounded in 2018 after a slow growth in 2017. The economy expanded by 6.3 per cent in 2018 compared to 4.9 per cent in 2017. The economic recovery is attributed to improved performance of the agriculture sector, and reduced political uncertainty resulting in good performance of the services and industrial sectors.

2. Overall monthly inflation rates in 2018 to June 2019 remained within the government's target band of 5%±2.5%. However, fuel inflation exerted upward pressure on domestic inflation. While overall inflation slightly rose from 4.5 per cent in December 2017 to 5.7 per cent in December 2018, fuel inflation rose from 5.4 per cent to 13.8 per cent in a similar period due to 8 per cent VAT on petroleum products and increase in international oil prices. Food inflation maintained a declining trend from 4.9 per cent in December 2017 to 2.6 per cent in December 2018 following improved weather conditions. However, in June 2019, food inflation increased to 6.6 percentage points, resulting to an increase in overall inflation. This indicates that concerted efforts are needed to reduce reliance on rain-fed agriculture and facilitate distribution and marketing of food and food products across and within counties.

3. Total government revenue in 2018/19 grew both in absolute value and as a ratio of GDP, an improvement from 2017/18 where it grew in absolute terms but declined as a ratio of GDP. Government revenue as a percentage of GDP increased from 17.3 per cent in 2017/18 to 19.1 per cent in 2018/19, an indication that revenue was relatively buoyant to GDP.

4. Government expenditure fell short of target due to low revenue collection and low absorption of development expenditure. Total expenditure and net lending for 2018/19 financial year amounted to Ksh 2,509.1 billion, a shortfall of Ksh 48.2 billion against a target of Ksh 2,557.3 billion. This is likely to slow down the implementation of planned projects.

5. Fiscal consolidation is gathering momentum, with a significant reduction in overall fiscal deficit. Fiscal deficit, both as a percentage of GDP and in absolute terms fell in 2018/19. Overall fiscal balance for 2018/19 financial year amounted to Ksh 656.5 billion, which was 6.8 per cent of GDP and that of 2016/17 was Ksh 709.4 billion, which was 9.2 per cent of GDP. This reflects the government's commitment to reduce fiscal deficit and create more fiscal space.

6. Total public debt to GDP in nominal terms in 2018/19 fell marginally while external debt level rose. Public debt slightly decreased to 55.7 per cent of GDP in 2018/19 from 57.1 per cent of GDP in 2017/18. External debt to GDP rose from 29.0 per cent in 2017/18 to 31.8 per cent in 2018/19 while domestic debt rose to 28.0 per cent of GDP from 27.6 per cent in a similar period.

7. There were significant improvements in current account deficit in 2018 to June 2019. Earnings from tea, horticultural products, transport freight and tourism services slowed down the worsening of the current account balance.

8. The easing of monetary policy in 2018 together with interest rate cap led to decline in interest rates. The Central Bank Rate reduced from 10 per cent in September 2017 to 9.5 per cent in March 2018 and further reduced to 9.0 per cent in July 2018 and remained at 9 per cent up to end of May 2019. This led to a fall in interest rates from 13.2 per cent in June 2017 to 12.5 per cent in May 2019.

9. With interest rate cap law in place, there was a growing preference for public sector credit in the period under review. Domestic credit to government grew by 19.5 per cent while that of private sector grew by 5.2 per cent. In addition, the share of government credit in total domestic credit grew from 23.0 per cent in 2017/18 to 25.0 per cent in 2018/19 while that of the private sector fell from 73.0 per cent to 72.0 per cent in a similar period. In addition to the statistics, a study done by the Central Bank of Kenya in 2018 established that introduction of the interest rate cap led to banks shifting their lending to government and the large corporates. Similarly, the Monetary Policy Committee (MPC) preliminary analyses of 2018 on the impact of interest rate capping on lending by banks showed a continued slow down in private sector credit growth and increased lending to corporates.

2.6.2 Recommendations

1. For sustained growth momentum, there is need to maintain a stable macroeconomic environment.

2. To contain food inflation, efforts are needed to reduce reliance on rain-fed agriculture

and facilitate distribution and marketing of food and food products across and within counties.

3. With the commitment to the fiscal consolidation path, there is need for measures to grow government revenue, including through a review of tax policies on tax exemptions. In addition, there is need to deepen tax administration reforms to enhance compliance, and thus improve revenue collection. It is necessary also to maintain a growth-enhancing fiscal policy.

4. Debt sustainability is a priority in maintaining macroeconomic stability. As such, strengthening debt management with a focus on more concessional borrowing, slowed domestic borrowing and investing in projects with high returns are priority to fiscal policy. Greater reliance on financing projects through Public-Private Partnerships (PPPs) will also contribute to reduction in public debt.

5. To maintain external sector stability, efforts to diversify the country's export base and export markets need to be accelerated. This will improve the current account and strengthen resource mobilization. It will require enhancing of competitiveness and improving the business environment; reduction of the cost of production, particularly energy; providing incentives to support value addition; and enhancing marketing in regional and international markets.

CHAPTER 3

MEDIUM-TERM ECONOMIC PROSPECTS

In the medium-term prospects, investment levels are targeted to increase to 30 per cent of GDP to achieve the desired economic growth. To finance these high levels of investments, mobilization of domestic resources is pertinent. This calls for doubling of gross national savings to 25 per cent of GDP. Targeted policies are required to promote public savings, household savings, private corporate sector savings, and attract capital inflows. Such policies need to target both supply and demand side factors that heavily determine the savings behaviour.

3.1 Introduction

These medium-term prospects provide the desired economic forecasts for Kenya in view of the level of resource mobilization required for sustainable development. The forecast in the Kenya Economic Report 2018 revealed that for the economy to reach a growth rate of 10 per cent, investment levels need to reach a minimum of 30 per cent of GDP. This means doubling the levels of gross domestic savings to adequately finance these investments. This chapter examines the key macroeconomic indicators required to achieve a strong economic growth.

The year 2018 registered an economic growth rate of 6.3 per cent, which is greatly attributed to stable macroeconomic conditions and favourable weather conditions. The sectors that saw highest growth rates in the period were accommodation and restaurant (16.6%), information and communication (11.4%), electricity supply (10.5%), transport and storage (8.8%), construction (6.6%), agriculture (6.4%), and wholesale and retail trade (6.3%). Inflation for January to October 2018 maintained a single digit position, averaging 4.5 per cent due to a net decline in prices of food and non-alcoholic beverages. However, introduction of 8 per cent VAT on fuel in September 2018 contributed to the upswing of inflation in September and October but later eased to below 5 per cent and averaged 4.7 per cent for the year.

Kenya's fiscal revenues for the year 2018/19 went up by 9.8 per cent (Ksh 148.7 billion) compared to the previous fiscal year, reaching Ksh 1.67 trillion (17.6% of GDP). This was, however, 7.4 per cent short of the set target of 1.8 trillion (19.2% of GDP) for that year. This shortfall resulted from under-performance in collection of ministerial appropriations-in-aid by ministries, departments and agencies and under-performance in ordinary revenues, particularly other income tax, which was 13.4 per cent below the target largely because of low performance of corporate profits.

Fiscal expenditures increased by about Ksh 259.3 billion (12.1%) compared to the previous fiscal year, reaching Ksh 2.4 trillion. Out of this, about Ksh 1.45 trillion and Ksh 542.0 billion

was recurrent and development expenditures, respectively. Fiscal expenditure performed poorly against the Ksh 2.5 trillion target, recording a shortfall of Ksh 135.9 billion attributed largely to low absorption of development budget, and lower collection of revenue. This affected both recurrent expenditure and development expenditure by the national government.

Fiscal deficit worsened to approximately Ksh 721.1 billion (7.6% of GDP) by end of June 2019 from Ksh 632.4 billion (7.4% of GDP) by end of June 2018. The June 2019 position was lower than the projected deficit of Ksh 650.5 billion (6.8% of GDP) in the period. The fiscal deficit in 2019/20 is expected to decline further to 5.9 per cent of GDP following renewed efforts on fiscal consolidation, with enhanced revenue collection aided by the improving operating economic environment, tax policy measures and revenue administrative measures put in place by the National Treasury.

For the external sector, deficit in current account narrowed by 12.2 per cent to Ksh 441.8 billion in 2018 compared to Ksh 503.4 in 2017, mainly due to increased growth of merchandise exports by 3.3 per cent compared to growth of merchandise imports by 0.1 per cent. Total exports of goods increased due to increase in exports of horticultural products, while the slow growth of imports was due to decline of imports of food and a reduction in value of machinery and imports of transport equipment.

The stability in macroeconomic environment is expected to continue in the medium term due to inflation remaining within the government policy scenario of 5.0 per cent, a stable interest rate, stable exchange rate, narrowing and stable current account deficit, and fiscal deficit expected to decline under the fiscal consolidation regime. However, a few risks exist, which include the downside of weather shocks with climate change and sustained weak demand for Kenyan exports. The upside is characterized with political stability and continued improvement in business environment as Kenya's rating in the ease of doing business keeps improving. It is expected that upside risks will sustain market confidence, which is crucial in boosting economic activity.

3.2 Growth Forecast for Kenya

From the Kenya Economic Report (KER) 2018, it was observed that investments required to grow by 9.6 per cent to achieve the desired economic growth in the Vision 2030 (Table 3.1). This will see investment levels increase to levels of 30 per cent of GDP. In this case, the prevailing levels of gross national savings cannot be able to adequately finance the required investment levels. This calls for gradual acceleration of gross national savings (to even doubling the current levels) to 25 per cent of GDP by 2022. Increase in gross national savings therefore becomes the objective of this analysis.

Table 3.1 gives the macroeconomic indicators as forecasted under the scenario for Vision 2030 and the MTP III as reported in the KER 2018. The indicators project an average economic growth rate of 7.7 per cent for the period 2018-2022. This economic growth is driven by high levels of investments and exports and is targeted to reach 9.9 per cent in 2022, which is the desired growth in the economic blueprint. Stability in fiscal deficit, current account balance, inflation, interest rate and the exchange rate over the period will contribute towards providing the enabling environment for private sector investments and achieve the expected high levels.

Implementation of the third Medium Term Plan that includes the "Big Four" agenda is expected to spur growth in economic activity. The current stable macroeconomic conditions are expected to continue in the medium term, with implementation of prudent fiscal policy that will see public debt maintained at sustainable levels. It is notable that demand on fiscal space is still high, and exports are not growing at the desired rates against the steadily increasing

import bills. However, sustained political stability and continued improvement in the business environment will support growth in economic activity.

3.3 Gross National Savings

Gross national savings is derived by deducting final consumption expenditure from gross national disposable income, and consists of personal savings, plus business savings, plus government savings, but excludes foreign savings. Using this framework, Table 3.2 presents levels for the various components. Given that government savings are normally the fiscal deficit, gross national savings are mainly from personal savings and business savings. This implies that minimizing government fiscal deficit or even having fiscal surpluses could go a long way in supporting increased gross national savings, thus mobilizing enough financial resources for the desired investment levels.

Gross national savings as a per cent of GDP range from 10.2 per cent to 12.3 per cent for the period under review. This gives an average savings for the review period of 10.7 per cent, which is very far from funding the expected investments of 30 per cent of GDP for Kenya. To finance high investment levels, Kenya needs to increase gross national savings by two and half times the current levels. Therefore, measures are required to promote gross national savings in the country.

The savings-investment gap as a per cent of GDP is presented in Table 3.3. It ranges from 5.9 per cent to 12.0 per cent of GDP for the

Table 3.1: Forecasting scenario under Vision 2030 and MTP III

	2015	2016	2017	2018	2019	2020	2021	2022
GDP Growth	5.7	5.9	4.9	6.0	6.4	7.5	8.6	9.9
Inflation	6.6	6.3	8.0	4.7	5.1	5.0	5.0	5.0
Private Consumption	2.9	6.8	6.6	6.7	6.9	7.6	8.7	9.6
Government Consumption	11.5	8.5	8.4	7.5	6.6	7.4	7.8	8.9
Private Investment	5.9	-8.1	15.1	8.6	9.1	8.8	9.3	10.7
Government Investment	2.0	-15.6	-2.7	6.8	7.1	8.3	9.4	10.0
Exports Goods and Services	6.2	-2.6	-6.2	5.7	6.5	6.7	7.4	8.3
Imports Goods and Services	1.2	-6.3	8.4	5.8	6.8	7.5	7.5	8.4
Current Account Balance	-6.7	-5.2	-6.7	-6.5	-5.5	-5.8	-5.6	-5.7
Fiscal Deficit	-6.0	-5.4	-6.2	-6.4	-6.3	-6.1	-5.9	-5.4
Public Expenditure	26.1	25.2	26.6	25.8	26.2	27.6	28.1	29.5
Interest Rate	10.8	8.5	8.1	8.8	8.8	8.8	8.8	8.8
Ksh per Dollar	98.2	101.5	103.4	103.4	103.6	103.0	103.5	103.3

Source: KIPPRA Treasury Macroeconomic Model (KTMM) / KIPPRA 2018

Table 3.2: Gross national savings (current prices – Ksh millions), 2014-2018

	2014	2015	2016	2017	2018
Government Final Consumption Expenditure	750,450	885,293	908,699	1,035,239	1,149,988
Private Final Consumption Expenditure	4,272,830	4,907,347	5,483,791	6,582,986	7,209,085
NPISH Final Consumption Expenditure	43,709	47,726	52,412	62,166	71,936
Gross Total Final Consumption Expenditure	5,066,989	5,840,366	6,444,902	7,680,391	8,431,009
GrossTotal Final Consumption Expenditure % of GDP	93.8	92.9	91.8	94.3	94.7
Gross National Disposable Income	5,636,310	6,556,024	7,311,612	8,534,554	9,338,422
Gross National Savings	569,321	715,659	866,711	854,163	907,413
GDP	5,402,648	6,284,185	7,022,963	8,144,373	8,904,984
GNS % of GDP	10.5	11.4	12.3	10.5	10.2

Source: Kenya National Bureau of Statistics (2019), Economic Survey

period 2012 to 2017. The gap is indicated as a negative number, indicating that the economy is spending more income than it produces, thus drawing down the national wealth (dis-saving). With the expectation of investments to rise to levels of 30 per cent of GDP, this gap can only be closed through enhanced mobilization of savings.

Constrained domestic financing of investments results to utilization of external financing, which can burden the economy in the future. However, it is possible to mobilize enough domestic resources to finance all the investment requirements in the country, including by enhancing private savings, public savings and attracting capital inflows.

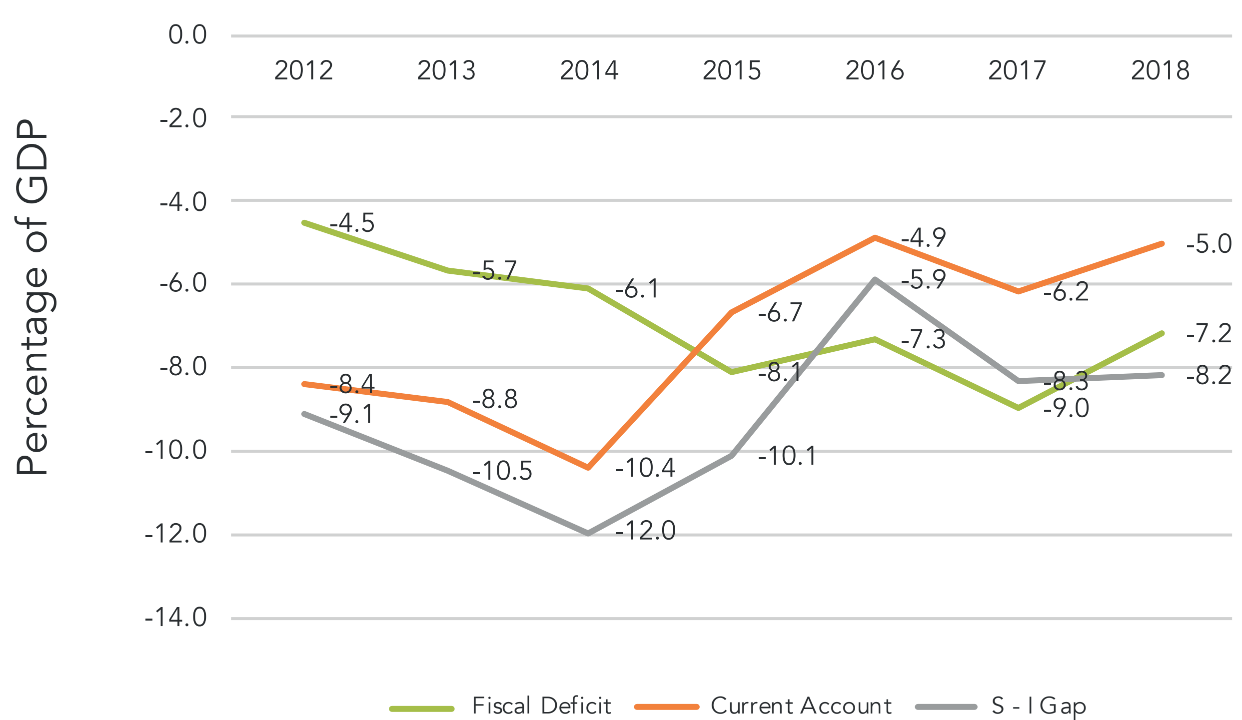
The savings-investment gap (Table 3.3 and Figure 3.1) shows a comparable trend with the current account deficit, since any investments not financed by domestic savings are financed externally. Ideally, savings-investment gap is supposed to be the same as the current account. However, save for 2014 to 2016, as fiscal deficit was deteriorating the current account and the savings-investment gaps were also worsening. Increase in fiscal deficit directly affects both the current account deficit and the savings-investment gap. Fiscal deficit is part of the public sector component of gross national savings and, therefore, when it increases it directly reduces the gross national savings, thus widening the savings-investment gap. This calls for fiscal prudency in addition to accelerated export growth to address the gaps simultaneously.

Table 3.3: Savings - investments gap (% of GDP), 2012-2018

	2012	2013	2014	2015	2016	2017	2018
Investment	21.5	20.1	22.5	21.5	18.2	18.8	18.4
Gross National Savings	12.4	9.6	10.5	11.4	12.3	10.5	10.2
Savings - Investment Gap	-9.1	-10.5	-12.0	-10.1	-5.9	-8.3	-8.2
Fiscal Deficit as % of GDP (June)	-4.5	-5.7	-6.1	-8.1	-7.3	-9.0	-7.2
Current Account Balance as % of GDP	-8.4	-8.8	-10.4	-6.7	-4.9	-6.2	-5.0

Source: Kenya National Bureau of Statistics (2019), Economic Survey

Figure 3.1: Savings–investment gap, fiscal and current account deficit (% GDP), 2012-2018



Source: Calculated from Data sourced from KNBS and The National Treasury

Table 3.4: Country comparative analysis of gross national savings (% of GDP)

Country	2014	2015	2016	2017	2018	2019	2020	2021	2022	Average
Botswana	43.5	41.2	38.8	40.6	36.3	36.6	36.6	37.5	38.4	38.8
Zambia	36.2	38.9	33.7	37.1	37.1	36.7	35.8	35.2	35.1	36.2
Ethiopia	30.7	32.4	31.4	29.2	32.5	31.5	32.2	32.4	34.0	31.8
Tanzania	24.4	25.4	30.0	30.3	30.8	30.9	30.2	29.5	29.1	29.0
Ghana	20.7	23.5	24.6	20.7	20.4	21.9	22.2	32.5	33.5	24.4
Uganda	17.6	18.1	20.8	20.2	19.7	19.7	19.8	19.4	19.5	19.4
South Africa	15.4	16.3	16.4	16.4	14.6	14.4	14.1	14.1	14.2	15.1
Nigeria	16.0	12.3	16.0	18.2	15.8	13.8	13.9	13.9	14.1	14.9
Kenya	12.0	14.7	11.0	9.9	11.8	13.9	14.8	15.3	15.1	13.2
Rwanda	8.5	6.7	5.9	12.1	13.0	14.9	16.5	17.7	18.1	12.6
Malawi	3.8	3.2	-2.3	2.3	1.6	5.6	5.3	5.3	5.5	3.4
South Sudan	19.0	7.4	18.1	2.4	-6.7	-5.0	-9.7	4.4	-1.0	3.2
Burundi	-3.4	-6.7	-4.1	-5.3	-7.4	-7.6	-6.9	-6.4	-5.4	-5.9

Source: International Monetary Fund (2019), World Economic Outlook Database

3.4 Country Comparative Analysis

Table 3.4 shows savings levels for different African countries as a per cent of GDP, which shows Botswana leading for the period 2014 to 2022. This is attributed to a growth in per capita income over time, stable macroeconomic environment, development management and good governance with strong adherence to democratic principles. Zambia, which is a resource rich country, is the second in the sample.

From the sample in Table 3.4, the countries with savings ratio above 20 per cent are only five, namely: Botswana, Zambia, Ethiopia, Tanzania and Ghana. The others including Kenya and South Africa have low savings ratios and below 20 per cent throughout the sample period. Though the countries differ along savings behaviour, the main contributors to low savings in Africa are low per capita incomes, high young-age dependency ratio, high dependence on aid, low real growth rates, and structural differences in savings behaviour between the low income and the middle-income countries.

3.5 Promoting Domestic Savings

A policy package targeted specifically towards promoting private savings could lead to higher and longer-term domestic savings. The idea is to have policy interventions that can increase household and corporate savings. The policies could be grouped into demand-side policies to inform household savings decisions, and supply-side policies that can improve regulatory, institutional, and other conditions in which savings decisions are made. Household savings depend heavily on income levels, which are eventually based on economic activities that

Why Botswana maintained high gross national savings

- Attained independence in 1966; it is sparsely populated, arid, landlocked country.
- Extraordinary performance is attributed to minerals, particularly diamonds.
- Good governance and good economic management. Good governance aids effectiveness of good policy.
- Property rights and rule of law are key factors and are well enhanced.
- Has maintained a parliamentary democracy since independence.
- Experiences high fiscal saving, a surplus on the current account balance and heavy government investment in infrastructure and human capital.
- Accumulation of reserves cushions against short run declines in mineral revenues particularly for the case of mineral depletion.
- Public sector investment fairly constant at about 10 per cent of GDP, but if we include health and human capital investments, it reaches 20 per cent.

households are engaged in. Therefore, those engaged in income generating activities may have some levels of savings while those without may have no savings at all. Unfortunately, for the smallscale savers, there are no financial savings products to encourage them to save in a sustainable manner.

It has been proven generally that the level of education is closely correlated with household savings. Savings rate steadily increase with the level of education. This is through the expectation that higher levels of education lead to better employment opportunities and increasing incomes, which eventually leads to higher savings. Also, with higher education, there is increased awareness on taking care of the future. It has also been shown that the education-savings profiles are more stable than age-savings profiles. Thus, at any given education level, the variance in savings rate from year to year is relatively very small.

Any effort on savings needs to be complemented by other macro-prudential, fiscal and monetary policy measures. This refers to specific policies and measures to promote savings geared towards more capital accumulation. Savings do not automatically generate investments, and this calls for directing increased savings to productive investments. Therefore, the mix of capital formation in terms of construction, machinery and equipment is very important.

Raising awareness on the benefits of savings, particularly the long-term aspects, calls for promotion of financial literacy to households. Many households do not plan for savings and thus may confront an income gap later in life and be unable to maintain their living standards. Household decisions about budget allocation of savings are frequently taken without enough information about alternative options. The knowledge of the public about financial markets beyond bank deposit and government securities is limited, and the number of shareholders in the stock exchange is small. Increasing the financial capability of households, starting early in the life cycle, and helping them make informed financial decisions could increase savings. Financial savings products are limited, which calls for innovative ways of introducing a

number of them that are attractive to citizens in a well-regulated market.

Special savings schemes modelled on good examples from other countries could help attract new savings into the system. Well-designed and effectively administered new schemes, mandatory or voluntary, could bring household savings into the financial system. A significantly improved financial system and stable macroeconomic environment provides an improved environment for designing and implementing special savings schemes.

Business savings could be enhanced by improving the financial sector to have friendly and attractive savings conditions that include better interest rates and minimal transaction costs. Further is the need to improve the business environment and reduce the costs of doing business. In addition, efforts to enhance productivity of local firms could reduce unfair competition from counterfeit goods, promote innovation, and enhance profitability of firms.

The non-debt increasing financing includes FDI, remittances and external grants, all of which do not have repayment obligations. They all require an enabling environment in the country for them to thrive while addressing the stringent conditions from the source countries where applicable. For the case of remittances, transaction costs have been a major constraint that needs to be addressed. Avoiding the risk of "hot money" in diversification of portfolio investments is also important.

Kenya's current account balance has been in deficit for a while, which is mainly attributed to higher imports value of goods and services compared to lower exports value of goods and services. The exports are mainly raw agricultural products including coffee, tea and cut flowers, which fetch very little foreign exchange earnings. To enhance exports, value addition on these products is critical in coming out of this persistent deficit. Policies and measures, incentives towards production of exports, and diversification of export products are also important to enhance savings.

It is crucial to manage fiscal deficit to promote public savings. Fiscal prudence is required in the government budget as stipulated in the PFM Act (2012) to contain expenditures within the available resources. Measures need to be taken to improve revenue collection to the optimal level while rationalizing expenditures targeting a balanced budget.

3.6 Key Messages and Recommendations

3.6.1 Key Messages

1. Mobilization of domestic resources requires an accelerated pace to finance the desired investment levels of 30 per cent of GDP. This calls for doubling of the current gross national savings to reach levels of 25 per cent of GDP by 2022 and thereby reduce over-reliance on external financing while reducing the external debt burden.

2. Targeted policies (such as improved financial education, promotion of pension schemes, increased labour participation, enhanced entrepreneurship, improved business climate) are required to enhance savings that are composed of public savings, household savings, private corporate sector savings, and capital inflows. The policies could target both supply side and demand side factors that heavily determine the savings level nationally.

3. Extensive sensitization and awareness creation is required in promoting savings culture and the long-term benefits of savings in the economy. Many households may not be aware of the benefits and vehicles of savings.

4. Improving education of the citizens to enable them acquire skills that enhance their productivity and therefore inculcate savings culture is important. Financial sector reforms

should aim at making financial services friendly, with a variety of financial products.

5. For public savings to contribute positively to gross national savings, application of fiscal prudence in management of public finances is required progressively to even attain fiscal surpluses. Managing public expenditures to realize value for money while increasing revenue mobilization is important, while at the same time containing public debt within sustainable levels.

6. To address the current account deficit, growth of exports needs to be enhanced through value addition to fetch more income. There is need to minimize imports for consumption while regulating imports of products that are locally available. Non-trade barriers, unfair trade practices, dumping and better trade negotiation skills could be addressed to remove constraints in international trade. Borrowing from the case of Malaysia, policies on exports should address issues of improved commercial environment, enhancing the overall investment climate, addressing trade barriers and standards, value addition in commodity sector (palm oil, rubber, oil and gas) and diversification in the industrial sector to mention but a few.

3.6.2 Recommendations

1. Sensitization and creation of awareness on savings products will build a savings culture for Kenyans. This could improve domestic resource mobilization as it will enhance growth in gross national savings.

2. A targeted savings policy that addresses bottlenecks in both supply and demand side should be developed. The policy should include issues on utilization of tax incentives, improvement of pension funds, enhanced asset management and efficiency in micro-finance institutions, all geared towards improving gross domestic savings.

3. Improving the education sector by enhancing skills that enable engagement in productive economic activities would improve per capita income levels for Kenyans.

4. There is need to provide a better enabling environment to attract FDI and foreign capital flows. This includes maintaining momentum in growth of economic activity, ensuring stable macroeconomic conditions, appropriate real effective exchange rate, low external debt, and maintaining a favourable political environment to secure investor confidence.

5. Local firms require more support to be able to grow and develop their businesses. This includes making the principle of single business permit more effective, reviewing the multiple taxes incurred by businesses, and harmonizing charges across counties.

6. To improve public savings, a balanced budget is required through proper management of government resources, and strict adherence to the PFM Act 2012 and the PFM regulations. There is also need to enhance tax collection while minimizing leakages and containing expenditures to available resources.

CHAPTER 4

MOBILIZING FISCAL RESOURCES

Kenya has maintained momentum in implementing tax policy and tax administration reforms, and this has seen improvement in tax collections. While there is impressive increase in tax revenue in nominal terms, the rate of growth has remained consistently lower than that of GDP. Having a less buoyant tax revenue to increase in GDP poses a challenge in fiscal revenue mobilization. The structure of tax revenue has not changed significantly, with income tax revenue remaining as the largest source of fiscal resources. At county level, own-source revenue remains low despite the significant potential to enhance revenue collection. Increased borrowing to finance infrastructure development has seen the concessional component of public debt decline. However, debt levels remain sustainable.

4.1 Introduction

The analysis on mobilizing fiscal resources requires a framework for tax and non-tax revenue performance analysis of tax systems, tax reforms and to a large extent the political economy. This section reviews the various reforms undertaken in Kenya to boost fiscal revenue and any other measures implemented in the review period. Since independence, there has been a chronology of major reforms on fiscal revenue where a few are well documented. However, as a way of contribution, this section focuses on the period from 1990 onwards and reviews the reforms and the effectiveness of the main reforms through revenue performance.

4.2 Institutional and Regulatory Framework

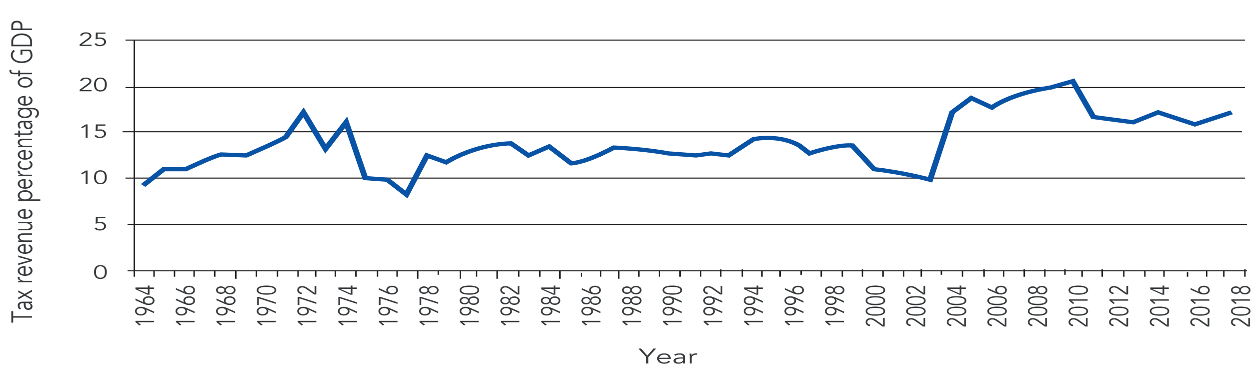
Tax policy reform refers to a change in the way the government collects and manages tax revenue. This may involve adoption of a new tax system, simplification of taxes or change in tax code to ensure complete administration (Mahon, 1997). Revenue mobilization was not a challenge to the government in the first decade of independence as illustrated in Figure 4.1. However, the energy crisis of 1970 led to the need for tax reforms to mobilize more revenue. The effect of the second oil price shock, uncontrolled government spending and weak fiscal management led to budget deficit ballooning. With the challenges, the Government of Kenya through Sessional Paper No. 1 of 1986 (Government of Kenya, 1986) came up with a Tax Modernization Programme (TMP) aimed at enlarging the government revenue base through standardization and rationalization of tax structures. However, the reforms did not yield much success as tax revenue stagnated from early 1980s to mid-1990s.

Revenue collection by the Kenya Revenue Authority (KRA) improved because of sustained economic growth and improved revenue

administration between 2003 and 2007. The reduction of value added tax from 18 per cent in 2003/04 to 16 per cent in 2004 led to increase in nominal tax revenue collected by 210 per cent from Ksh 112 billion in 2003/4 to Ksh 347 billion in 2007/8. The Economic Recovery Strategy of 2003-2007 identified revenue mobilization as one of the four policy actions to be undertaken by the government to spur economic growth. The revenue mobilization goal was to ensure that government revenue were above 21 per cent of GDP in the period under review. By the end of the period, revenue averaged 19.72 per cent, missing the target by less than two percentage points.

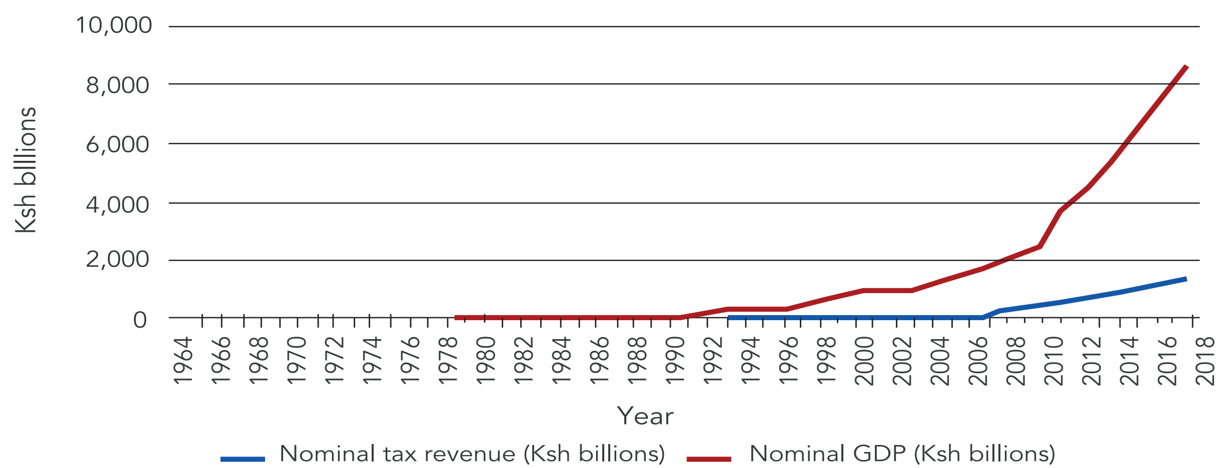
Despite the impressive growth of tax revenue between 2003 and 2007, the tax revenue rate of growth has been sluggish compared to GDP growth rate. This implies that tax revenue has been less buoyant than increase in GDP. For example, in early 1990s, the gap between tax revenue and GDP widened; GDP started growing faster than tax revenue despite the government implementing tax reform measures such as corporate tax reforms, which reduced the rate from 45 per cent to 30 per cent and reduced tariff rates to comply with the WTO regulations. This indicates persistent challenges in fiscal revenue mobilization as illustrated in Figure 4.2.

Figure 4.1: Trends in tax revenues in Kenya (% of GDP), 1964-2018



Source: Kenya National Bureau of Statistics (Various), Economic Surveys

Figure 4.2: Tax buoyancy in Kenya, 1964-2018



Source: Kenya National Bureau of Statistics (Various), Economic Survey

The Kenya Vision 2030 (Government of Kenya, 2007) recognizes the role of a stable macroeconomic environment in achieving a globally competitive environment. The Vision identifies macroeconomic stability and fiscal dispensation in ensuring private sector development and growth. The government seeks to ensure that the bulk of its expenditure is met from taxes while at the same time maintaining fiscal stability. The key elements of this strategy are:

i. Targeting to raise revenue from 20.7 per cent of GDP in 2006/07 to 22 per cent by 2015 and maintaining this level until 2030.

ii. Maintaining fiscal deficit at a level that is below 5 per cent to allow a commensurate growth in private sector credit and widen investment and trade.

iii. Creating fiscal space through expenditure rationalization that will ensure resources are shifted from low priority areas to high priority ones.

iv. Increasing the share of development expenditure from 18 per cent in 2006/2007 to 35 per cent in 2012/13 and maintaining this share until 2030.

v. Carrying out expenditure reforms to improve efficiency, effectiveness and accountability in budget process.

vi. Progressively shift from concessional funding to reliance on international financial markets while at the same time encouraging non-debt creating FDI.

The first Medium-Term Plan (MTP I) 2008-2012 targeted to sustain the revenue to GDP ratio at 20-22 per cent through increased efficiency in revenue collection with reforms and modernization efforts, rationalize taxation and eliminate duty anomalies and implement the Public Financial Management (PFM) Reform Programme. By the end of the 2012 period, the first phase of the Integrated Tax Management System (ITMS) was implemented and revenue collections increased because of increased efficiency and modernization efforts by the Kenya Revenue Authority (KRA). The second Medium-Term Plan (2013-2017) outlined several tax policy and administration reforms that would help the government finance development programmes and projects (Table 4.1). The third Medium-Term Plan (2018-2022) targets to raise tax revenues to about 20 per cent of GDP by 2022 and proposes several reforms that will be implemented to enhance government revenue to finance development projects and programmes.

Table 4.1: Proposed tax reforms and achievements under MTP II

Proposed Tax Reform	Achievements
Tax Policy Reforms i. Revamp turnover tax to make it more efficient and easier for tax payers to comply with ii. Tax high net worth individuals iii. Review transfer pricing to widen tax base iv. Tax the mining sector v. Review the revenue Acts	**Tax Policy Reforms** i. The turnover tax was revamped, making it more efficient and easier for tax payers to comply with ii. Establishment of a unit in the Domestic Taxes Department to handle taxation of the high net worth individuals. This has enhanced revenue collection iii. A review of transfer pricing was undertaken, and international tax created to deal with issues relating to international taxation iv. Different tax laws were modernized and simplified

Proposed Tax Reform	Achievements
Tax Administration Reforms	**Tax Administration Reforms**
i. Introduce the second phase of the integrated tax management system ii. Introduce a Common Cash Receipting System (CCRS). This is paying of taxes through mobile money iii. Beef up taxation of the real estate sector. This was to be implemented through introduction of a technology called GEOCRIS iv. Introduce a single Customs territory v. Introduce dynamic risk management system vi. Implementation of the Electronic Cargo Tracking System (ECTS) vii. Put in infrastructure to help the county government in revenue collection viii. Strengthen and revamp tax enforcement mechanism	i. The second phase of the Integrated Tax Management System was completed in February 2014 ii. Payment of taxes through mobile money iii. A Single Customs Territory (SCT) was implemented and as at September 2017, 70% of all the transit goods were being cleared under the SCT iv. Progress has been made in introduction of the Electronic Cargo Tracking System in the Northern Corridor. The coverage in both Northern and Central corridors is expected to be completed by October 2019 v. KRA has increased its presence in 45 counties and engaged several counties to increase tax base and revenue collection vi. Several strategies have been implemented to strengthen and revamp tax enforcement mechanisms

Source: Government of Kenya, Medium-Term Plans II and III

The proposed tax reforms under Third Medium Term Plan focus mainly on enhancing tax administration, including the following measures:

i. Roll out the Integrated Customs Management System (ICMS) to seal loopholes at Customs to prevent concealment, undervaluation, mis-declarations and falsifications of import documents

ii. Implement the Regional Electronic Cargo Tracking System (RECTS) to tackle transit diversion

iii. Enhance scanning activities to detect concealment

iv. Scale-up on-going and routine activities such as Pre-Verification of Conformity (PVOC), benchmarking and auctions

v. Data matching and use of third-party data to enhance compliance through integration of i-Tax with IFMIS

vi. Expansion of tax base by targeting the informal sector, pursue non-filers and increase focus on taxation of international transactions and transfer pricing

vii. Enhance investigations, intelligence capacity and KRA capacity to support revenue collection

viii. Improve on property tax revenue by implementing a Geographic (Geospatial) Information System (GIS) to automatically link data on land parcels, property ownership and development with the KRA taxes

ix. Work together with county governments to put in place a framework for taxation of property across the country

The Financing for Development, Addis Ababa Action Agenda (UN, 2015) asserts that measures to boost revenue collection should be followed with appropriate measures to use these revenues productively. The action agenda calls for measures such as expenditure prioritization,

improved tax structures and administration and expansion of the tax base. In this regard, the paper on Financing for Development (UN, 2015), notes that in the last two decades, tax revenue has significantly increased in developing countries. Nevertheless, over 50 per cent of the countries have tax revenues that fall below 15 per cent. This indicates a window for increased tax revenue collection. The Action Agenda outlines a number of Guiding Principles for Producing a Balanced Domestic Revenue Base:

i. Use a broad-based VAT with items subject to a single rate and a high threshold. The Fund estimates that broadening of the VAT tax base could raise tax revenues to GDP ratio by two percentage points.

ii. Introduce a competitive rate on corporate income tax. The IMF proposes giving special fund incentives that will increase investments in the country and hence a higher revenue.

iii. Apply progressive income taxes to all levels of income and capital incomes, among other principles.

Based on these principles, in 2018, Kenya introduced a VAT of 8 per cent on petroleum products and increased several other sets of taxes. Similarly, in 2017/18, the government proposed amendments to the Income Tax Act to expand the PAYE tax bands by 10 per cent, and corporate taxes were reduced from 30 per cent to 20 per cent to attract investments in low cost housing. To attract local assembly of motor vehicles, corporate taxes were reduced from 30 per cent to 15 per cent in 2016/17. This has seen some improvement in revenue collection, though some measures are yet to be implemented. A significant increase in revenue is expected once these measures are implemented.

Finally, the Constitution of Kenya (2010) Article 209 gives the national government the power to impose the following taxes: income tax; excise tax; value-added tax; customs duties, and other duties on import and export goods. The county governments under Article 175(b) of the Constitution of Kenya are given powers to impose property rates, entertainment taxes and any other tax that it is authorized to impose by an Act of Parliament. The Constitution requires that all aspects of public finance fulfill the following aspects:

a. Openness and accountability

b. Promote an equitable society

c. Equitable sharing of resources between present and future generations

d. Use of public resources/revenue/money in a prudent and responsible way

e. Responsible financial management and clear fiscal reporting

4.2.1 Domestic tax policy reforms

The objective of tax policy reforms has been to widen the tax base, increase revenue collection, decrease inequality in terms of redistributing wealth and income, and discourage the consumption of certain commodities (Karingi and Wanjala, 2005). The first tax policy reform was the adoption of income tax in 1973 (Cap 470 of 1973). This was followed by introduction of sales tax in 1973 and capital gains tax in 1975. The latter two taxes were necessitated by the import substitutions and industrialization policies (KIPPRA, 2006). Other tax reform changes that occurred beginning the late 1980s included reduction of top tariff rates from 170 to 25 per cent, and reduction of tax rate bands from 24 to 5 while rate bands were reduced from 24 to 5 (including duty free). This saw the average tax rates fall from 40 per cent to 16 per cent between 1987 and 1998 (KIPPRA, 2006).

(a) Excise tax reforms

In Kenya, excise tax has been used to induce consumers of excisable goods and services to internalize externalities arising out of consumption of excisable goods and generate revenue to finance growing government expenditure. Prior to implementation of the Tax Modernization Programme in 1986, the government maintained a tax regime that ensured that the level of excise revenue in real terms was maintained. This was achieved through annual change of excisable tax to ensure prices are in line with domestic inflation. However, the discretionary change of excise tax during this regime created uncertainty on consumption and investment of excisable goods, since action was dependent on whether excise tax rates would go up or down depending on domestic inflation outcome.

A major effort to reform excise taxation was undertaken in 1991 when fundamental changes were made to its structure. Excise duty was extended to cover not only an additional range of domestic goods, such as wines and carbonated soft drinks, but also imported goods. A change in excise tax regime during 1991/92 resulted in conversion of some excise tax rates from specific to *ad valorem* for tobacco and alcoholic products. This was to ensure that there was automatic inflation adjustment to excise tax revenue, and thus eliminate the need for discretionary measures.

In 1994, the coverage of excise taxes was extended to mineral and aerated waters and petroleum products, and to cosmetics in 1995. Petroleum products had been previously subject to VAT, but this was converted to an excise tax for revenue purposes. In 2003/04, ad valorem regime was abandoned for tobacco and alcoholic products, and there was a reversion to specific excise tax to simplify and improve the effective tax rate. However, petroleum products remained within the specific tax regime. A hybrid excise duty of a minimum specific tax and an additional ***ad valorem*** rate was introduced on both domestic and imported cigarettes after abandoning ***ad valorem*** to curb increased cases of smuggling and under-declaration of taxable value.

The Kenya Revenue Authority (KRA) rolled out the first phase of the Excisable Goods Management System (EGMS) in 2013 with an aim of combating illicit production of goods, and tax evasion among manufacturers, thereby sealing loopholes on excise tax revenue loss. It required all excisable goods except motor vehicles to be fixed with stamps. It covered the following items: spirits, beers, wines and cigarettes. The second phase of the EGMS was to take effect on 1st November 2018 and was to cover bottled water and juices but was postponed following a court injunction. However, the rollout of EGMS has been met with resistance from manufacturers, citing likely distortion of production process, and cost burden of installing the system on them.

The Excise Duty Act 2015 came into effect on 1st December 2015 and repealed the Customs and Excise Act, Cap 472 of 2010 of the Laws of Kenya, that previously administered excise duty in Kenya. The Act provides for the management, administration, charging, assessment and collection of excise duty in Kenya.

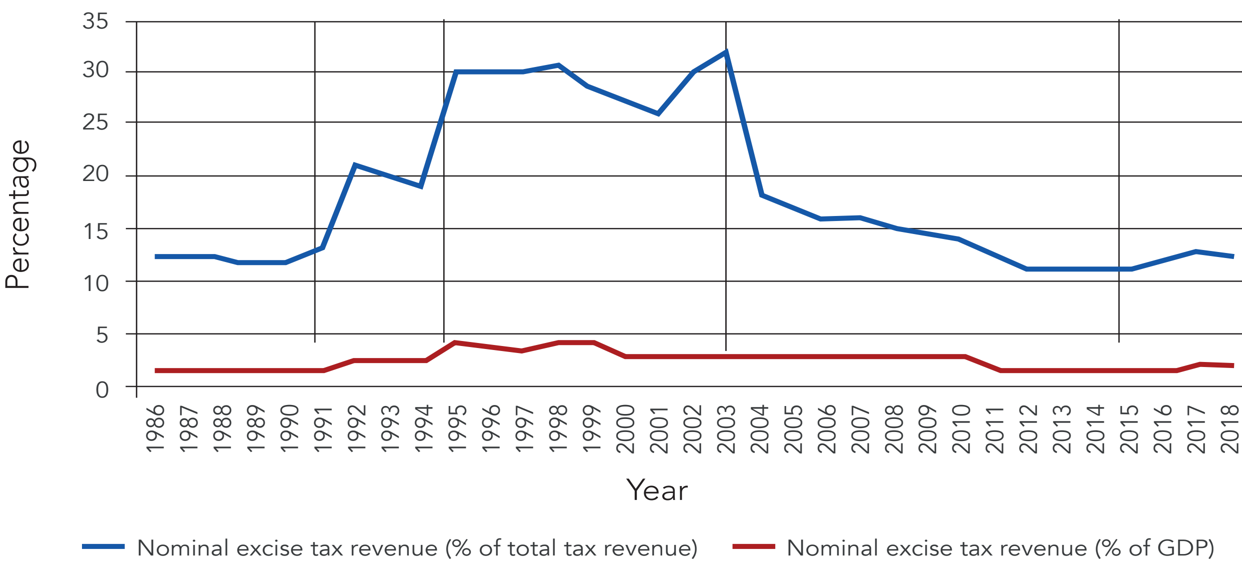
Under the Act, excise duty is chargeable on excisable goods manufactured in Kenya by a licensed manufacturer; excisable services supplied in Kenya by a licensed person; and excisable goods imported into Kenya. The excise duty liability for a licensed manufacturer crystallizes upon removal of excisable goods from the manufacturer's warehouse. Consumption of excisable goods within the manufacturer's factory is treated as a removal for excise duty purposes. This affects industries such as refineries that will use products they refine in their operations and have previously been exempted from excise duty on such consumption.

Under this Act, the following goods and services are exempt from excise duty: excisable goods exported under customs control; excisable goods that the manufacturer has destroyed, with the prior written permission of the Commissioner under supervision of an authorized officer; denatured spirits for use in the manufacture of gasohol or as a heating fuel; excisable goods that have been lost or destroyed by accident or other unavoidable cause before or in the course of removal from the factory, aircraft or vessel; goods for use in ships or aircraft for consumption by passengers or crew in international traffic; and goods imported by and excisable services supplied to privileged persons, e.g. diplomats, foreign governments, international organizations, and aid agencies including the Kenya Red Cross. Others include: one motor vehicle for use by a disabled person (once every year 4 years); excisable goods imported by a person changing residence or returning resident; excisable goods imported by and in possession of a passenger; and one motor vehicle previously owned and used by a deceased person outside Kenya. Also in the list are excisable services supplied in Kenya to privileged persons such as diplomats, foreign government, international organizations, and aid agencies including the Kenya Red Cross, among other services.

Currently, excise tax is also levied on both domestic production and imports of seven products, namely: alcoholic beverages, tobacco products, petroleum products, motor vehicles, perfumes, mineral water, and soft drinks. In addition, mobile cellular phone services, other wireless telephone services, and bank transaction services attract excise duty. The tax revenue expected to be raised from the recent increase in excise tax rate on cellular services is meant to fund the universal healthcare programme as per the budget statement of June 2019.

The trend in excise tax revenue (Figure 4.3) reveals a consistent increase in the share of excise tax revenue to total revenue between 1991 and 1998, despite a slight dip in 1994. Excise tax as a share of GDP also remained high in this period relative to the other periods. This

Figure 4.3: Excise tax revenue, 1986-2018



Source: Kenya National Bureau of Statistics (Various), Economic Survey

implies that introduction of excise tax in 1991 to cover a variety of domestic goods (such as wine and carbonated soft drinks) and imported goods had a positive effect on revenue mobilization in Kenya. The share of excise tax to GDP has remained relatively constant, but its share as a proportion of total revenue has been declining since 2003. However, after the introduction of Excise Tax Act 2015, which expanded the tax bracket to include products that were previously not covered such as air time and financial transactions, there was an upward trend in excise taxes as a ratio of total taxes.

(b) VAT reforms

The VAT Act (1989) was assented to on 22nd August 1989 and the date of commencement was 1st January 1990. The VAT Act is an Act of Parliament to impose a tax to be known as Value Added Tax on goods delivered in or imported into Kenya, and on certain services supplied in Kenya and for connected purposes. VAT is a general consumption tax assessed on the value of goods and services and it applies to all commercial activities involving production/ distribution of goods/services. The VAT is ultimately borne by the final consumer. It was first introduced in Kenya as a mechanism to increase government revenue through expansion of the tax base in January 1990 to replace sales tax, which had been in operation since 1973. The basic law establishing VAT is contained in the Value Added Tax Act, Cap 476, 2012 of the laws of Kenya and the tax is payable by a registered person making a supply, who then recovers the VAT from the receiver of the taxable supply in addition to the cost of the supply.

During its commencement (January 1990), there were fifteen (15) different rates of VAT. The standard VAT rate was set at 17 per cent and was imposed on both manufactured goods and services while the highest rate was 210 per cent. However, the number of VAT rates was reduced to eight (8) from fifteen (15) within a year (1990) of its introduction. Similarly, the highest VAT rate was reduced to 100 per cent from 210 per

Table 4.2: Value added tax rates in Kenya, 1989-2019

Year	Number of VAT rates	Standard rate	Highest rate
1989-90	15	17	210
1990-91	9	18	150
1991-92	8	18	100
1992-93	6	18	50
1993-94	4	18	40
1994-95	4	18	30
1995-96	4	15	25
1996-97	3	15	15
1997-98	3	17	17
1998-99	4	16	16
1999-00	4	15	15
2000-01	4	18	18
2001-02	4	18	18
2002-03	4	18	18
2003-04	3	16	16

Year	Number of VAT rates	Standard rate	Highest rate
2005-17	1	16	16
2018-current	2[1]	16	16

Source: Karingi and Wanjala (2005); Government of Kenya (2018) Finance Act

NB: *An 8 per cent VAT was introduced on selected petroleum products in the Finance Act (2018).*

cent. This was done to curb tax evasion and make local products more competitive.

Further rationalization of VAT rates has been done over the years (Table 4.2) until 2005/6, which saw adoption of a single rate to simplify administration of VAT and improve compliance. However, in 2018 through the Finance Act, an 8 per cent VAT was introduced for selected petroleum products.

In 2003, withholding of VAT was introduced and applied to government agencies that purchased goods and services that were subject to VAT. VAT withholding ensured that the responsibility for paying VAT on certain sales rests not only with the seller but also with the buyer. VAT withholding came into effect amid concerns that government agencies paid VAT inclusive of prices to suppliers who were not necessarily remitting the same to KRA. Subsequently, more purchases were brought into the VAT withholding regime.

VAT on imported goods is due and payable by the importer at the time of importation and is charged as if it were duty of Customs, while VAT on taxable services is payable by the registered person receiving the services and is due when the service is supplied. The qualification for such registration is provided for under Section 34 of the VAT Act, which is to the effect that 'any person supplying or who expects to supply taxable goods and taxable service value of which is Ksh 5 million or more in a year qualifies to register for VAT.' Such registration threshold is pegged on a condition that only the turnover on taxable supplies is considered. In determining such registration threshold, taxable supply of a capital asset of the person and taxable supplies solely made upon sale of whole or part of the persons' business should not be accounted.

Further, the VAT tax base requires to be broadened by considerably reducing the number of zero-rated and exempted items and services. It is important to have minimal exemptions to the standard rate of 16 per cent as many exemptions complicate the existing VAT law and open avenues for disputes between taxpayers and KRA. For the exempted goods and services, there are 15 categories of exempted goods and 17 categories of exempted services and transactions whose revenue potential could be significant. This will also help increase VAT revenue performance and contribute significantly to fiscal resource mobilization required for sustainable development in Kenya.

There are clear issues of delayed repayment of VAT refunds, which is a major impediment to KRAs smooth implementation of VAT. This frustrates and demotivates tax payers and encourages them to evade payment of VAT tax. KRA has a huge backlog of refunds, which makes revenue collection to be over-estimated and denies the VAT tax payers the much-needed capital to run their businesses. To reduce the backlog of VAT refund, KRA needs to develop a framework where VAT refunds can be used to offset other tax liabilities. This will free up much-needed working capital for firms.

(c) Income tax reforms

The Income Tax Act 1973 came into operation on 1st January 1974 and applied to assessments

for the year of income 1974 and subsequent years of income. This Act has undergone amendments through the various Finance Acts, making it complex over time. The Income Tax Act governs the following income tax components: Corporation Income Tax for all forms of legal entities; Pay As You Earn (PAYE); Withholding Tax; Turnover Tax; and Transfer Pricing; among others. The Income Tax Act, Cap 470, makes provision for the charge, assessment and collection of income tax, for the ascertainment of the income to be charged, for the administrative and general provisions relating thereto, and for matters incidental to and connected with the foregoing.

A highlight of some of the key reforms for income tax are as follows:

1. Merger of Income Tax and VAT to form Domestic Taxes Department (DTD) in July 2004.

2. In July 2005, DTD took over the administration of Domestic Excise from Customs and Excise Department.

3. Segmentation of taxpayers to address their unique needs by creating the Large Taxpayer Office (LTO) to cater for large taxpayers and the Medium Taxpayer Office (MTO) for medium-sized taxpayers.

4. Widening the tax net by introducing Turnover Tax (TOT) for small taxpayers and particularly those in the informal sector.

5. Enhancing taxpayer compliance through introduction of Withholding VAT system in October 2003 and Electronic Tax Register (ETR) system in July 2005.

6. Development and implementation of a web-based Integrated Tax Management System (ITMS) to provide various tax services online.

7. e-tax registration and e-tax filing modules were rolled out, and provision of online facilities for verification of Personal Identification Number (PIN) and Tax Compliance Certificate (TCC) at the KRA website to enable taxpayers and the public to verify authenticity.

Due to several changes in the Act, there is need to review the Act to ensure optimal direct tax system with a balance between equity and efficiency, while yielding optimal utilities to all stakeholders involved in the economy. Most importantly, there is need to ensure that all factors are appropriately considered in the design of an income tax regime that facilitates an enabling environment for business, while at the same time promoting economic growth and development.

The government is proposing other measures to help raise revenue. These include the 2018 draft Income Tax Bill which seeks to introduce a higher tax rate of 35 per cent on companies with taxable incomes of over Ksh 500 million, restrict interest expense deductibility on foreign-owned companies, and review the individual income tax structure, among other measures. This is expected to increase revenue and therefore manage public debt.

4.2.2 Domestic tax administration reforms

Tax administration is under the Kenya Revenue Authority, which is under supervision by the National Treasury which sets the policy environment. Resource mobilization by the government is guided by policies and Acts of Parliament for specific tax components and systems. The main law is the Public Finance Act of 2012 (PFM 2012), which enhances matters of fiscal prudence. This section captures details of the specific statutes that relate to government resource mobilization responsibilities.

The administrative reforms have aimed at improving domestic revenue administration,

reducing the administrative and compliance costs, increase tax compliance, improve transparency in revenue administration, improve customer service and increase taxpayer's compliance (Karingi and Wanjala, 2005; KRA, 2016). Examples of tax administration reforms are the establishment of semi-autonomous revenue collection agency, KRA in 1995, the merger of Income Tax and VAT to form Domestic Taxes Department (DTD) in July 2004, taking over of administration of Domestic Excise from Customs and Excise in July 2005 by the DTD, establishment of Electronic Tax Register (ETR) system in July 2005, and introduction of and implementation of a web-based Integrated Tax Management System (ITMS) in December 2008.

In terms of tax systems and administration reforms, the key activity relates to the Tax Modernization Programme (TMP) launched in 1986. The main effort was towards raising and maintaining revenue as a ratio of GDP at 24 per cent, expanding the tax base, rationalizing the tax structure to be more equitable, reducing and rationalizing tax rates and tariffs, reducing trade taxes and increasing them on consumption to support investment, and sealing leakage loopholes. The VAT was introduced in 1990 while KRA was established in 1995. The revenue raising effort has been improved over time, with revenue collected ranging at around 20 per cent of GDP over time.

In summary, several tax administration reforms have been undertaken. The main ones can be highlighted as follows:

1. Introduction of Personal Identification Number (PIN) or Taxpayer Identification Number (TIN) for proper identification and tracking of taxpayers

2. Formation of the Kenya Revenue Authority as the centralized government agency for tax collection

3. Management of Income Tax and Value Added Tax (VAT) under Domestic Taxes Department of KRA

4. Introduction of the Simba 2005 System to enhance the collection of Customs duty

5. Introduction of the Electronic Tax Register (ETR) to enhance collection of Value Added Tax (VAT)

6. Introduction of Certificate of Tax Compliance and its requirement in dealings with government offices

7. Introduction of a Turnover Tax to capture the informal sector and the small and medium enterprises

8. Introduction and implementation of the Integrated Tax Management System (ITMS) by KRA

4.2.3 Tax incentives

The Kenya Revenue Authority (KRA) offers a variety of corporate tax incentives and credits. A tax credit is an exemption, deduction or exclusion from tax liability. These are intended to encourage foreign direct investment in the country. These include foreign tax credit, investment deduction, export processing zones, special economic zones and listed companies (PWC, 2018).

It is argued that Kenya could be losing tax revenue because of competing to attract foreign direct investment by offering tax credits and incentives. A study entitled "Tax competition in East Africa: A race to the bottom? Tax incentives and revenue losses in Kenya?" by Tax Justice Network Africa in 2012 estimates that Kenya could be losing over Ksh 100 billion every year as a result of tax incentives. The authors argue that tax incentives in the country have failed to produce the desired results and only benefit the well connected. This is due to lack of an open and

clear criteria for the exemptions and incentives. This situation is aggravated by competition from other East Africa countries to attract foreign direct investment. Tax competition is a problem because it makes countries lower their tax rates, leading to declining tax revenues (World Bank, 2018).

To address this problem, the government committed itself to rationalizing the existing tax incentives, expanding the revenue base, removing tax incentives, and undertaking a comprehensive tax policy review and appointed a Tax Reform Commission in 2012. However, KRA has continued to perform below its targets as these issues have not been fully solved.

The government could make greater steps in improving coordination to ensure reduced tax competition and review all the existing tax incentives to reduce or remove them.

4.2.4 Public borrowing policy and legislative reforms

The government has implemented several strategies to manage debt, ensure effective management of public resources, and reduce wastage and debt. For instance, the Public Finance Management Act (2012) governs the use of public finances by the county and national government. The government has also adopted the Medium-Term Debt Management Strategy 2019 to help it design sound debt management strategies over the medium term. The strategy outlines how the government intends to borrow and manage its debt at the lowest risk and cost, while at the same time meeting its financing needs and maintaining the right portfolio.

In recent years, Kenya has shifted from borrowing from domestic markets and traditional markets to international markets such as the Eurobond. This can be attributed to three reasons: (i) risk of crowding out domestic private investment; (ii) risk of increased domestic debt interest repayments - as domestic debt rises, so is domestic interest rate meant to attract more investors, which is an increased burden; (iii) external debt is cheaper than domestic debt for traditional lenders (such as World Bank) in terms of interest component and maturity period. Overall, there appears to be an economic shift by African countries towards other lenders, especially China. To avoid getting into problems of debt distress, the government has been investing the funds borrowed in development projects to ensure a repayment cycle.

Kenya has graduated in accessing funds at the World Bank IDA window; it is also considered in the level of frontier markets at the IMF. As key sources of concessional loans, the quota system used reduces the ability to access adequate funding to stabilize the local market and finance development projects. Kenya should also target to access World Bank IBRD loans, which it has not used since 2017 (World Bank Database on International Debt Statistics June 2019). Kenya also started relying on non-traditional lenders during the NARC government period, and in recent times sourcing from international financial markets.

4.3 Status and Analysis of Resource Mobilization

This section highlights the key avenues for resource mobilization available to the government and their performance. These resources include fiscal revenue, external grants, government loans, own source revenue by county governments, FDI and public private partnerships (PPPs). Where possible, the gaps and challenges in harnessing these resources are also highlighted to the extent possible.

4.3.1 Tax and non-tax revenues

National government

The total cumulative revenue including Appropriations-in-Aid (AIA) collected as at end of June 2018 was Ksh 1,487.23 billion, which

was about 90 per cent of the target. The target was missed mainly due to prolonged elections and drought-related challenges in the first half of the year. External grants have been performing dismally at Ksh 27.6 billion against a target of Ksh 43.0 billion. This low performance of grants has been persistent for a long time and new strategies are required to increase absorption of grants, and attract more grants and to contribute significantly to resource mobilization. External grants have several challenges, which include ensuring effective administration and absorption, maintaining macroeconomic stability, formulating budgets under uncertainty, and disbursement issues that consider political developments and donor conditions.

Total revenue performance as a per cent of GDP increased from 18.3 per cent in 2012/2013 to 19.1 per cent in 2013/2014 and to 18.0 per cent in 2016/17 and slightly recovered to 18.2 per cent in 2017/2018 (Table 4.3). The total revenue in nominal terms has been increasing throughout the period but, after rebasing of GDP, the ratio of total revenue to GDP has continued to decline. This sluggish growth can be attributed to low compliance levels and other tax administrative issues.

Table 4.4 reports the composition of government revenue. It shows that income tax revenue, composed of PAYE and corporate tax revenue, is the largest source of total government revenue followed by VAT revenue. Excise tax revenue follows a distant third in terms of resource mobilization. This has been the case in the recent past and particularly for 2005/06 to the current. Consumption taxes adversely affect the poor who spend a bigger proportion of their income on consumption, while income taxes provide tax relief to low income earners. This concern makes the Kenyan structure more preferable as opposed to shifting to more consumption taxes.

Tax revenue continues to fall short of the target. Income tax revenues fell short of the target in 2015/16 by Ksh 17,322 million, representing 3 per cent deviation. However, in 2016/17, income tax revenue surpassed the target by Ksh 1,178 million. In 2017/18, revenue fell short of target by Ksh 68.7 billion, a 9.7 per cent deviation from the target, which is quite significant compared to previous years. This huge shortfall is unusual and requires to be addressed. This could be attributed to companies not performing as expected and therefore adversely affecting the payment of corporate taxes. This being a key resource of revenue for the government, efficiency in handling income taxes will be pertinent, and improvement in its administration can greatly expand the performance of this resource.

Table 4.3: Tax and non-tax revenues (% of GDP), 2012/13-2018/19

	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019*
Tax Revenue	16.4	16.8	16.4	15.9	15.6	14.9	16.1
Non-Tax Revenue	1.8	2.3	2.2	2.2	2.3	3.3	3.0
Total revenue	**18.3**	**19.1**	**18.5**	**18.1**	**18.0**	**18.2**	**19.1**

Source: National Treasury (2019) (2018/2019 revised budget)*

Table 4.4: Government revenue and external grants (Ksh millions), 2016/17-2018/19

	2016/17 Actual	2016/17 Target	2017/18 Actual	2017/18 Target	2018/19 Actual	2018/19 Target	2018/19 Deviation	2018/19 Deviation %
Total Revenue	1,400,578	1,455,390	1,487,227	1,659,611	1,852,572	1,949,181	-96,609	-5.21
Ordinary Revenue	1,305,794	1,311,323	1,365,063	1,489,633	1,672,629	1,769,228	-96,599	-5.78
Income Tax	625,050	623,872	640,593	709,269	769,629	836,570	-66,941	-8.70
VAT	339,034	337,385	356,856	378,031	426,122	464,215	-38,093	-8.94
Excise Duty	165,474	170,258	162,484	179,413	230,301	218,960	11,341	4.92
Import Duty	89,943	89,220	99,215	103,391	135,518	119,352	16,166	11.93
Other Revenues	86,293	90,402	105,916	119,530	111,239	130,131	-18,892	-16.98
AIA	94,784	144,067	122,164	169,977	179,944	179,952	-8	0.00
External Grants	26,312	58,784	27,600	42,953	48,487	48,487	0	0.00
Total revenue and External Grants	1,426,891	1,514,174	1,514,827	1,702,564	1,901,059	1,997,668	-96,609	-5.08

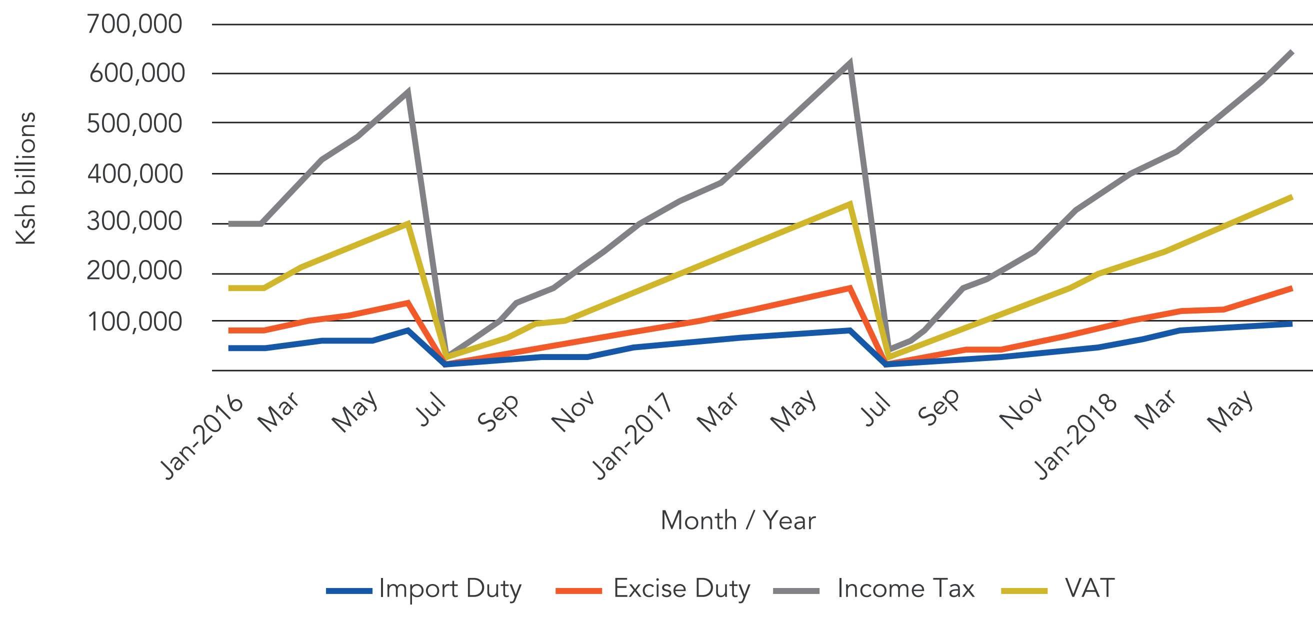
Source: National Treasury (2017; 2018)

VAT and Excise duty also had high deviations from targets in 2017/18 compared to 2015/16 and 2016/17. Generally, revenue collection was hard hit in 2017/18 and this could be partly attributed to prolonged general elections in the first half of the year. VAT had surpassed the target in 2016/17 while excise duty surpassed the target in 2015/16, which is a common occurrence.

Every year, tax collection has a peculiar pattern where it peaks in the month of June for all taxes and is lowest in the month of July (Figure 4.4). This follows the budget process in Kenya which follows a fiscal year of July to June and therefore the trend is attributed to enforcement of tax laws and the filing of income tax returns, which must be done before 30th June of every year. As attempts to address seasonality issues are addressed, it is pertinent to simplify the complex tax laws and minimize costs of administration to ensure sustainability of the key resources. With this composition in tax revenues, resource mobilization requires to be enhanced mainly through the income tax and VAT. This requires more tax reforms to increase revenue through efficiency means that lower the cost of administration and widening of tax base in the country.

Grants have been performing poorly in Kenya, where actual collection has always been less than the target and most of the times is less than half of the target. Besides, the amount of grant

Figure 4.4: National tax revenues, 2016-2018



Source: National Treasury (2018)

revenue has been rather too small compared to other revenue sources. It can be a good and strategic source of resources because there are no repayment obligations.

For sustainable development perspectives, the key resources that need enhancement are income tax, VAT and excise taxes. However, income tax, being the largest source of national total revenue, is the key target for domestic resource mobilization for Kenya. Income tax has low cost of administration and is structured in a very clear way. This requires enhanced efforts to widen the base and capture many more tax payers particularly where tax evasion is prevalent. With the government efforts to expand the economy in terms of massive investments and the "Big Four" agenda, private investments will be greatly supported, which will bring forth job creation in the country, thereby widening the income tax base. This means that there are prospects for more corporate tax incomes and high levels of PAYE, resulting to an improved resource mobilization capacity.

The informal sector poses a challenge to widen the tax base despite having issues of limited tax potential, high costs of tax administration and adverse effects on small firms. But it is important to tax the informal sector. The move in Kenya to change from turnover tax to presumptive tax for informal sector is commendable, since all players in the informal sector will be captured and with a higher compliance level since it is applied at the licensing stage. Also, the amount of tax to be incurred by business owner is relatively smaller since it is based on the cost of the license/permit and not as previously based on business turnover. However, it is important for the government to improve the business environment for SMEs through careful implementation of the SME Act, which will aid small businesses to thrive and be on the path to formalizing the sector.

Non-tax revenue

Non-tax revenue items include fines and forfeitures, rent of buildings, dividends, reimbursements, other taxes, and

Appropriations-in-Aid (AIA). These are normally a small component of total revenue as they comprise an average of 12.8 per cent of total tax revenue. The largest component of this non-tax revenue is AIA, which is more than half of the total. However, the cumulative ministerial AIAs always perform below the target, which reflects the problem of under-reporting by ministries in the annual expenditure returns.

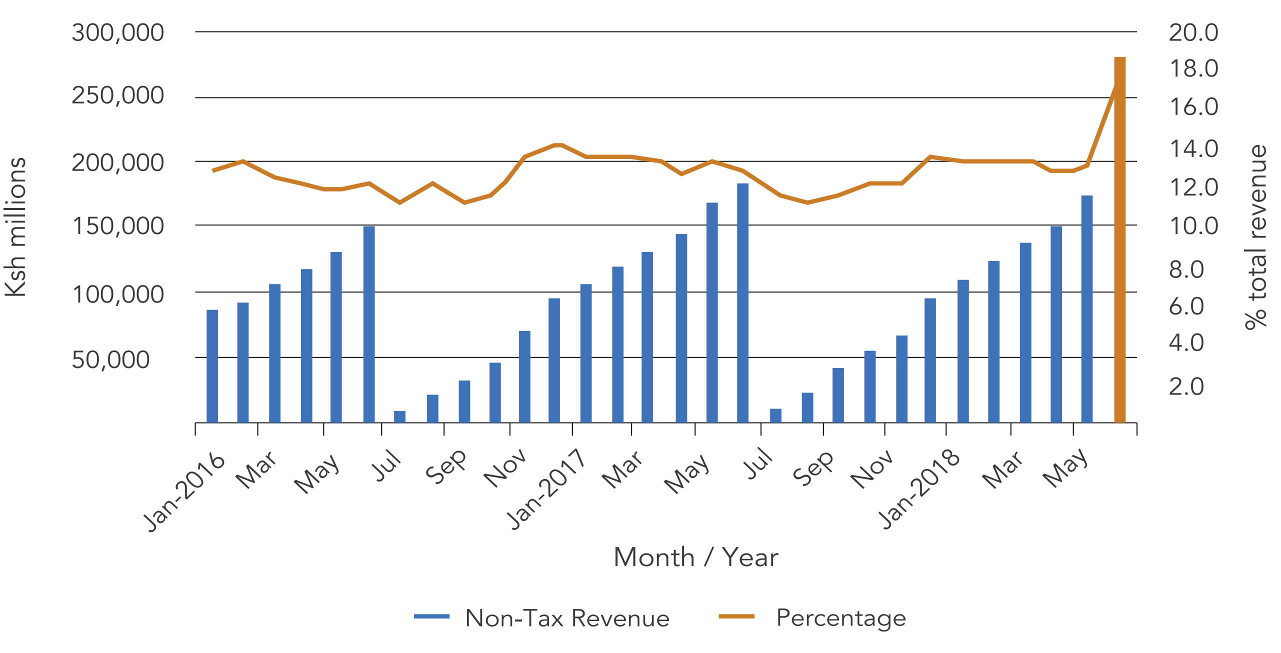
AIA revenues are monies MDAs collect, retain and spend directly without remitting to the exchequer, though they are taken into consideration during the budget process. The AIA revenues are a small component of total revenue as they average 7.2 per cent of total revenue for the period 2012/13 to 2017/18, with the lowest ratio recorded in 2015/16 at 5.4 per cent and highest in 2012/13 at 10.5 per cent.

The non-tax revenue also has the same trend as tax revenue where they peak in June while the lowest is July of every year (Figure 4.5). This non-tax revenue faces several challenges as the cost of collection and administration is very high. These revenues are several, with very small amounts of revenue and at times irregular, which makes their management cumbersome. However, for the case of resource mobilization for Kenya, they cannot be ignored as they may have higher potential in the future.

Country comparison

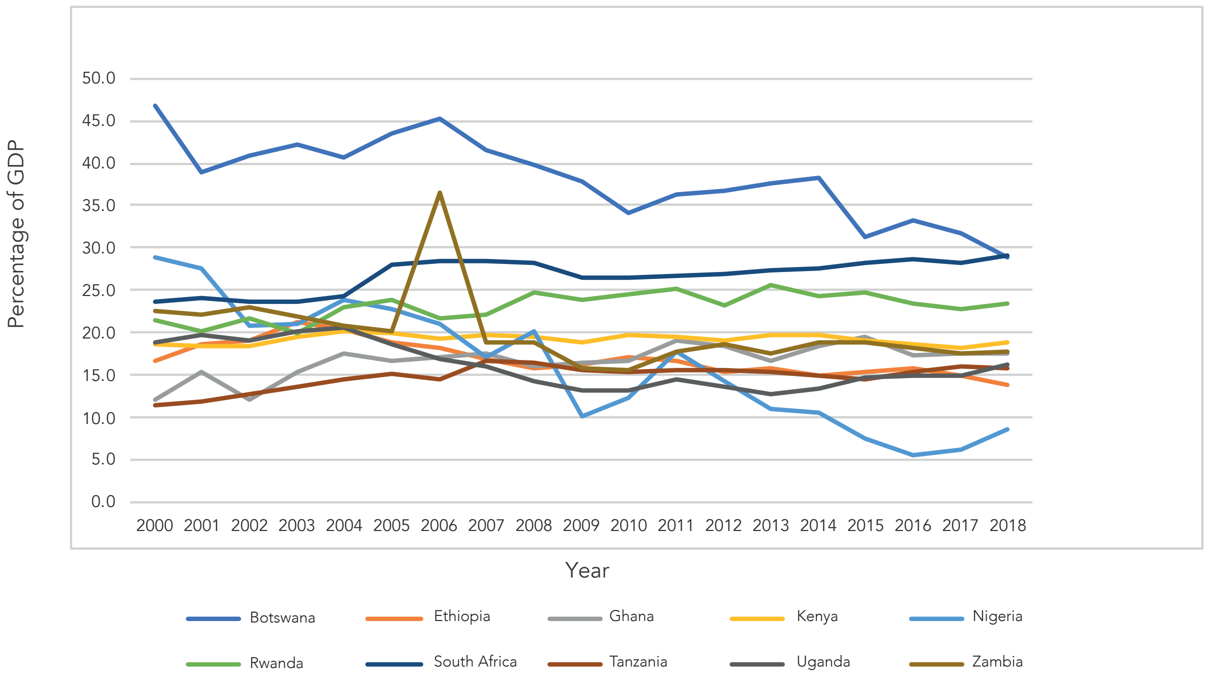
Most Sub-Saharan Africa countries, Kenya included, have maintained a stable revenue per cent of GDP position for a long time. However, Nigeria and Botswana have experienced a decline in revenue ratio over the same period, which is attributed mainly to changes in international commodity prices especially for oil and mineral prices.

Figure 4.5: Non-tax revenues, 2016-2018



Source: National Treasury (2018)

Figure 4.6: Government revenue (% of GDP), 2000-2018



Source: IMF (2018), World Economic Outlook Database

Considering the period covered in Figure 4.6, Botswana has the highest revenue ratio, implying that her performance is quite strong in terms of fiscal resource mobilization. The ratio is, however, declining as it moved from 46.8 per cent in 2000 to 31.7 per cent in 2017 and an estimate of 28.9 per cent in 2018. South Africa has a relatively high ratio, although much lower than for Botswana which has been below 30 per cent and the period average is 26.8 per cent. Rwanda also has a relatively high ratio averaging at 23.2 per cent for the period. Kenya and Zambia have almost the same revenue ratios, with averages of 19.2 per cent and 20.1 per cent, respectively. Ethiopia, Ghana, Nigeria, Tanzania and Uganda have lower revenue ratios of below 17.0 per cent on average. The performance for Kenya has ranged between 18.4 per cent and 20.1 per cent. This gives a firm foundation for resource mobilization, and that a little more effort can push the performance upwards to over 20.0 per cent annually.

County own resources

The county government has several revenue sources that include transfers from national government (referred to as equitable share), conditional grants from national government and development partners, own source revenue generated locally, and loans and grants procured with guarantee from the national government. In terms of resource mobilization, own source revenue is the key resource to be considered, of which performance has been dismal since the inception of county governments. The own source revenue for counties is mainly non-tax revenue and comprises single business permit, market fees, plot rent and rates, game park fees, public health licences, animal stock sales fee, produce cess, hospital revenue and veterinary services. These revenues differ across counties. For the period 2013/14 to 2016/17, Nairobi and Mombasa counties had the highest own source revenue collected with an average of Ksh 11,042.5 million and Ksh 2,579.6 million, respectively (Figure 4.7). The other counties

Figure 4.7: County own source revenues (Ksh millions), 2013/14-2016/17

Own-source revenue Ksh millions

9,000.0
8,000.0
7,000.0
6,000.0
5,000.0
4,000.0
3,000.0
2,000.0
1,000.0
-

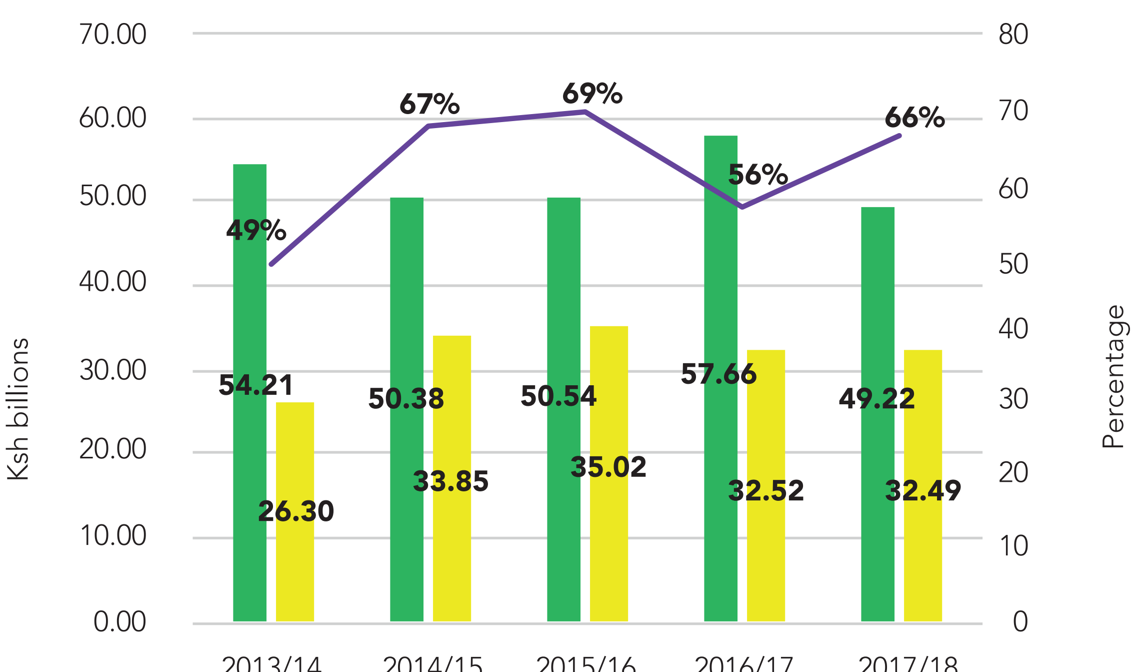
Nakuru, Kiambu, Narok, Machakos, Kisumu, Uasin-Gishu, Kajiado, Nyeri, Murang'a, Kilifi, Meru, Bungoma, Kakamega, Kericho, Laikipia, Trans-Nzoia, Embu, Kitui, Kirinyaga, Busia, Migori, Kisii, Baringo, Nyandarua, Kwale, Nandi, Makueni, Bomet, Samburu, Taita-Taveta, Turkana, Homa Bay, Vihiga, Siaya, Tharaka Nithi, Isiolo, West Pokot, Elgeyo-Marakwet, Wajir, Nyamira, Marsabit, Garissa, Mandera, Lamu, Tana River

Source: Office of Controller of Budget (2018)

with over one billion revenue performance are Nakuru, Kiambu, Narok and Machakos while Kisumu and Uasin Gishu surpassed the billion mark in 2016/17. Therefore, a total of eight (8) counties collect own source revenue at the level of over a billion shillings, indicating that the revenue base is not strong enough for domestic resource mobilization. All the other counties collect an average of Ksh 600 million and below, which includes seven (7) counties that collect below Ksh 100 million, namely: Wajir, Nyamira, Marsabit, Garissa, Mandera, Lamu, and Tana River.

The total own source revenue collected was Ksh 26.03 billion (0.48% of GDP) in 2013/14, Ksh 33.85 billion (0.54% of GDP) in 2014/15, Ksh 35.02 billion (0.49% of GDP) in 2015/16 and

Figure 4.8: County own source revenue, 2013/14-2017/2018



Source: Office of Controller of Budget (Various issues), County Budget Implementation Review Reports

Ksh 33.85 million (0.44% of GDP) in 2016/17 for all the counties. A look at the performance of total actual own source revenue collected compared to the target set shows that there was an improvement in meeting the target own source revenue collection from 49 per cent in 2013/14 to 69 per cent in 2015/16. However, 2016/17 saw a dip in the percentage of own source revenue collected compared to the target but picked up to 66 per cent in 2017/18. The amount collected all through was below one per cent of GDP, signifying that own source revenue are not that significant for resource mobilization. This calls for a huge effort to boost collection of own source revenue by increasing economic activities in each county in the value chain process. Therefore, to rely on own source revenue as a source of resource mobilization to finance significant levels of investments can be a challenge. These resources can only be targeted in the long term after reforms are implemented and tested to yield significant resources for the country.

In general, revenue collection by county governments has been below 70 per cent of the target over the years (Figure 4.8). Revenue raising measures county governments could undertake to improve own source revenue include: creation of an enabling environment to the private sector to increase economic activities in each county, and automation of revenue collection process to curb potential revenue loss through leakage. In addition, county governments could set revenue collection targets based on previous trends and foreseeable economic trends in the counties.

4.3.2 Public borrowing

Borrowing has been a key resource in financing government budget. Kenya's public debt has over time been increasing and it reached Ksh 5.0 trillion in June 2018, reflecting government's increasing appetite for loans to fund infrastructure projects across the country. This has been necessitated by dwindling efforts

Table 4.5: The structure of public debt (Ksh millions), 2017-2019

	Jun-17	Sep-17	Dec-17	Mar-18	Jun-18	Dec-18	Mar-19	Jun-19
External								
Bilateral	724,823	742,063	782,588	800,912	816,119	894,046	916,572	996,059
Multilateral	841,899	842,814	841,847	836,766	820,966	874,680	846,587	914,394
Commercial Banks	712,100	708,231	712,274	858,062	906,389	938,151	941,763	1,095,753
Suppliers Credit	15,914	17,089	17,086	16,691	16,725	16,857	16,676	16,932
Sub-Total	**2,294,736**	**2,310,197**	**2,353,795**	**2,512,431**	**2,560,199**	**2,723,734**	**2,721,598**	**3,023,138**
External Debt as % of Total Gross Debt	**52.1**	**51.5**	**51.5**	**51.4**	**50.8**	**51.7**	**50.2**	**52.0**
Domestic								
Central Bank	55,061	79,201	96,797	93,583	110,782	118,196	90,264	109,607
Commercial Banks	1,141,889	1,144,536	1,124,950	1,226,866	1,266,457	1,289,564	1,402,668	1,414,431
Total from Banks	**1,196,950**	**1,223,737**	**1,221,747**	**1,320,449**	**1,377,239**	**1,407,760**	**1,492,932**	**1,524,038**

Non-Banks and Non-Residents	915,316	949,098	998,618	1,051,202	1,101,596	1,141,015	1,211,052	1,261,899
Sub-Total	**2,112,266**	**2,172,835**	**2,220,365**	**2,371,651**	**2,478,835**	**2,548,775**	**2,703,984**	**2,785,936**
Domestic Debt as % of Total Gross Debt	**47.9**	**48.5**	**48.5**	**48.6**	**49.2**	**48.3**	**49.8**	**48.0**
Grand Total Gross	**4,407,002**	**4,483,032**	**4,574,160**	**4,884,082**	**5,039,034**	**5,272,509**	**5,425,582**	**5,809,074**
Less On-Lending	5,701	5,701	5,701	5,701	5,701	5,701	5,701	5,701
Less Government Deposits	428,774	432,113	350,094	573,884	503,337	432,049	398,223	501,728
Grand Total Net	**3,972,527**	**4,045,218**	**4,218,365**	**4,304,497**	**4,529,996**	**4,834,759**	**5,021,658**	**5,301,645**

Source: The National Treasury (2019)

to generate and grow more tax revenue over the recent past in the face of growing expenditures needs. Table 4.5 shows the current structure of total public debt, which indicates that, on average, external debt is 51.3 per cent of total debt while domestic debt accounts for 48.7 per cent of the total.

Domestic borrowing

Gross domestic debt rose from 22.5 per cent of GDP in 2008/09 to 27.4 per cent of GDP in 2016/17. This was due to increased demand on financing government expenditure and lower than expected performance in fiscal revenue. Domestic debt as a per cent of total debt has been at the level of 50 per cent for some time, with the year 2016/17 recording a low level of 47.9 per cent. The lowering of domestic debt ratio is highly recommended to avoid the risk of crowding out the private sector, thus giving room for private investment to thrive.

As a proportion of total debt, domestic debt increased from 48.9 per cent in 2008/2009 to 55.5 per cent in 2012/2013 and then to 47.9 per cent in 2016/2017. The average for the nine (9) years is 51.5 per cent, which implies that this debt ratio can easily oscillate at 50.0 per cent level. This debt balancing requires a thorough review as the cost of servicing domestic debt is quite high, which implies that maintaining 50 per cent level will be quite expensive for the country given the dwindling fiscal space.

Commercial banks hold most of the domestic debt, followed by non-bank financial institutions (Figure 4.9). This is because banks have a preference to invest in Treasury bills and bonds due to the lower inherent risk as opposed to lending to the private sector. Regarding resource mobilization, commercial banks are quite key and can be used effectively while assessing the cost element thereof. Non-bank financial institutions follow closely in second position since 2011/12 and are an important source of resource mobilization for Kenya. Therefore, the two sources are key and have potential to finance investments in Kenya.

External borrowing

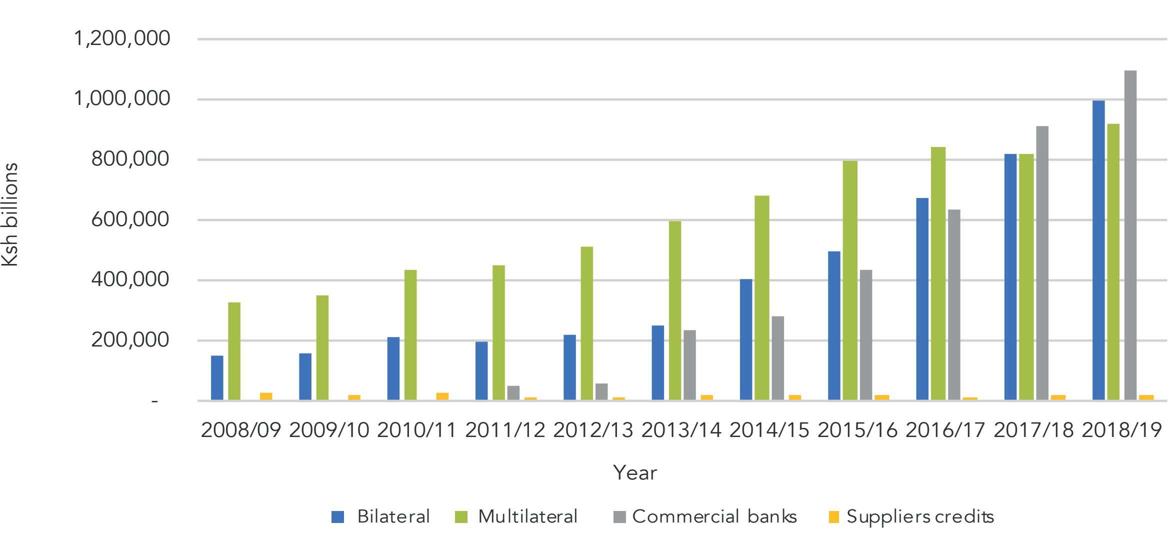
External debt comprised 51 per cent of total public debt, and the composition of external debt was 32.3 per cent multilateral debt, 31.7

Figure 4.9: Gross domestic debt, 2008/09-2018/19

Ksh billions
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
-
2008/09 2010/11 2012/13 2014/15 2016/17 2018/19
Year
Central Bank
Commercial Banks
Non-Bank Financial Institutions

Source: National Treasury (2019)

Figure 4.10: Gross external debt, 2008/09-2018/19



Source: National Treasury (2019)

per cent bilateral debt, 35.3 per cent commercial debt and 0.7 per cent suppliers' credits. Commercial debt was the highest in 2017/18 mainly due to the Eurobond, which was aimed at financing development expenditure.

Multilateral debt has been high for some time due to low cost of financing such debt. However, in the recent past, commercial loans have overtaken multilateral sources mainly due to the need to finance infrastructure projects, despite relatively higher costs involved owing to limited space to raise adequate funds from concessional sources. Bilateral debt is also becoming increasingly important mainly due to loans from China for infrastructure development.

Out of the total Kenya's external debt, the share of bilateral debt in 2017/18 was 31.7 per cent. China has the highest bilateral component as

indicated in Figure 4.11. In 2016/17, debt from China was 66 per cent of total external debt. This was followed by Japan and France with 12.7 per cent and 8.8 per cent, respectively. The earlier traditional lenders have less than 1.0 per cent of total external debt and they include The Netherlands, Denmark, United Kingdom, Italy, Canada, Austria and Finland.

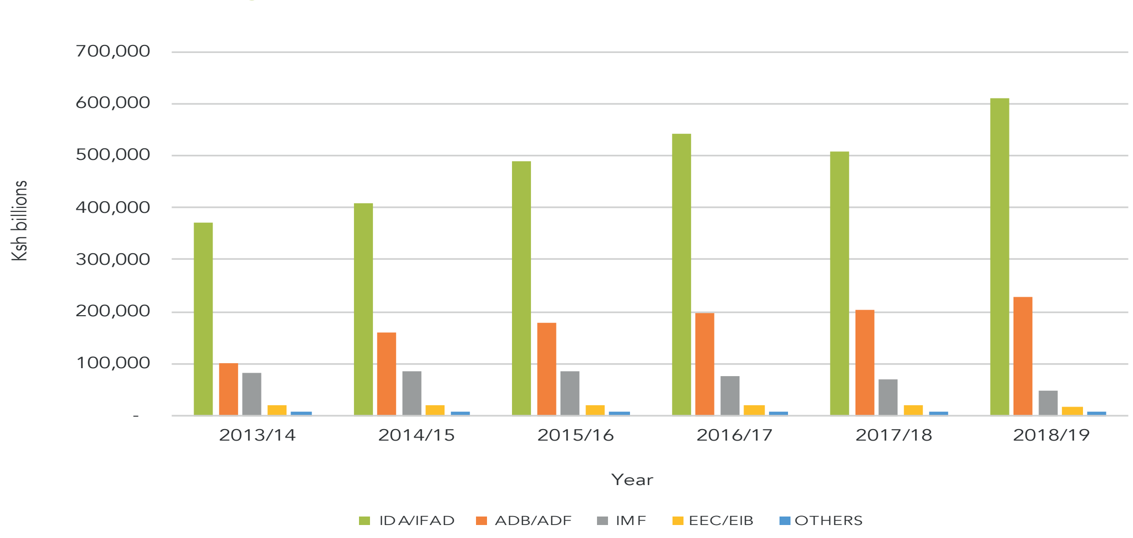
Bilateral debt is an important source of financing for Kenya's budget. Therefore, efforts towards enhancing this source needs to be encouraged and more so to key and strategic trading partners such as the UK and The Netherlands given the continued level of bilateral trade.

External multilateral debt, Figure 4.12, has been a key source of external resources in

Figure 4.11: External bilateral debt, 2013/14-2018/19

Source: National Treasury (2019)

Figure 4.12: External multilateral debt, 2013/14-2018/19



Source: National Treasury (2019)

Kenya all the years up to 2016/17 before it was overtaken by external commercial bank sources in 2017/18 and 2018/19. The multilateral debts are collateral loans with relatively low interest rate, thereby having a low debt burden in the country. The main sources of theses loans are World Bank, African Development Bank and IMF. Therefore, it is an external resource that is highly recommended for Kenya.

External commercial debt, Figure 4.13, used to be a low source of external resources but this changed as from 2015/16 when borrowing from this source changed drastically. It is the highest source of external resources for 2017/18 and 2018/19 for Kenya. As much as it is currently the most important source of external resources, it results to higher debt burden as interest rates on these loans are relatively high. It is a quick source of external resources but due to high costs of repayment, it is not highly recommended for Kenya.

Debt country comparison

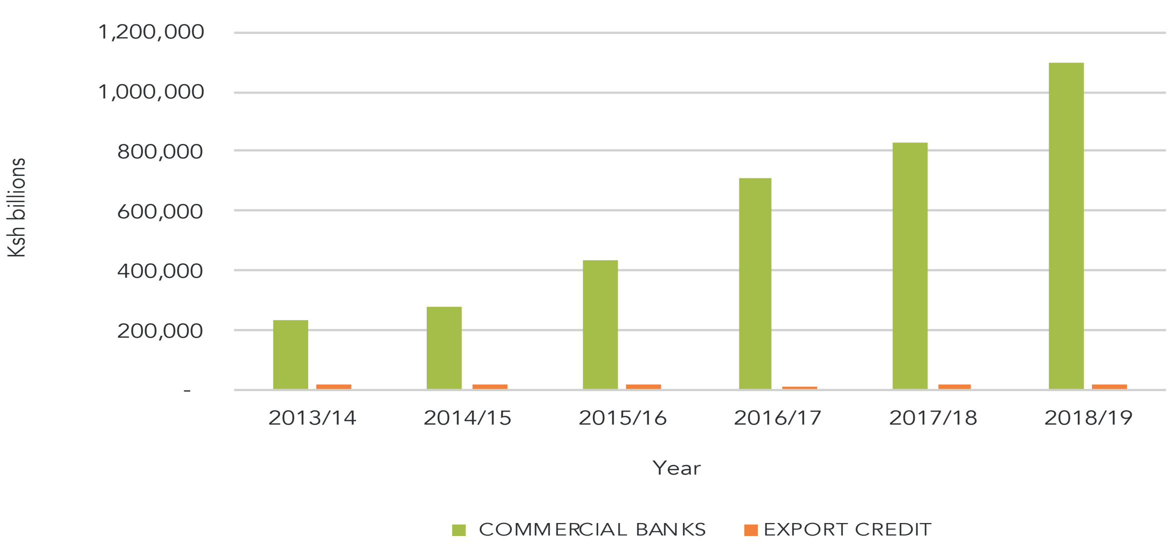
Debt levels as a per cent of GDP allows a better comparison of debt between countries. From the sample of countries in Figure 4.14, three countries are highly indebted, with gross debt as a per cent of GDP for Zambia at 78.3 per cent, Ethiopia 63.9 per cent and Ghana at 60.0 per cent. Botswana has the lowest debt burden of 12.7 per cent of GDP followed by Nigeria at 22.4 per cent. Kenya at 49.3 per cent is, on average, performing almost at the same level with Rwanda at 48.2 per cent, which shows that managing debt levels is necessary for fiscal prudence. South Africa has, on average, 39.6 per cent while Tanzania and Uganda have 35.1 per cent and 40.6 per cent, respectively.

The trend shows that apart from Botswana whose debt ratio is declining, all the other countries in the sample have their debt ratios going up. As other countries are having slight increases, Zambia experienced sharp increases in debt ratios from year 2014 onwards. This is due to huge debts from China meant for infrastructure development and sustaining the mining sector.

Interest payments

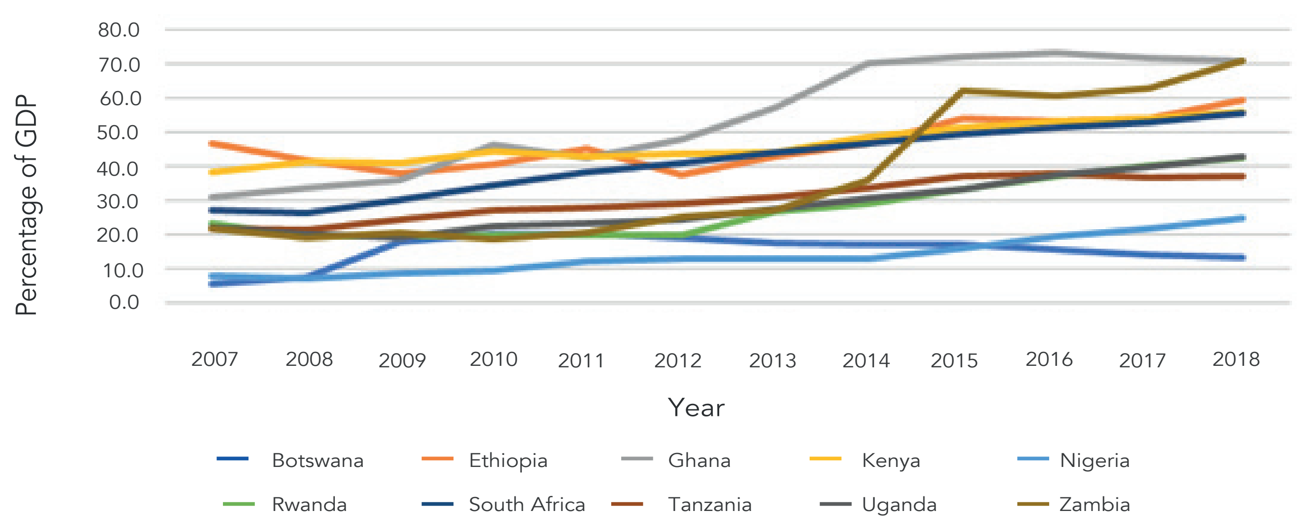
Interest payments are expenditures incurred when servicing the total public debt. Debt service includes both the principle payments and the interest payments when debts fall due.

Figure 4.13: External commercial debt, 2013/14-2018/19



Source: The National Treasury (2019)

Figure 4.14: Gross public debt (% of GDP), 2007-2018



Source: IMF (2018), World Economic Outlook Database

Kenya's interest payments for both external and domestic public debt have averaged 3.4 per cent of GDP for the period 2013/14 to 2018/19, which is a relatively small component of total expenditure. However, the payments are increasing due to higher amounts of public debt falling due, and also due to recent increase in public debt. Domestic interest payments have been rather high compared to foreign interest payments as they averaged four times in size for the period 2013/14 to 2018/19 (Table 4.6).

Public debt sustainability

Debt sustainability is the ability of a country to service its debt obligations as they fall due without disrupting its budget implementation. Under the Debt Sustainability Framework, countries are classified into three policy performance categories: strong, medium and poor, using the World Bank's CPIA index. Different indicative thresholds for debt burden are used depending on the quality of a country's policies and institutions. According to the World Bank CPIA index, Kenya is rated a strong policy performer. For the CPIA, Kenya's highest performing cluster was in economic management while the

Table 4.6: Domestic and foreign interest payments, 2013/14-2018/19

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
(Ksh millions)						
Domestic Interest	119,193	139,615	172,857	212,865	239,470	272,351
Foreign Interest	15,628	32,261	42,471	58,368	84,420	103,372
Total Interest	134,821	171,876	215,328	271,233	323,890	375,723
Total Revenues	974,418	1,107,772	1,254,790	1,439,507	1,522,419	1,671,071
Per cent of GDP						
Domestic Interest	2.35	2.40	2.63	2.76	2.72	2.86

Foreign Interest	0.31	0.55	0.65	0.76	0.96	1.04
Total Interest	**2.66**	**2.95**	**3.28**	**3.52**	**3.68**	**3.95**
Per cent of total revenues						
Domestic Interest	**12.2**	**12.6**	**13.8**	**14.8**	**15.7**	**16.3**
Foreign Interest	1.6	2.9	3.4	4.1	5.5	6.2
Total Interest	**13.8**	**15.5**	**17.2**	**18.8**	**21.3**	**22.5**

Source: National Treasury (2019), Quarterly Economic and Budgetary Review, August 2019

Table 4.7: Public debt sustainability

Indicator	Threshold	2017	2018	2019	2026
PV of public sector debt to GDP ratio	74	49	49	47	36
PV of public sector debt to revenue ratio	300	236	227	217	161
Debt service to revenue ratio	30	35.8	30.5	33.4	24.3
Total Revenues	974,418	1,107,772	1,254,790	1,439,507	1,522,419

Source: IMF (2018), Country Report

lowest was in public sector management and institutions.

Table 4.7 gives the baseline scenario for sustainability of public debt where there is a breach in one of the debt burden indicators. This is on debt service to revenue ratio where the threshold is 30 per cent, which Kenya scored 35.8 percent in 2017 and is expected to score 33.4 per cent in 2019. In the short run, though, it raises concerns about sustainability. Under baseline scenario, the other external debt ratios indicate that Kenya's external debt is well within the debt sustainable levels.

However, in the alternative scenario, Table 4.8, the results indicate that over the medium term, all the ratios will remain within the sustainability

Table 4.8: Public debt indicators

Indicators	Thresholds	2017	2018	2019	2026
Indicators	Thresholds	2017	2018	2019	2026
PV of debt –to-GDP ratio	50	22.6	22.5	21.4	18.3
PV of debt-to-export ratio	200	137.9	132.2	124.1	103.5
PV of debt-to-revenue ratio	300	108.7	104.7	98.9	82.8
PPG debt service-to-export ratio	25	15.2	9.2	13.8	12.2
PPG debt service-to-revenue ratio	22	12.0	7.3	11.0	9.8

Source: IMF (2018), Country Report

thresholds for Kenya. This implies that for now, Kenya's public debt is sustainable but fiscal prudence is required for public debt to remain sustainable. The nominal public debt for Kenya is expected to decrease gradually in the medium term and by 2026.

4.3.3 Public private partnerships

The Public Private Partnerships (PPPs) cycle has a framework that covers four (4) main areas, namely: preparation; procurement; contract management; and approach to unsolicited proposals (USPs). The World Bank Group's report, "Benchmarking PPP procurement 2017" assesses the capacity of 82 countries, including Kenya, to prepare, procure and manage public-private partnerships (PPPs) based on the prevailing policy, legal and regulatory framework and evaluates this data against generally accepted good practice. Out of the 20 Sub-Saharan African (SSA) countries reviewed in the report, an average of the scores given for each area assessed reveals that Kenya is among the top 10 in the SSA countries, with Tanzania scoring the highest. The report shows that Kenya has a robust PPP framework, which is largely supportive of the many PPP projects currently in the pipeline.

The PPP Act of 2013 led to the establishment of the PPU Unit within the National Treasury, whose main mandate is to serve in the secretariat and technical arm of PPP committees in contracting authorities. The Unit offers technical support to government agencies that intend to undertake projects through public-private partnership framework. While the Kenyan PPP law is relatively new, the draft 2019 Budget Policy Statement reveals that private investment in public infrastructure has been taking place since 1996, with the first such investment being in the energy sector.

Progressive legal and regulatory reforms have enhanced private sector investment in public infrastructure and services, with the number of projects in the National Priority List of PPPs currently standing at 76 (as reported in the draft 2019 Budget Policy Statement) with some under construction or impending financial closure (see Annex 4.1). A number of PPP projects spanning across different sectors are in the planning phase for the period 2019-2021, with their total value estimated at US$ 11,422 million.

However, the PPP arrangement in the country has faced some challenges, an example being the concessional agreement between Kenya Railways and Rift Valley Railways (RVR) that was terminated due to failure by RVR to maintain conceded assets, missing freight volume target and payment of concessional fees as stipulated in the concessional agreement.

While PPPs have emerged as important source of resource mobilization, they also impose financial costs on public finance in the event that contingent liabilities crystalize in projects which the government issued support measures to make them secure and bankable. In 2018, the Government of Kenya issued a policy on issuance of government support measures in support of investment programmes aimed at minimizing and managing contingent liability risks arising from its support to MDAs undertaking public projects under PPP arrangements. This policy restricts government support measures to projects considered strategic and of public interest.

There is room for improvement, for instance, in the framework governing a sole bidder scenario, unsolicited PPP proposals, and sub-national PPPs.

4.4 Key Messages and Recommendations

4.4.1 Key messages

1. Kenya has implemented several reform measures to improve on tax policy and tax administration. These measures have resulted in significant increase in tax revenue collection, but growth in tax revenue remains low relative to growing economic activity, making it less buoyant.

2. Total tax revenue continued to perform below the set targets. One of the reasons is the slow performance in income tax revenue, which is the dominant source of total tax revenue. The low performance is mainly attributed to declining corporate income tax performance due to declining corporate profits. Also, there are significant challenges in boosting consumption tax in Kenya, which is a key source of revenue for developed economies.

3. External grants are an important source of resources for development, despite making a small proportion of total revenue in Kenya. Further, because of donor conditions that include political developments and effective administration, the disbursed amount fall short of the target in the budget. That said, external grants present a good opportunity since they do not have repayment obligations, and their conditionalities are not as strict as they are meant to alleviate poverty and improve welfare of low-income segments of the population.

4. The county own source revenue are currently quite insignificant in terms of resource mobilization, at below one per cent of GDP. However, there is potential to further enhance their mobilization and make county governments less dependent on national government transfers.

5. External debt from multilateral sources carries a lower interest rate compared to bilateral and commercial debt. However, with the growing demand to finance infrastructure development, the proportion of multilateral debt has been on a decline. With the commitment to concessional lending, it is critical to review the potential of multilateral sources.

6. Total interest payments are on average 3.3 per cent of GDP or 18.6 per cent of total revenue, implying that they are not a real threat to fiscal space, at least for now. However, the increasing trend is worrying, thereby calling for improved debt management to free resources meant for growth and development of the country.

7. Kenya's public debt is sustainable as per IMF and World Bank recent analysis. However, the level is rather high and exerting pressure on fiscal space. More so, it is breaching one criteria on revenue ratio which signals the need to put in high gear measures to control total public debt.

8. Even though PPPs have not recorded much success, they can also be important for resource mobilization. They are not yet well exploited in Kenya and can be a good source of resources for investment.

4.4.2 Recommendations

1. There is need to enhance revenue collection to contribute significantly to resource mobilization. Deepening reforms on tax policy and administration is necessary to improve tax revenue in Kenya, reduce tax complexity, and improve compliance levels.

2. The tax base for both direct and indirect taxes could be broadened, for example by reducing exemptions and/or eliminating tax holidays. This will lead to capturing of more players in the tax brackets and improve tax revenue collection.

3. The conditions for acquiring external grants in Kenya require to be enhanced to improve their performance, which has been low for a long time.

4. Non-debt financing such as foreign direct investment requires more emphasis in resource mobilization. Improvement of the enabling environment to attract more foreign direct investments is critical to enhance investment levels in Kenya.

CHAPTER 5

FINANCIAL INSTITUTIONS AND MARKETS IN MOBILIZING FINANCIAL RESOURCES

Strong financial institutions and markets are important in enhancing and mobilizing financial savings. Growth of the financial sector in Kenya has slowed over time, although its contribution to GDP has remained stable, implying that reforms in the banking, capital markets, insurance, pension and SACCO sub-sectors are yet to yield the expected results. Exploiting opportunities provided by introduction of Islamic banking, insurance, capital markets and pensions schemes calls for the need to create awareness to reduce information asymmetry. Further, it is important to remain vigilant with the advanced use of technology in provision of financial services to ensure appropriate and prompt response in case there are challenges. It is also important to target the informal sector with appropriate products given the potential it has in enhancing mobilization of savings. Finally, reforms targeting Development Finance Institutions (DFIs) should facilitate provision of equity and mobilization of long-term finance.

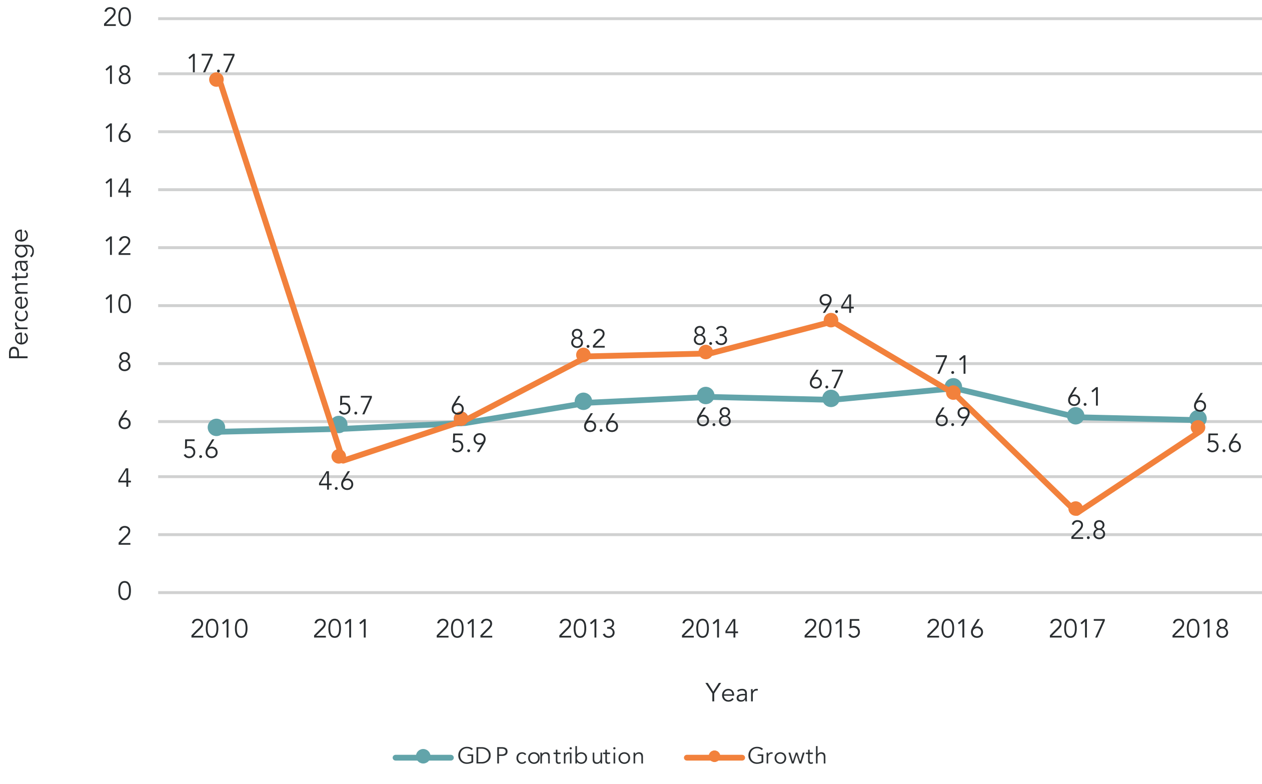
5.1 Introduction

The financial sector performs a critical role in the development process through financial intermediation. Empirical evidence indicates that strong financial institutions are important for growth in investments, economic growth and poverty alleviation. Therefore, Kenya's financial sector is key in mobilizing financial savings required to achieve the objectives of the Medium-Term Plan III of the Kenya Vision 2030, which includes the "Big Four" agenda. The financial sector in Kenya is mainly made up of banks, capital markets, insurance, pension schemes, and Savings and Credit Cooperative Societies (SACCOs).

5.2 Financial Sector Performance

The growth of the financial sector in Kenya has slowed over time but its contribution to GDP has remained stable. The growth rate averaged 7.7 per cent in the last nine years but declined significantly from 17.7 per cent in 2010 to 5.6 per cent in 2018. The sector's contribution to GDP has consistently been increasing, albeit in small margins. In the period 2010-2018, the sector's contribution to GDP averaged 6.3 per cent, increasing from 5.6 per cent in 2010 to 6.0 per cent in 2018 (Figure 5.1). To grow and develop the financial sector, the government is making deliberate efforts to make Nairobi an international financial centre by improving access, efficiency and stability of the sector. The enactment of Nairobi International Financial Centre Act, 2017 gave way to creation of the Nairobi International Financial Centre Authority with the mandate to develop an efficient and globally competitive financial sector that generates high levels of national savings and investments. The Authority is yet to be operational.

Figure 5.1: Financial sector performance, 2010-2018



Source: Kenya National Bureau of Statistics (2015 & 2019), Economic Survey

5.2.1 Banking sector in Kenya

Like in most developing countries, banks are the predominant financial institutions in Kenya, comprising over 80 per cent of the financial system. In Malaysia, the banking sector accounts for about 67 per cent of the financial system. Soundness of the banking sector is essential in adequately supporting economic growth of a country. Besides being the primary mechanism for the transmission of monetary policy, banks also mobilize, allocate, and invest savings. Thus, banks' performance affects growth and development through its ability to finance investment and industrial expansion, supporting growth of non-financial firms and providing a platform to smooth consumption.

In analyzing performance of the banking sector, this section covers financial innovation; regulatory framework; composition of the banking sector; liabilities; assets and their quality; profitability; and interest rates.

a) Financial innovations

Banks in Kenya have over the years embraced technology and innovation to improve on efficiency and the quality of financial services. This includes Internet and mobile banking, agency banking, payment systems, and credit information sharing. Through the Internet and mobile banking, account holders can operate their accounts, including making inquiries and requests, making payments and even transferring funds. Banks have partnered with mobile phone service providers to offer mobile banking solutions which have become popular.

Advancement in technology has also facilitated the success of agency banking in Kenya where third parties are contracted by banks to provide banking services such as deposits and withdrawals. The agency banking model was introduced in 2010 for commercial banks and later extended to deposit-taking micro-finance institutions (now known as micro-finance banks).

As at 2017, a total of 61,290 and 2,191 bank agents had been contracted by 18 commercial banks and five (5) micro-finance banks (MFBs), respectively.

Through technology, banks have also been able to introduce secure and efficient platforms that reduce cost of transactions. For example, the PesaLink platform enables customers to make transactions from one bank to another using a mobile phone. This payment system has complemented the existing infrastructure and offered consumers added choices. Further, the introduction of cheque truncation system has enhanced speedy clearance of cheques, reduced costs of transporting cheques and cheque fraud. The cheque truncation system enables conversion of cheques into an electronic form which is transmitted to the clearing house for processing. Cheques are now cleared within two working days from the previous four days.

Another financial innovation witnessed is the introduction of credit information sharing largely to ease information asymmetry within the financial sector. The Credit Reference Bureaus (CRBs) licensed and supervised by the Central Bank of Kenya are mandated to collect, collate and disseminate credit information to lenders to assist them in their credit decisions. As at 2017, a total of 19.6 million credit reports from three (3) licensed CRBs had been requested by banks.

While increased use of technology has been beneficial, several challenges have emerged including technology-related frauds. The government has in response enacted the Computer Misuse and Cybercrimes Act, 2018 to deal with such fraud. This notwithstanding, banks need to put in place preventive and detective measures in their information and communication technology systems. This is important for the stability of the banking sector and for entrenching confidence to financial services users.

b) Regulatory framework

The banking sector regulatory framework is critical in ensuring good health and stability of the sector. Commercial banks and micro-finance banks in Kenya are licensed and regulated by the Central Bank of Kenya (CBK) through the Banking Act Chapter 488 and the Micro-finance Act, 2006, respectively. The CBK is established by the Central Bank of Kenya Act Chapter 491, which gives the Bank the mandate to license and supervise authorized dealers. CBK applies the Basel III Committee of Banking Supervision and International Monetary Fund. Basel III defines financial soundness indicators to be used in monitoring and evaluating the performance of the institutions. Greater emphasis is placed on common equity. Other indicators include capital to risk weighted assets and non-performing loans net of provisions to capital.

To regulate and supervise the payment systems and payment service providers in Kenya, the National Payments System Act was enacted in 2011. The Act enables the payment system to comply with international settlement core principles and gives CBK enhanced legal and regulatory powers over the payment systems. This is crucial as it supports the efforts to make Nairobi an international financial centre.

There are other laws that largely support the stability of the banking sector. For example, the Proceeds of Crime and Anti-Money Laundering Act, 2009 provides for the offence and measures of combating money laundering. The Financial Reporting Centre is the agency implementing the Act. Money laundering could erode the economy and the stability of the banking system. Kenya is also a member of the Eastern and Southern Africa Anti-Money Laundering Group (ESAAMLG) whose objective is to combat money laundering through implementation of the Financial Action Task Force (FATF) recommendations. FATF was established in 1989 by ministers of its member jurisdiction as a policy making body to create the political

will to effect national legislative and regulatory measures to combat money laundering, terrorist financing and other related threats.

Banks in Kenya have increasingly embraced universal banking. Banks are now taking up insurance business where they either own insurance companies or insurance agencies. Some banks have also entered the pension industry, and investments. Universal banking therefore creates a regulatory challenge in the context of existing frameworks. This is because the different financial services have different regulators. To overcome the challenges, the draft Financial Services Authority Bill 2016 proposes to have a single authority to regulate and supervise financial institutions in the insurance, pension, SACCOs, and capital markets sub-sectors. However, with the advent of universal banking, an overall financial service regulator would be more desirable.

c) Composition of the banking sector

The composition of the banking sector in Kenya is similar to that in a number of aspirator countries such as Chile, Malaysia, South Korea and China where most banks are locally-owned. The number of banks in Kenya has averaged 43 in the last eight years (Table 5.1). Private locally-owned banks have been the majority with an average of 25 banks (60%), with private foreign-owned banks being about 13 banks (32%). Local public-owned banks have been stable at three (3) banks. To increase outreach and tapping new customers, banks' branch expansion increased to 1,518 in 2017 from 1,063 in 2010.

Locally-owned banks in Kenya own slightly over 50 per cent of the net asset market share. Though their market size is only about 9 per cent, small banks dominate with an average of 22 banks. Medium size banks average 15 banks with a market size of 34 per cent, while large banks average about 8 banks with the largest share of market size of 57 per cent.

Table 5.1: Structure of banking system in Kenya

	2010	2011	2012	2013	2014	2015	2016	2017
Total number of banks	44	44	44	44	43	43	39	40
Number of branches	1,063	1,161	1,272	1,342	1,443	1,523	1,541	1,518
Number of private local-owned banks	27	27	27	26	26	26	22	21
Number of local private mortgage companies	1	1	1	1	1	1	1	1
Number of local public-owned banks	3	3	3	3	3	3	3	3
Number of foreign-owned banks (Over 50% ownership)	13	13	13	14	14	13	13	15
Number of small banks	22	22	22	22	21	21	21	22
Small banks' market size (%)	9.16	9.32	9.46	8.51	8.41	9.24	8.9	7.92
Number of medium banks	16	16	16	16	16	15	11	10
Medium banks' market size (%)	34.8	36.04	36.82	39.09	41.71	32.42	26	26.1
Number of large banks	6	6	6	6	6	7	7	8
Large banks' market size (%)	56.1	54.6	53.7	52.4	49.9	58.2	65.4	65.9
Micro-finance banks	5	6	8	9	9	12	13	13

Source: Central Bank of Kenya (Various), Annual Banking Supervision Reports

d) Liabilities of the banking sector

The deposit base which is the cheapest main source of funding more than doubled from Ksh 1,237 billion in 2010 to Ksh 3,026 billion in 2017 (Table 5.2). Deposits form the largest share of banks' liabilities and take 88 per cent of total deposits. The deposits/GDP ratio has averaged about 55 per cent in the last eight years. While Kenya's ratio is higher than for countries in the East African region, aspirator countries such as South Korea, Malaysia Singapore and Thailand have a deposits/GPD ratio of above 100 per cent. This implies that banks in aspirator countries are able to mobilize higher deposit levels.

The share of deposits for small banks has averaged 8.9 per cent with their total deposit accounts below 1 million. Medium banks whose deposits share is 34.7 per cent had an increase in deposit accounts to 3.3 million in 2017 from 1.5 million accounts in 2010. Large banks have a dominating share of deposits at 56.7 per cent with about 43.18 million deposit accounts as at 2017. Large banks deposit accounts have consistently increased over the years compared to the other tier of banks. This is attributable to customers confidence in large banks coupled with aggressive marketing of their products.

Depositors' protection and promotion of stability of the banking system is important. The capital adequacy ratio (total capital/ total risk weighted assets) has averaged 21 per cent in the last eight years against a minimum requirement ratio of 14.5 per cent; an indication that Kenyan banks have enough cushion to meet their financial obligations. This is complemented by the deposit insurance scheme for customers of member institutions provided by the Kenya Deposit Insurance Corporation (KDIC), which was established through the enactment of the Kenya Deposit Insurance Act 2012. All deposit-taking institutions are by obligation members of KDIC. Each member pays a flat rate contribution based on the level of deposits held in that institution in the last twelve months. The deposit insurance covers all types of accounts to a maximum of Ksh 100,000 for each depositor. The payout may sometimes take long, since the affected institution has to be wound-up or liquidated through the due process.

Among the factors driving growth of deposits is the introduction of Islamic banking in Kenya. Currently, there are three banks which are fully *Sharia* compliant. The three banks' market share of deposit is 1.16 per cent. Since there is a huge potential for Islamic banking and finance

Table 5.2: Trends in banks' deposits

Indicator	2010	2011	2012	2013	2014	2015	2016	2017
Deposit base (Ksh billions)	1,237	1,488	1,708	1,936	2,292	2,486	2,727	3,026
Deposits share of total liabilities (%)	89	87	88	87	87	86	90	90
Small banks share of deposits (%)	9.4	9.5	10.0	9.0	8.8	8.9	8.2	7.3
Medium banks share of deposits (%)	35.7	37.1	38.4	40.8	41.6	32.2	25.1	26.3
Large banks share of deposits (%)	55.0	53.5	51.5	50.2	49.6	58.7	66.7	66.7
Small banks' deposit accounts (Ksh millions)	1.10	1.04	0.61	0.66	0.81	0.82	0.89	0.98
Medium banks' deposit accounts (Ksh millions)	1.50	1.83	3.23	8.17	3.36	3.10	3.11	3.31
Large banks' deposit accounts (Ksh millions)	9.30	11.38	12.08	12.96	24.73	30.73	37.14	43.18
Deposit base/GDP (%)	40	45	50	53	60	61	63	67

Source: Central Bank of Kenya (Various), Annual Banking Supervision Reports

to grow, regulatory reforms are paramount in fostering its development. Further, creation of public awareness is important to mitigate misconceptions about Islamic finance and Islam. Other drivers of deposits growth have been the technological innovations, including agency banking and mobile banking services. These innovations have enabled provision of banking services that are more cost effective to customers, particularly to those who are unbanked or under-banked.

e) Assets and their quality

As at 2017, banks' assets more than doubled to Ksh 4,003 billion from Ksh 1,678 billion in 2010 mainly supported by investments in government securities. This has seen the assets/GDP ratio increase from 54 per cent to 89 per cent in the same period (Table 5.3). This is an indication of a relatively strong asset base which is critical in marshalling financial resources. However, aspirator countries such as South Korea, Malaysia, Singapore and Thailand have an assets/GDP ratio of above 100 per cent.

Loans portfolio increased from Ksh 1,277 in 2010 to Ksh 3,327 billion in 2017. Small banks, however, seem to have benefited from the interest rate capping as their share of loans increased from 9.5 per cent in 2016 to 27.1 per cent in 2017. This unfavourably compares with the medium and large banks whose share of loans declined in 2017 with the introduction of interest rate cap. This implies that the medium and the large banks have been cautious in their lending compared to the small banks and, instead, have increased their investment in government securities and other securities.

Table 5.3: Assets, loans and non-performing loans

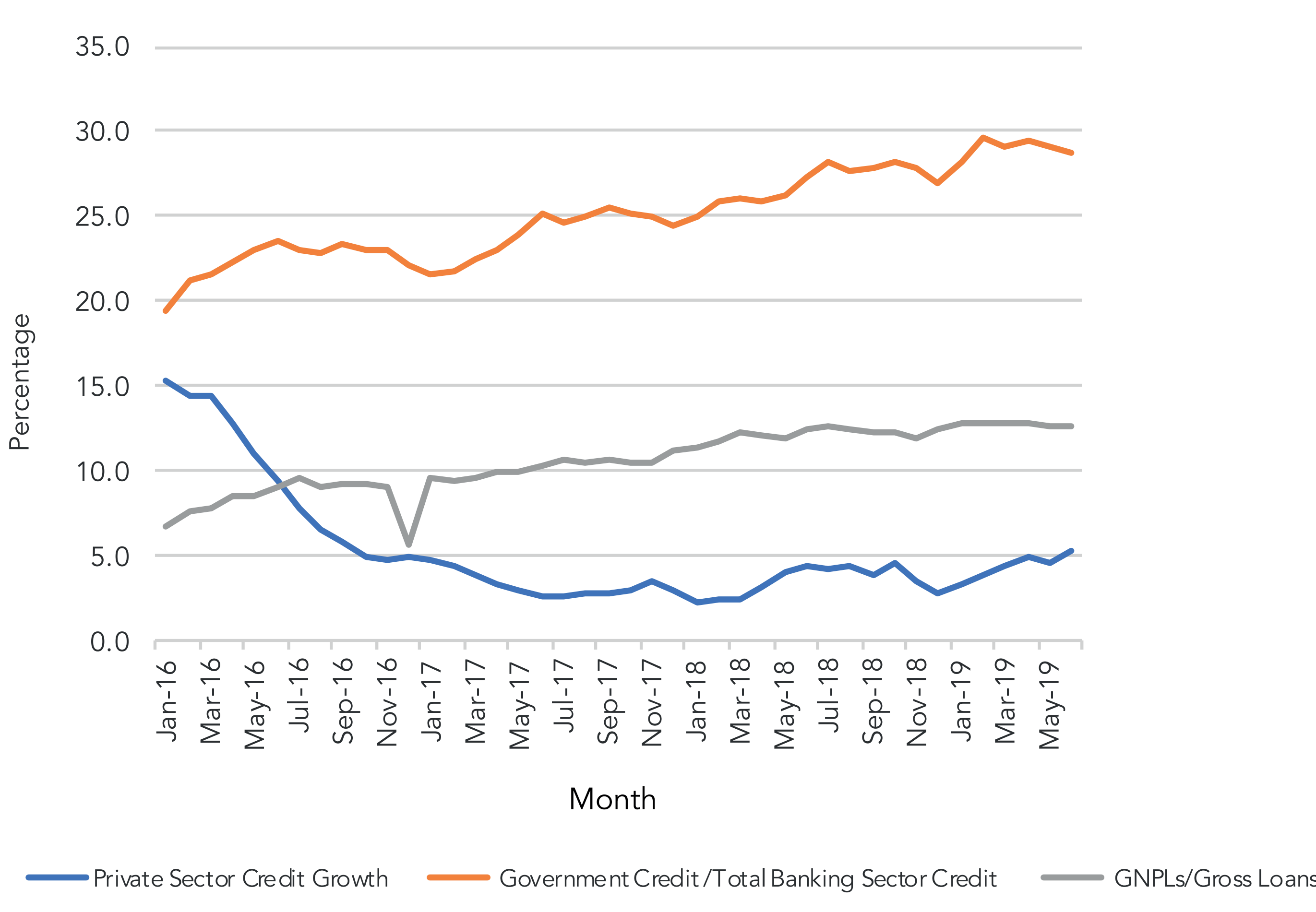
Indicator	2010	2011	2012	2013	2014	2015	2016	2017
Assets (Ksh billions)	1,678	2,021	2,330	2,703	3,199	3,493	3,696	4,003
Assets/GDP (%)	54	61	68	74	83	86	86	89
Loans (Ksh billions)	1276.9	1526.8	1767.7	2007.2	2465	2872.6	3127.8	3318.8
Small banks share of loans (%)	9.5	9.1	9.8	9.3	10.3	9.5	9.4	27.1
Medium banks share of loans (%)	32.4	31.9	36.2	38.2	45.2	33.0	30.5	22.8
Large banks share of loans (%)	58.0	59.0	54.1	52.5	44.5	57.4	60.1	50.1
Private sector credit (Ksh billions)	898.5	1,173.1	1295.4	1555.6	1,898	2,225	2,317	2,381
Private sector credit/deposit base (%)	69	77	74	788-	83	89	85	79
Private sector credit /GDP (%)	28	35	37	42	49	55	54	53
Private sector credit growth (%)	20	31	10	20	22	17	5	2
Gross non-performing loans (GNPLs) (Ksh billions)	57	53	62	82	108	147	214	265
Gross non-performing loans/gross loans (%)	6.3	4.4	4.7	5.2	5.6	6.8	9.3	12.3
Small banks share of GNPLs (%)	17.6	17.3	18.9	25.1	16.9	15.4	12.3	26.6
Medium banks share of GNPLs (%)	28.8	32.9	33.6	31.8	37.1	45.1	43.6	36.7
Large banks share of GNPLs (%)	53.6	49.8	47.6	43.1	46.0	39.5	44.1	36.6

Source: Central Bank of Kenya (Various), Annual Banking Supervision Reports

Private sector credit tripled from Ksh 898.5 billion in 2010 to Ksh 2,381 billion in 2017. However, its growth has slowed in the last eight years. In 2010, private sector credit grew by 20 per cent compared to 2 per cent in 2017. This decline continued despite the introduction of interest rate capping in September 2016. The monthly analysis showed that private sector credit grew by less than 5.9 per cent achieved in September 2016. The highest growth attained thereafter was 5.3 per cent, which was only realized in June 2019 (Figure 5.2). This is asserted by the increasing proportion of government credit to total banking sector credit, implying a decline in private sector credit.

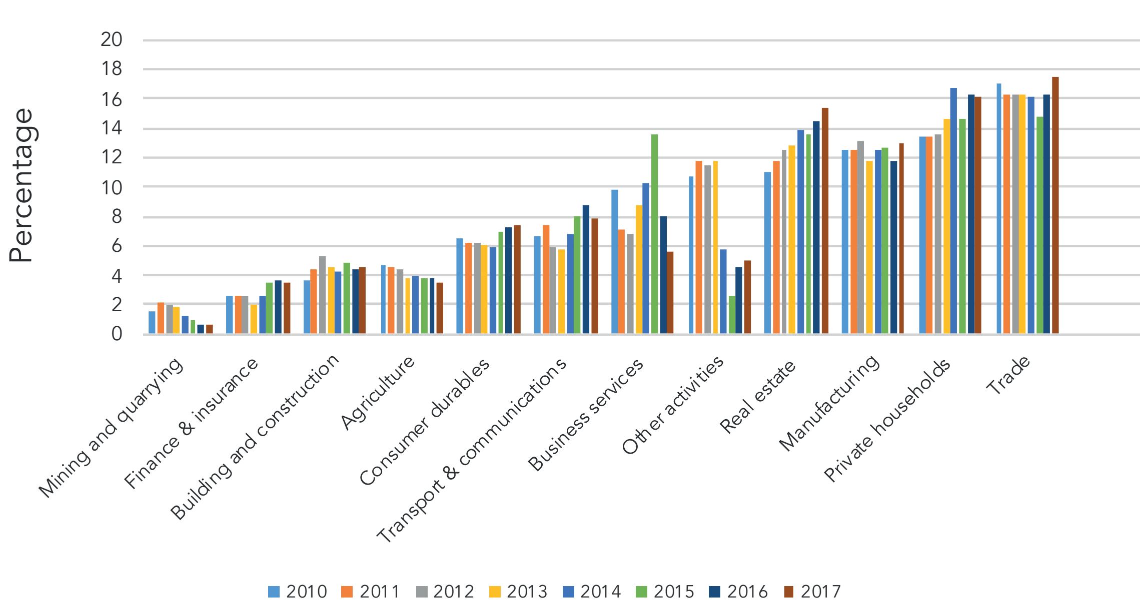
Though priority sectors of the Kenya Vision 2030, including trade and manufacturing, have received high proportions of the credit, growth in these sectors has continued to be slow. Further, the agricultural sector, also a priority sector in the Vision 2030, has continued to receive low and declining credit over the years (Figure 5.3). This has affected the sectors' performance over the years. For example, the manufacturing sector's growth has been declining over the years. The provision of more credit to the private sector is necessary to support high economic growth and expansion of sectors of the economy. Local banks are the main source of the loans for firms including those listed at the Nairobi Securities Exchange (NSE). The loans include long-term loans with repayment period above one-year and short-term loans with repayment period up to one year.

Figure 5.2: Private sector credit, government borrowing and gross non-performing loans, 2016-2019



Source: Central Bank of Kenya(various), Monthly Economic Indicators

Figure 5.3: Distribution of private sector credit (%), 2010-2017



Source: Central Bank of Kenya (Various), Annual Banking Supervision Reports

The private sector credit ratio to deposits has averaged 80 per cent; an indication that banks may not be constrained in provision of private sector credit. In 2017, private sector credit ratio to deposits declined to 79 per cent from 85 per cent in 2016 (Table 5.3). As a ratio to GDP, Kenya's private sector credit has averaged 44 per cent, oscillating slightly over 50 per cent in the period 2015-2017. Therefore, Kenya's private sector credit, though growing, continues to be low compared to aspirator economies such as South Korea, South Africa, Chile, Thailand, and Malaysia whose private sector credit/GDP ratio is above 100 per cent (Annex 5.2). This means that bank deposits are not the only source of funding in these countries. Further, deposit/GDP ratio in these countries is also above 100 per cent. Therefore, Kenya's deposit base must be higher than the GDP to achieve a private sector credit GDP ratio of above 100 per cent. Kenya's deposit/GDP ratio is currently 67 per cent.

The level of non-performing loans (NPLs) has implications on stability of the financial sector with implications on the quality of assets for banks. The Gross Non-Performing Loans (GNPLs) have increased by about five times from Ksh 57 billion in 2010 to Ksh 265 billion in 2017 (Table 5.3). This translates to doubling of the NPLS to total gross loans ratio from 6.3 to 12.3 per cent. The monthly data also depicts a similar situation. The GNPLs increased from 6.9 per cent in January 2016 to 13 per cent in June 2019 (Figure 5.2). The medium and large banks had the highest proportion averaging 81 per cent. The share of small banks' GNPLs increased from 12.3 per cent in 2016 to 26.6 per cent in 2017 (Table 5.3). In 2016 and 2017, trade, households, manufacturing and real estate sectors accounted for over 70 per cent of NPLs. The momentum in economic activities generally affects loan servicing across all sectors of the economy. For example, the slowdown in economic activities in 2016 and 2017 negatively affected loan repayments, resulting to increased NPLs.

NPLs in Kenya have remained high despite efforts by the Central Bank of Kenya in collaboration with the Kenya Bankers Association to initiate the credit information framework in 2010 to mitigate them. The framework is also supposed to allow banks to extend credit to customers based on information capital, thus allowing borrowers without collateral to access loans. Countries such as Chile, China, South Africa,

Thailand, and Malaysia have generally lower ratios ranging from 1.5 to 3.1 per cent.

f) Profitability

Banks' pre-tax profits increased from Ksh 74 billion in 2010 to Ksh 147 billion in 2017 (Table 5.4). While the return on assets has averaged 3.7 per cent, the return on equity has been about 26.3 per cent. Though profitability increased in 2017, the return on asset reduced to 2.7 per cent from 3.3 per cent in 2016. Similarly, in the same period, the return on equity declined to 20.8 per cent from 24.6 per cent.

The major sources of income have been the interest on loans and advances, and interest on government securities. Interest income share of total operating income has averaged 70 per cent in the last eight years. In 2017, the share declined to 67.7 per cent from 71.2 per cent in 2016 partly attributable to interest rate capping effects. Large banks' share of interest income dominates at over 50.0 per cent followed by medium banks' share at an average of 30.0 per cent. However, the share for the two tiers of banks reduced in 2017. The share of small banks has averaged 9.0 per cent increasing in 2017 to 23.9 per cent which is higher than that of medium banks. The share of non-interest income has averaged about 29.0 per cent. However, in 2017 the share increased to 32.3 per cent from 28.8 per cent in 2016; again, partly attributable to interest rate capping effects. The fees and commissions on loans and advances share of non-interest income has averaged 22.0 per cent compared to the share of other fees and commissions which has averaged 42.0 per cent in last eight years.

Table 5.4: Profitability

Indicator	2010	2011	2012	2013	2014	2015	2016	2017
Pre-tax profits (Ksh billions)	74	90	108	126	141	134	134	147
Return on assets	3.8	4.4	4.7	4.7	3.4	2.9	3.3	2.7
Return on equity	28.2	30.9	30	29.2	26.7	23.9	24.6	20.8
Interest income share of total operating income (%)	57.9	63.7	77.0	78.4	68.6	82.6	71.2	67.7
Non-interest income share of total operating income (%)	42.1	36.3	23.0	21.6	31.4	17.4	28.8	32.3
Small banks' share of interest income (%)	7.7	7.3	6.9	6.3	8.0	7.9	6.9	23.9
Medium banks' share of interest income (%	27.3	31.1	29.5	33.6	40.4	29.1	27.6	22.6
Large banks' share of interest income (%)	64.9	61.6	63.7	60.1	51.6	63.0	65.5	53.6
Fees and commissions on loans and advances share of non-interest income (%)	18.3	21.0	20.8	26.4	18.9	25.2	21.8	23.2
Other fees and commissions share of non-interest income (%)	35.7	39.6	45.6	45.8	41.0	51.6	39.7	39.7

Source: Central Bank of Kenya (Various), Annual Banking Supervision Reports

g) Interest rates

Kenya's lending rates have averaged 15.9 per cent compared to 6.9 per cent deposit rates in the last nine years (Table 5.6). This has resulted in interest rate spread averaging 9.0 per cent. On average, Kenya's lending rates are comparatively higher compared to aspirator emerging economies. The higher credit levels in aspirator emerging economies is due to low lending rates. The lending rates for South Korea, Chile, China, Thailand, and Malaysia are below 5.0 per cent. A high interest rate spread continues to be a pointer of inefficiency in the sector.

With the introduction of interest rate capping in 2016, both the lending and deposit rates reduced to 13.7 and 7.3 per cent, respectively; narrowing the interest rate spread to 6.3, 5.4 and 5.1 per cent in 2016, 2017 and 2018 respectively, from 10.3 per cent in 2015. The Banking (Amendment) Act 2016 required commercial banks to charge interest rates at 4 per cent above the CBR and pay depositors a rate of 70 per cent of the CBR. In September 2018, however, the cap on deposit rate of 70 per cent of the CBR was removed. The capping of interest rates aimed at reducing the lending rates, thus increasing loans access to Small and Medium Enterprises (SMEs). However, the interest rates capping has not resulted into huge growth in provision of credit to the private sector especially the SMEs as anticipated since it is difficult to price risk premium appropriately. Nevertheless, the government has plans to provide the necessary regulatory framework to facilitate credit guarantee scheme to enable banks to provide more credit to SMEs.

Earlier efforts to promote transparency and competition in the pricing of credit did not also achieve the desired results. These efforts include transparency in pricing of banking services in 2014 through reference interest rate called Kenya Banks Reference Rate (KBRR). The KBRR was an average of Central Bank Rate (CBR) and the 91-day Treasury bills. The use of the all-inclusive annual percentage rate (APR) in loan pricing was also rolled out to supplement the KBRR.

Table 5.6: Trends in interest rates

	Lending rates (%)	Deposit rates (%)	Interest rate spread (%)	CBK rate (%)
2010	13.9	3.6	10.3	6
2011	20.0	7.0	13.1	18
2012	18.2	6.8	11.4	11
2013	17.0	6.7	10.3	8.5
2014	16.0	6.8	9.2	8.5
2015	18.3	8.0	10.3	11.5
2016	13.7	7.3	6.3	10
2017	13.6	8.2	5.4	10
2018	12.5	7.4	5.1	9
Average	**15.9**	**6.9**	**9.0**	**10.3**

Source: Central Bank of Kenya (Various) and KNBS (2018)

5.2.2 Capital markets

Capital markets contribute to economic growth and development through mobilization of resources for the private sector. Capital markets link savers and investors, making available resources for investment. Thus, capital markets aid the availability of funds which can then be used for new investments or for expansion of existing investments. Efficient utilization of these resources is likely to lead to growth in an economy. In Kenya, capital markets mainly comprise of equities and fixed income securities (bonds and notes).

a) Primary market for equities

Initial Public Offering (where new shares are issued) and introductions (where only existing shares are listed, and no additional funds are raised) have grown very slowly. In the period, 2010-2018, there were only three IPOs which raised a total of Ksh 7.77 billion, which was on average less than 0.5 per cent of GDP (Table 5.7). While one IPO was over-subscribed at 764 per cent, the other two IPOs were under-subscribed at 60 and 29 per cent. None of the three IPOs were issued by a non-financial firm. Further, in the period 2010-2018, only 15 rights issues of shares (additional public issue of shares) were witnessed. Six of the rights issues were by non-financial firms. Funds raised from the issues were used for expansion and product diversification. Non-financial firms have also taken advantage of the opportunity to cross-list in the East African region. So far, 5 and 4 such firms are listed in the Uganda Securities Exchange and Tanzania's Dar es Salaam Stock Exchange, respectively. The cross listing has expanded Kenyan firms' source of funds into other East African countries.

Local investors dominate new accounts at the NSE. Table 5.8 shows the holding of new Central Depository System (CDS) accounts opened by various investors. Local individual investors lead in opening new accounts at an average of 92 per cent. Local corporate investors are second with an average of 4.1 per cent. A new investor must open a CDS account to enable electronic holdings of shares and their transfer when traded. The CDS is managed by the Central Depository and Settlement Corporation (CDSC). The total number of accounts held at the CDSC are fewer compared to accounts in banks. For, example, in 2017, the total number of accounts were 47.5 million compared to 1.2 million accounts at CDSC. This shows the potential in attracting more investors at the NSE.

Table 5.7: Equity primary market performance

Indicator	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of listings by introduction	0	2	3	1	2	0	1	0	1
Number of Initial Public Offers (IPOs)	0	1	0	0	1	1	0	0	0
Amount raised by IPOs (Ksh billions)	-	3.5	-	-	0.63	3.6	-	-	-
Amount raised by IPOs/ GDP(%)	-	0.11	-	-	0.09	0.02	-	-	-
IPOs subscription level (%)	-	60	-	-	764	28.96	-	-	-
Additional offers and POs	1	0	2	0	0	0	1	0	1

Source: Capital Markets Authority (Various), Quarterly Statistical Bulletin

Table 5.8: New Central Depository System accounts opened by investors (%)

	2010	2011	2012	2013	2014	2015	2016	2017	2018
East African corporate	0.04	0.05	0.11	0.01	0.08	0.10	0.08	0.14	0.14
East African individuals	0.07	0.32	0.46	0.14	1.09	0.32	0.48	0.43	0.44
Foreign corporate	0.49	1.21	1.99	0.40	1.88	1.53	1.91	2.35	2.45
Foreign individuals	0.35	1.00	1.44	0.81	1.54	1.51	2.01	2.21	2.11
Local corporate	3.17	3.65	4.21	2.20	4.85	5.43	4.14	4.27	4.92
Local individual	95.87	93.77	91.80	96.44	90.57	91.12	91.37	90.59	89.94

Source: Capital Markets Authority (Various), Quarterly Statistical Bulletin

b) Secondary market for equities

The secondary market performance of stock markets in Kenya has been varying over the years. In the period 2010-2018, the NSE 20 Share Index (reflects the share prices performance) declined to close at 2,834 points in 2018 from 4,433 points in 2010 (Table 5.9). However, from 2012-2015, there was a steady increase in the index mainly due to increased investors' confidence. Thereafter, a downward trend was witnessed up to 2016. An increase in the index implies increased share prices and investors' gains and vice versa. To further provide a gauge by which investors can measure the performance of their portfolios and a foundation for the development of index-related products such as Exchange Traded Funds (ETFs), NSE partnered with FTSE International in 2011 to launch FTSE NSE Kenya Index Series; FTSE NSE Kenya 25 Index and FTSE NSE Kenya 15 Index. Also, in 2016, a new NSE 25 share was launched following an approval by the NSE Board. The new share index was in line with global best practice to provide the market with opportunities to develop structured products in the equities and at the upcoming derivative market. The new indices run concurrently with the NSE 20 Share and NSE All Share Indices.

Table 5.9: Secondary market for equities' performance

Indicator	2010	2011	2012	2013	2014	2015	2016	2017	2018
NSE 20 Share Index	4,433	3,205	4,133	4,927	5,113	4,040	3,186	3,712	2,834
Stock market capitalization (Ksh billions)	1,167	868	1272	1,921	2,316	2,054	1,932	2,522	2,102
Stock market capitalization/ GDP (%)	38	26	37	53	60	51	45	56	44
Number of listed companies	55	58	61	61	64	64	66	67	67
Number of delisted companies	0	0	0	1	0	0	0	0	0

Source: Capital Markets Authority (Various), Quarterly Statistical Bulletin

The market capitalization capturing the size of the market is also an indicator of stock market development. As at 2018, market capitalization was Ksh 2,102 billion or 44 per cent of GDP. The volume of shares traded was the main driver of the market capitalization. The market capitalization in aspirator emerging economies such as South Africa, South Korea, Chile, Malaysia and Thailand is over 100 per cent of GDP (Annex 5.2). These countries also have a high number of listed companies, with countries such as Malaysia and South Korea having 890 and 2,114 companies, respectively. This unfavourably compares to NSE-listed companies which averages 62 in the last nine years (Table 5.9).

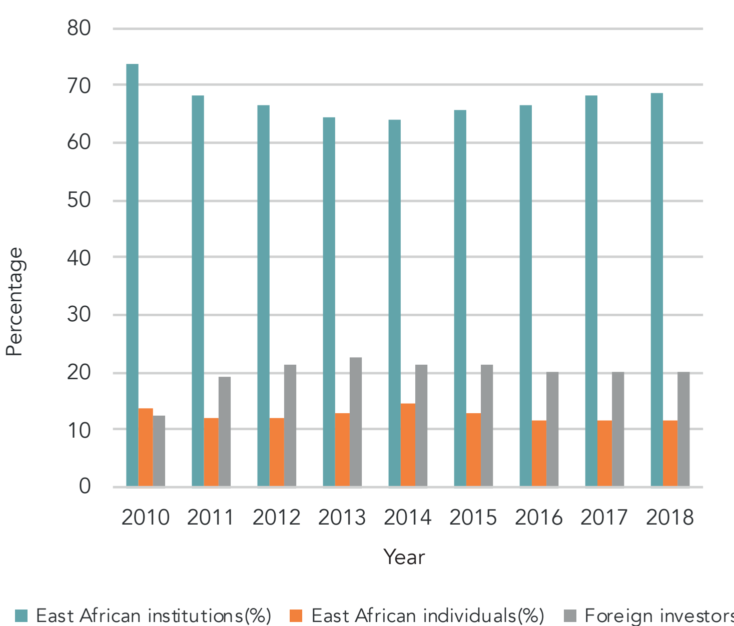
Non-financial firms listed at the NSE dominate the trading of shares. In 2017 and 2018, market turnover for non-financial firms dominated the total market turnover on average at 58 per cent. That said, in the 2010-2018 period, the holding of stocks at the NSE across various investors has remained steady. The East African investors continue to hold most stocks at 68 per cent. Foreign investors have also been constantly holding about 18 per cent of stocks compared to East African individuals whose holding is only 13 per cent (Figure 5.4). Though their holding is lower, foreign investors have dominated in the secondary market trading. In 2018 and 2017, the average foreign investors participation was about 65 per cent. In 2016, their participation was relatively high at 74 per cent from 57 per cent in both 2014 and 2015.

c) Bonds market

The bonds market has witnessed improved performance with total bonds turnover increasing from 479.36 billion in 2010 to 557.72 billion in 2018. Treasury bonds, however, have continued to dominate the market at 99 per cent (Table 5.10). In Malaysia though, government bonds dominate at slightly over 50 per cent while in South Africa, government bonds dominate at 90 per cent.

Besides the fixed coupon bonds, the government has over time issued long term securities, including infrastructure bonds whose proceeds are used for specific projects. This has extended the maturity of Treasury bonds to 30 years. Other efforts to broaden government securities include the launch of Kenya's first mobile-based Treasury bond in 2017. The bond

Figure 5.4: Investors' % holdings at the NSE



Source: Capital Markets Authority (Various), Quarterly Statistical Bulletin

dubbed M-Akiba has a minimum investment level of Ksh 3,000. The M-Akiba bond was expected to enable many Kenyans to access the government debt securities through their mobile phones and at low amounts. The uptake has, however, not been impressive. In 2018, the government floated the second M-Akiba which received a subscription of 79 per cent, an indication of lack of public awareness about the bond.

In the last nine years (2010-2018), only 20 corporate bonds have been issued, raising Ksh 90 billion. This unfavourably compares with aspirator countries such as Malaysia where corporate bonds worth US$ 25.9 billion and US$ 28.9 billion were issued in 2017 and 2018, respectively. Kenya's performance is dismal despite the impressive performance of the government bonds which is a pre-condition for successful corporate bonds market. The period 2014-2015 had the highest number of corporate bonds issued at 12. In most of the issues, there was over-subscription; an indication of unexploited opportunity by firms to raise long term capital. In the period 2010-2018, a total of Ksh 89.5 billion was raised against a target of Ksh 68.5 billion, which was an over-subscription of 131 per cent. Only three of the corporate bonds issued were by non-financial firms mainly in the telecommunication and manufacturing sectors. The collapse of Chase Bank and Imperial Bank, which had issued corporate bonds, affected confidence in the market especially for investors. This is because of uncertainty on the investors recouping their money from the collapsed institutions. The law currently allows the depositors of a collapsed bank to be paid first before the creditors who include bond holders.

Other financing facilities minimally used by non-financial firms listed at the NSE are commercial paper (an unsecured short-term debt instrument issued by firms mainly to cover short-term working capital needs), asset finance, trade finance and leasing. Only 6 firms used commercial paper in the period 2010-2017, mainly in the industrial and allied sector. In the same period, only three (3) finance leases were witnessed in 2010, 2011 and in 2015 (Annex 5.4).

Table 5.10: Bonds performance

Year	Treasury bonds turnover (Ksh billions)	Corporate bonds (Ksh billions) turnover	Total bonds turnover (Ksh billions)	Corporate bonds share of total bond turnover (%)	Treasury bonds turnover share of total bonds turnover (%)
2010	466.89	12.47	479.36	2.6	97.4
2011	437.13	8.52	445.68	1.91	98.09
2012	563.82	1.86	565.68	0.33	99.67
2013	451.58	0.88	452.46	0.19	99.81
2014	504.3	1.95	506.25	0.39	99.61
2015	302.14	2.96	305.1	0.97	99.03
2016	431.59	1.53	433.12	0.35	99.65
2017	432.81	3.08	435.89	0.71	99.29
2018	556.57	1.17	557.72	0.21	99.76

Source: Capital Markets Authority (Various), Quarterly Statistical Bulletin

d) Reforms in the capital markets

The capital markets have witnessed various reforms aimed at increasing efficiency, investors' confidence, products and liquidity.

(i) Efficiency

Such efforts include reducing the equity Settlement Cycle from the previous T+4 to T+3 in 2011 and demutualizing the NSE in 2014. In 2015, the efficiency of settlement of equities and corporate bonds traded at the NSE was enhanced after the settlement process was moved to the CBK's Real Time Gross Settlement System (RTGS). Also, to boost investors' confidence and curb challenges such as duplication of shares, loss and mutilation of certificates, signature mismatches and laborious transfer process, and all paper share certificates at the NSE were converted into electronic format in 2013. The dematerialization conversion of paper into electronic format of corporate bonds also commenced in 2014.

(ii) Products

On expanding capital markets products, the CMA Act was amended in 2011 to facilitate the establishment of a Futures market which is yet to commence operations. To provide SMEs an opportunity to access long-term and relatively cheap capital, and raise their profiles through participation in the NSE, the law was amended in 2012 to create a framework for Growth Enterprise Market Segment (GEMS) within the NSE. So far, only five (5) enterprises are listed in this segment.

Further, the law on Real Estate Investment Trusts (REITs), allowing mobilization of capital for housing development, was enacted in 2013 to allow developers raise money faster and efficiently, thereby accelerating the number of new houses in the economy. To unlock capital for the development of affordable housing and other amenities, the government in 2015 exempted asset transfers and other transactions related to the transfer of assets into Real Estate Investment Trusts (REITs) and Assets Backed Securities (ABS) from stamp duty. REITs and ABS are investment vehicles which offer developers, including county governments, source funds to undertake development projects in infrastructure, housing, health care and energy. The first Income Real Estate Investment Trust (REIT) scheme in Kenya was approved in 2015. Since then, only one REIT has been issued and listed at the NSE.

(iii) Liquidity

To improve liquidity at the NSE, the government removed the 5 per cent capital gains tax on sale of shares introduced in 2014 due to challenges in its implementation. Instead, a 0.3 per cent withholding tax on the transaction value of the shares was introduced in 2015. Also, to boost local and foreign investment, the code of corporate governance practices for issuers of securities to the public and the guidelines on the prevention of money laundering and terrorism financing in the capital markets were gazetted in 2016. Also, as efforts to improve the market environment for issuance of securities, amendments to the Capital Markets (Licensing Requirements) (General) (Amendment) regulations were also gazetted in the same period. These amendments introduced a maximum fee of Ksh 30 million for issuers of equity securities, which was previously 0.15 per cent of the total value of issue. Also, corporate and government bonds approval fees were capped at Ksh 30 million and Ksh 50 million, respectively. The transaction levy charged by CDSC was increased from 0.06 per cent to 0.08 per cent of the value of a given transaction. However, to compensate for this increase, transaction fees levied by brokers were reduced from 1.78 per cent to 1.76 per cent.

(iv) Investors' confidence

To promote investment in the East African region, companies listed across the East African region were allowed in 2012 to require just one

regulatory approval to raise money through corporate bonds. This was to enable the companies have access to a larger pool of capital in case they need to raise funds. Further, in 2013, as part of efforts to standardize capital market regulations across East African countries, the East African capital market regulators agreed to set uniform capital adequacy rules applicable to stockbrokers, investment banks, fund managers and all other intermediaries licensed to operate across the region. Additionally, regulators resolved in 2015 to develop a framework for minimum requirements for regular and additional disclosures; harmonize regulations on market abuse offences; harmonize the licensing requirements for fund managers; and develop a mechanism for sharing daily trading statistics among members. The regulators also agreed on the minimum capital adequacy requirement for the proposed regional broker license. The capital market regulators, further in 2016, approved the fast-tracking of the adoption and implementation of the risk-based supervision among all regulators in the region. Additionally, the regulators adopted the online submission of financial statements to facilitate timely and efficient analysis of financial statements.

5.2.3 Insurance sector

The insurance sector plays a critical role in financial and economic development. As financial intermediaries with long investment horizons, insurance companies especially those in long term insurance business can contribute to the provision of long-term finance and more effective risk management. To develop and enhance surveillance in the insurance sector in Kenya, the Insurance Regulatory Authority (IRA) was established through the Insurance (Amendment) Act, 2006. The Act is implemented through regulations and guidelines issued to insurers by the IRA from time to time. Prior to this, the insurance sector was supervised by the Department of Insurance in the Ministry of Finance, headed by the Commissioner of Insurance. Like other sub-sectors of the financial sector, it was also important to have an independent body to regulate and develop the insurance sector.

(a) Premiums and profitability

The insurance industry in Kenya has witnessed a growth in premiums of about 2.8 times in the last nine years (Table 5.11). Though the number of insurance companies has remained stable at an average of 50 companies, gross premiums grew to Ksh 215 billion in 2018 from Ksh 77 billion in 2010. The general insurance business, however, dominates the premiums at about 68 per cent compared to long term insurance business (life insurance) at 32 per cent. The industry's profit after tax grew by about 80 per cent to Ksh 14 billion in 2017 from Ksh 8 billion in 2010. However, the profit after tax declined to Ksh 7 billion in 2018.

Table 5.11: Insurance sector selected indicators

Indicator	2010	2011	2012	2013	2014	2015	2016	2017	2017
Number of insurance companies	47	47	47	48	50	51	52	52	53
Gross direct premium (Ksh billions)	77	90	112	129	156	173	195	208	215
Assets (Ksh billions)	9	246	311	366	431	479	529	591	635
Operating profit/loss after taxation (Ksh billions)	8	15	13	20	17	14	13	14	7

Source: Insurance Regulatory Authority (Various), Annual reports

(b) Assets

As at 2018, the assets were Ksh 635 billion compared to Ksh 223 billion in 2010. The strengthening of the supervisory framework by IRA is a contributing factor to the growth of the assets. Kenya' insurance industry assets/GDP ratio has, however, averaged 10 per cent in the last eight years. (Annex 5.2). Aspirator countries have a higher ratio compared to Kenya. South Korea has about 60 per cent, Singapore has 40 per cent and Malaysia and Thailand both have an average of 20 per cent.

(c) Insurance penetration

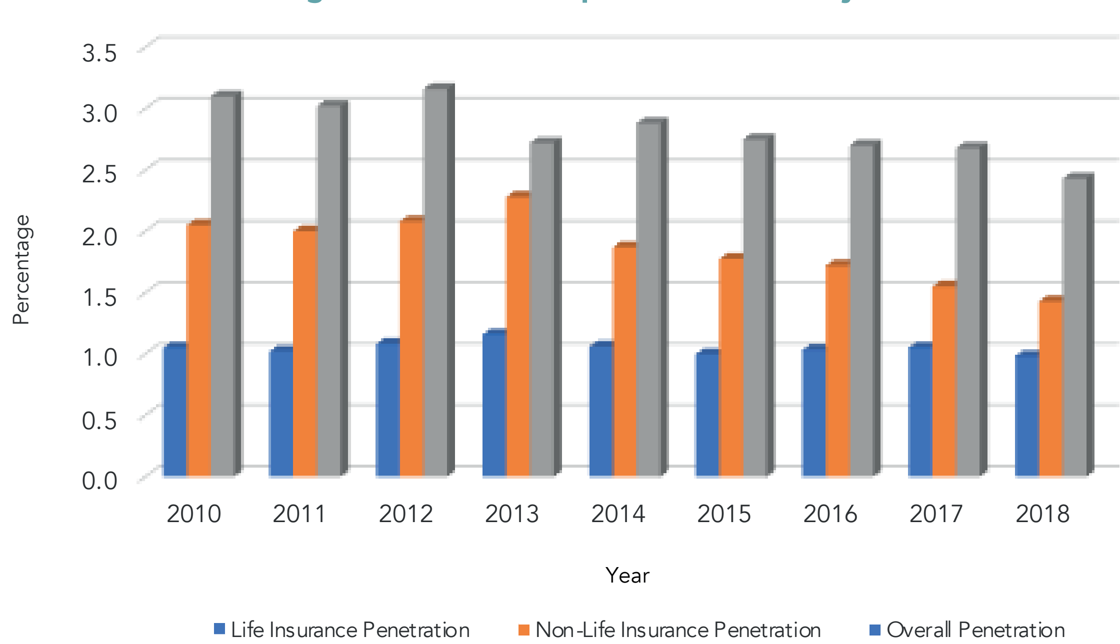
Though there have been efforts to improve insurance penetration in the country, the rate has remained steady at 3 per cent (Figure 5.5). Such efforts include the licensing agents by IRA provided they have attained the Certificate of Proficiency and met other licensing requirements. Previously, agents had to be recommended by an insurance company to be registered. Also, in 2016, the Insurance Act was amended to facilitate the licensing and supervision of the *Takaful* (Islamic) insurance business in Kenya. This was aimed at broadening insurance products. Also, the insurance industry got a boost after the law was amended to allow all importers of goods into the country to get insurances services from companies registered in Kenya.

Kenyans using insurance has remained stagnant at 6 per cent (Financial Sector Deepening, 2016). The main reasons for Kenyans not taking insurance are lack of awareness about insurance (40.9%) and inability to afford (35.2%).

(d) Investments

While general insurance dominates in premiums, the long-term insurance business has the largest share of investments made by insurance companies. This is because compared to general insurance business, long term business provides funds for long-term investment horizons. In the last nine years, a total of Ksh 2 trillion from long term insurance business had been invested across various portfolios, compared to Ksh 911 billion from the general insurance business. Table 5.12 shows the distribution of investments made from the long-term insurance business.

Figure 5.5: Insurance penetration in Kenya



Source: Association of Kenya Insurers (various issues)

Table 5.12: Long-term insurance business investments (%)

Indicator	2010	2011	2012	2013	2014	2015	2016	2017	2018
Investment Property	11.8	8.2	11.6	14.9	14.2	13.8	13.4	12.7	12.3
Government Securities	40.2	48.4	45.6	47.5	45.2	49.8	55.2	58.0	61.6
Other Securities	3.8	1.0	0.3	0.9	1.1	0.5	2.7	3.3	3.0
Preference Shares	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1
Ordinary Shares	26.2	19.4	17.2	17.0	17.6	13.7	11.2	12.1	10.0
Investment in Subsidiaries	0.0	0.0	0.0	1.7	3.0	2.6	2.2	1.7	1.6
Loans	4.5	5.3	3.3	1.7	1.3	1.4	2.7	2.2	2.1
Bank Deposits	13.6	15.9	15.8	11.5	12.2	12.0	8.6	6.8	6.8
Other Investments	0.0	1.8	6.2	4.5	5.3	6.1	3.9	3.1	2.4
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100**

Source: Capital Markets Authority (Various), Quarterly Statistical Bulletin

On average, 50.0 per cent of the investments have been in government securities,12.5 per cent in property, 16.0 per cent in ordinary shares and 11.5 per cent in bank deposits. Therefore, about 61 per cent of these funds are put into short-term investments, yet these are long-term funds. Hence, the need to encourage companies to put these funds in long term investment. In Malaysia, investments in corporate debt and securities consisted of 60 per cent of assets of Life insurance funds in the period 2010-2017.

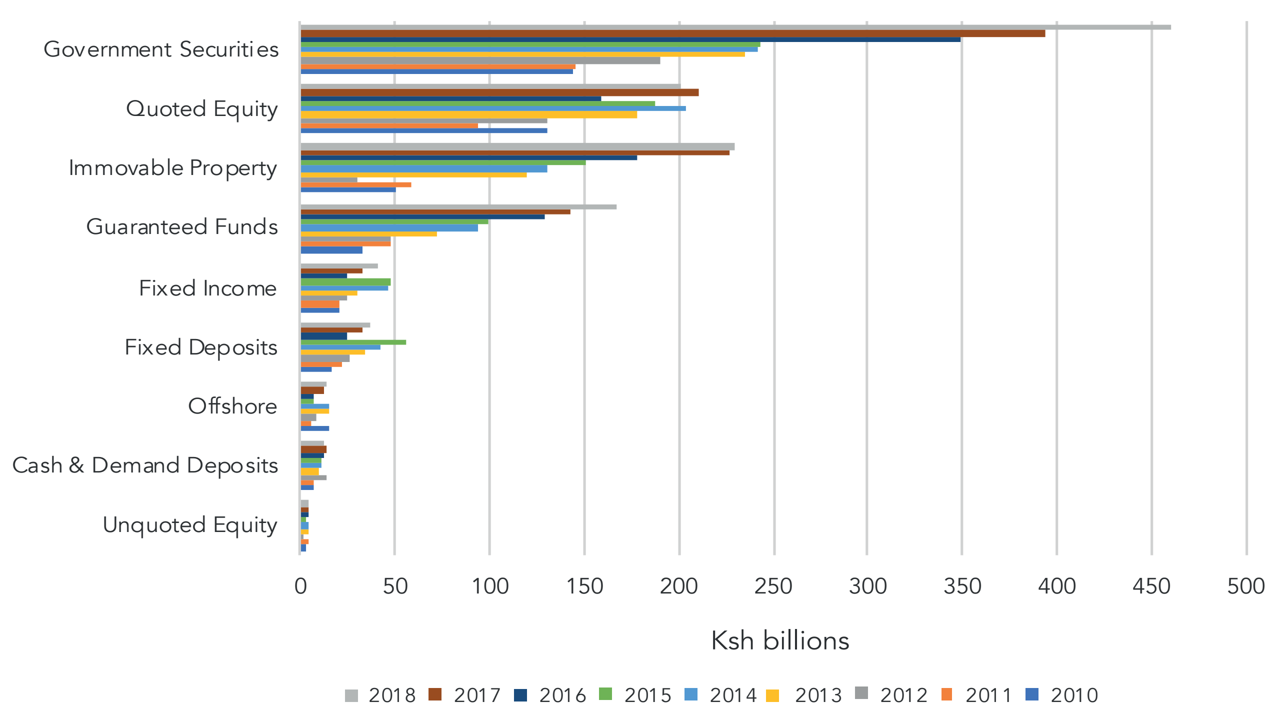
5.2.4 Pension sector

Pension schemes mobilize long-term capital which is important for investment and economic growth. Therefore, pension funds not only form an important core of contractual savings in Kenya but also an important pool of resources by which to augment domestic savings. Indeed, an important economic premise upon which the Retirement Benefits Authority (RBA) - which regulates the pension industry in Kenya - was founded to mobilize domestic savings for economic development.

The pension industry's assets grew by 177 per cent to Ksh 1,165 billion in 2018 from Ksh 420 billion in 2010. Kenya's pension assets/GDP ratio is, however, low at 13 per cent compared to aspirator countries such as Chile, Malaysia, Singapore and South Korea whose ratio ranges from 27 to 70 per cent. Pension schemes invest over 97 per cent of their funds mainly to nine (9) main classes of assets. These assets are: Cash and Demand Deposits, Fixed Deposits, Guaranteed Funds, Government Securities, Fixed Income, Quoted Equity, Unquoted Equity, Immovable Property and Offshore. Figure 5.6 shows the trend of investments in the nine (9) different classes of assets over time. Pension schemes' leading investment is in government securities (averaging 36% for the period 2010-2018) which are considered risk-free. Other dominating investment is in quoted equity (averaging 22%), immovable property (averaging 17.5%) and guaranteed funds (averaging 12%).

The coverage of the pension sector has continued to grow, with individual retirement benefit schemes being the driving force. The Blue MSME's *Jua Kali* retirement benefits

Figure 5.6: Main different assets investment trends (Ksh billions)



Source: Retirement Benefits Authority (Various), Annual reports

scheme dominates by having 46 per cent of membership of total individual schemes membership. The sensitization efforts by RBA have contributed to the growth of individual schemes. Other efforts include the enactment of the National Social Security Fund (NSSF) Act 2013 which was to increase social security in the country. Pension contribution was put at 12 per cent of the pensionable wages made up of two equal portions of 6 per cent from the employee and 6 per cent from the employer, progressively. The implementation of the new Act was expected to boost national savings. Many Kenyans, however, continue to be left out especially those in the informal sector which employs over 12 million people. Further, the Kenyan population is mainly youth dominated with about 42 per cent being in the working age. Therefore, the potential to mobilize savings is huge and unexploited since, as at 2016, only about 12.5 per cent of the population were enrolled in a pension scheme (Financial Sector Deepening, 2016).

5.2.5 SACCOS

Savings and Credit Cooperative Societies (SACCOs) are a major source of savings and credit to millions of low-income people in Kenya. In recognition of this fact, the SACCO Societies Regulatory Authority (SASRA) was established under the SACCO Societies Act 2008. The gazettement of the SACCO Societies (deposit-taking SACCO Business) Regulations in 2010 operationalized the Act. SASRA's mandate includes, among other things: licensing, regulating and supervising deposit-taking SACCOs. In 2015, SASRA was allowed to undertake vetting of directors and key officials of SACCOs as a way of strengthening governance in the sector. Also, the SACCOs were allowed to share both negative and positive information on their clients with other financial institutions within the credit information sharing mechanism. This move was aimed at dealing with liquidity problems emanating from non-performing loans in the industry.

The assets, deposits and gross loans of SACCOs have witnessed a tremendous growth of about three times in the last nine years. The assets, deposits and loans grew to Ksh 495 billion, Ksh 342 billion and Ksh 374 billion in 2018 from Ksh 146 billion, Ksh 105 billion and Ksh 106 billion in 2010, respectively (Figure 5.7).

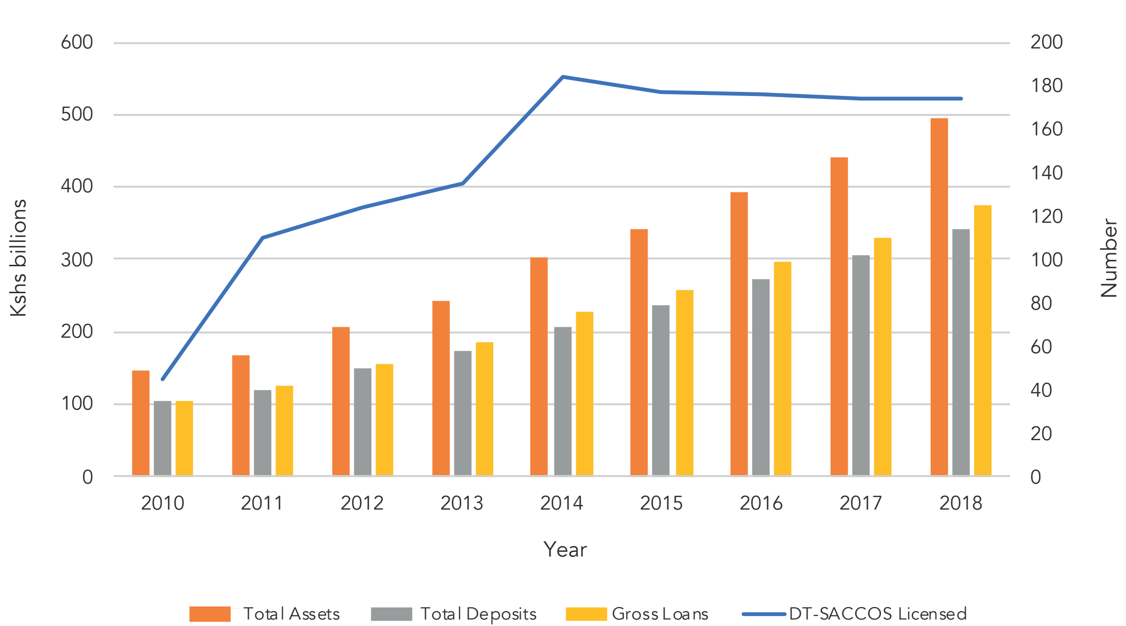
SACCOs' loan portfolio to members constitute over 70 per cent of total assets. Investment in financial assets averages 4.5 per cent while investment in property and equipment is about 8 per cent. In 2018, loans to members was ksh 359 billion compared to Ksh 320.5 billion in 2017. In the same period, financial investments were Ksh 27 billion from Ksh 20.9 billion in 2017. Over 80 per cent of the financial investments is on loans to other SACCOs and investments in equities and stocks. Investment in government securities is minimal at less than 3 per cent.

5.2.6 Development Financial Institutions

Development Financial Institutions (DFIs) in Kenya were deliberately established in 1960s to provide firms and projects with equity and long-term loans which commercial banks were unable and/or unwilling to provide (Popiel, 1994). DFIs played a key role in development by offering several products including finance, work space, business development services and technological development. These institutions relied on Kenyan government and external financing. External financiers were international and regional financial bodies such as World Bank, and foreign governments. The funding was in-form of loans and grants. The government guaranteed most of the foreign lines of credit.

However, due to perennial default of loans by DFIs, the government withdrew the guarantee of foreign credit. The default on loans by the institutions was mainly occasioned by inability of the financed projects to repay their loans. This has continued to constrain the institutions from financing their activities. Insufficient internally generated funds have exacerbated the situation. Further, coupled with unattractive balance sheets, DFIs lack the autonomy to raise funds. Therefore, it has increasingly become difficult for these institutions to mobilize enough financial resources locally and from foreign sources.

Figure 5.7: SACCOs assets, deposits and gross loans performance



Source: SASRA (Various), Annual Reports

Table 5.13: Development financial institutions: Loans advanced (Ksh millions) and industrial projects approved

Institution		2013	2014	2015	2016	2017	2018
IDB Capital Limited	Loans (Ksh millions)	339.1	74.2	252	129.8	200.1	551.8
	Projects	5	3	5	3	3	8
Development Bank of Kenya	Loans (Ksh millions)	230	66.6	341	292	130.5	230
	Projects	4	2	6	6	3	3
Kenya Industrial Estates Limited	Loans (Ksh millions)	104.5	194.3	120.8	165.3	181	243.7
	Projects	257	543	233	325	280	225
Industrial and Commercial Development Corporation	Loans (Ksh millions)	431.6	234	421.2	495.6	791	315
	Projects	2	1	7	4	7	4
Total loans		**1,105.2**	**569.1**	**1135**	**1083**	**1302.6**	**1340.5**

Source of data: KNBS (2018 & 2019), Economic Survey

The total number of projects approved for financing by DFIs more than doubled to 549 in 2014 from 268 in 2013, with Kenya Industrial Estates (KIE) having the largest proportion (Table 5.13). ICDC and IDB, however, lead in total loans advanced at Ksh 2.7 billion and Ksh 1.5 billion, respectively, in the 2013 to 2018 period. In the same period, the total amount advanced by all the four DFIs was Ksh 6.5 billion. In South Africa, the Industrial Development Corporation, a DFI wholly owned by the government disbursed about Ksh 480 billion in the period 2013 to 2017. Thus, while DFIs have role in an economy's development process, Kenyan DFIs are not fully playing their role. The development process requires adequate and appropriate financing to achieve the targeted goals. Despite the poor performance of DFIs in Kenya, their role in the development process remains crucial. To strengthen their operations, the government is proposing to merge the DFIs to enable them to perform their role effectively.

5.3 Key Messages and Recommendations

5.3.1 Key messages

1. Though the growth of the financial sector in Kenya has slowed over time, its contribution to GDP has remained stable. This notwithstanding, the performance of banks, capital markets, insurance, pension and SACCO sub-sectors has been steadily increasing. This is attributed to the various reforms undertaken by the government with aim of developing Kenya as an internationally competitive financial centre by improving on access, efficiency and stability. The Nairobi International Financial Centre Authority is mandated to develop an efficient and globally competitive financial sector that generates high levels of national savings and investment.

2. Locally-owned banks in Kenya own slightly over 50 per cent of the market share of net assets. Assets have more than doubled in the last eight years, mainly supported by investments in government securities. The assets/GDP ratio has also increased from 54 to 89 per cent. This is an indication of a strong asset base which is critical in marshalling financial resources. However, compared to other comparator and aspirator countries, Kenya assets/GDP ratio is low.
3. Bank credit to the private sector has increased in nominal terms by 2.6 times in the last eight years. However, with the advent of interest rate capping, the small banks have benefited as their share of loans increased compared to that of the medium and the large banks. Though banks face no funding constraint in the provision of private sector credit, there is need to expand their deposit base to achieve a private sector credit GDP ratio of above 100 per cent.
4. With persistently high levels of non-performing loans, risk premium on credit has increased and, without an appropriate pricing system for bank loans, it may be difficult to see the private sector credit growing faster than the current rates. In Kenya, non-performing loans ratio is 12.3 per cent which unfavourably compares with aspirator economies such as South Korea, Chile, China, Thailand, and Malaysia where the ratio ranges from 1.5 to 3.1 per cent. Consequently, the lending rates in these countries are below 5 per cent compared to Kenya rates of more than 10 per cent.
5. There is unexploited opportunity by firms to raise long-term capital from capital markets in Kenya mainly through equities and fixed income securities. The markets have achieved minimal success in raising funds even with reforms to increase efficiency, investors' confidence, products and liquidity. The primary equities market has witnessed only three IPOs in the last eight years. Despite impressive performance by Treasury bonds in the bonds market, only 20 corporate bonds (3 by non-financial firms) have been issued in the last eight years. The recent experience of firms listing corporate bonds and then collapsing has waned investor confidence, hence taking a toll on the corporate bonds market.
6. To facilitate mobilization of long-term capital from the insurance industry, there is need to increase the penetration especially for long term insurance business products. Though the insurance industry in Kenya has witnessed a growth of about 1.7 times in premiums, the general insurance business dominates the premiums at about 68 per cent compared to long term insurance business at 32 per cent. Furthermore, with information gaps the uptake of insurance products has been slow.
7. The potential in the pension sector in mobilizing savings is yet to be exploited since many Kenyans, especially those in the informal sector which employs over 12 million people, continue to be left out. Further, the continued high investment of funds in government securities denies other sectors of the economy the much-needed capital.
8. DFIs which can supplement other financial institutions in provision of equity and long-term loans' enterprises and projects continue to be financially incapacitated.

5.3.2 Recommendations

1. There is need to cultivate a savings culture to build the banking sector's deposit base. Further, it is important to reduce transaction costs including taxes on financial transactions and diversify the deposits products to attract more customers.
2. While some efforts have been made to mitigate risks of using advanced technology in the financial sector, there is need to remain vigilant to support in monitoring potential

risks and responding appropriately and in timely manner should they materialize.

3. For effective utilization of information from CRBs in pricing loans, there is need to deepen and improve on the quality of data produced by CRBs. This is critical in managing the risk premium on loans and realize affordable credit and scaling up the provision of credit to the private sector. This is also important in reducing the high non-performing loans.

4. To curb the increasing NPLs, continuous provision of a conducive environment for businesses is critical. Further, sustaining a stable political and macroeconomic environment, and strengthening the legal and institutional framework especially in enforcing of contracts should not be ignored.

5. Investor education in awareness creation remains a priority in exploiting opportunity in the capital markets and boosting of investors' confidence. More importantly, to restore confidence in the corporate bonds market, there is need to review compensation procedures for investors and information sharing in supporting decision making by investors.

6. There is also need to expedite the establishment of regulations on Islamic banking and use of Islamic financial instruments such as Sukuk bonds. These have been used successfully by many countries such as Malaysia to mobilize financial resources for development.

7. To increase coverage of pension schemes, there is need to target those people working in the informal sector. Efforts by RBA to create awareness on pension should be intensified in collaboration with other players in the pension industry. Further, there is need to redefine the pension schemes' investment and risk allocation strategies to facilitate much more diverse investment of the pension funds.

8. Creating awareness on insurance products remains a key priority in increasing insurance penetration. Therefore, the Insurance Regulatory Authority in partnership with insurance companies need to escalate the efforts in creating awareness on insurance. This should be coupled by availing friendly and affordable products to entice uptake. Further, for clients to have confidence in the insurance industry, IRA should continuously guard against exploitation of clients and malpractices.

9. The assets, deposits and gross loans from SACCOs have witnessed a tremendous growth of about three times in the last eight years. Besides lending to their members, they present an opportunity to provide capital to sectors of the economy. There is therefore need to mobilize more deposits from members and sustain them.

10. The proposed reforms targeting the merger of DFIs should facilitate provision of equity and mobilization of long-term finance that supports industrial capacity development by proactively identifying and funding high-impact projects, leading to creation of viable new industries; and having diverse industry expertise to drive growth in priority sectors and taking up higher-risk funding projects.

CHAPTER 6

HARNESSING DIASPORA RESOURCES FOR SUSTAINABLE DEVELOPMENT

Diaspora resources play a significant role in enhancing economic growth and development by availing financial resources and enhancing skills, knowledge and technology. In the realization of the Kenya Vision 2030, the role of the diaspora is geared towards driving investments in the priority sectors of the economy. Diaspora remittances have multiplier effects in the economy through savings, investments, fiscal and debt sustainability. At household level, remittances directly improve the livelihoods of migrant families in meeting basic needs, increasing savings and building assets for future stability. In Kenya, there has a been a rapid growth in diaspora remittances in the recent past following increased migration of skilled, semi-skilled and non-skilled workers in search of employment opportunities. The growth has largely been driven by improved policy and regulatory framework, and collaboration and partnerships with the international community which have increased the use of formal channels of remittances. However, sustained efforts are needed to lower the cost of transactions, eliminate restrictive practices, protect migrant workers' rights and conditions of work, and strengthen information and data management. Besides, the government could consider introducing diaspora bonds as alternative means of raising funds for long-term investments.

6.1 Introduction

Diaspora remittances are a key source of investments and an enabler of economic growth and sustainable development. According to the United Nations Sustainable Development Goals (SDGs), remittances by migrants to their families back home are fundamental for governments, international organizations and other partners in realizing their sustainable development objectives. They have multiplier effects in the economy through savings, investments, fiscal and debt sustainability. This is manifested in the consumption decisions, savings patterns and activities of remittance-receiving households (Abdih et al., 2009). For instance, when household's consumption increases, remittances expand the revenue base and allow the government to carry more debt or incur more expenditure.

At household level, remittances support start-up of smallscale enterprises while increased household consumption inspired by remittances increases the demand for locally produced goods and services. In addition, remittances are a vital source of income for health and nutrition, education opportunities, improved housing

and sanitation, entrepreneurship, financial inclusion and reduced inequality (Odipo et al., 2015). The recipients can invest for the future by increasing savings and building assets (IFAD, 2017; 2019). Empirical evidence suggests that migrant remittances alleviate poverty in low and developing economies through positive impacts on economic growth and household incomes (Adams 2011; Adams and Page, 2005; Adams and Cuecuecha, 2013 Acharya and Leon-Gonzalez, 2012; Beyene, 2014; Azam et al., 2016; and Tsarai, 2018).

Kenya has in recent decades become an active participant in international migration as a source, transit point and destination country for migrants. This follows increased migration of professionals, including doctors, lawyers, university lecturers, and other highly skilled professionals in search of better opportunities in western Europe, South Africa, Botswana, Uganda, Australia, Canada, and the United States. From early 1990s, Kenyan high school and elementary school teachers have been moving to countries such as Malawi, Comoros Islands, Seychelles, Rwanda, Burundi, and the Congo to fill teaching vacancies. In addition, many Kenyans are pursuing opportunities in low-skilled positions as drivers, domestic servants, cruise ship attendants, and security guards in Gulf countries such as Saudi Arabia, Qatar, and Bahrain as evidenced by the rising number of employment bureaus. Presently, the number of Kenyans abroad is estimated to be about three (3) million and is on the rise (Government of Kenya, 2014c; Whitaker and Ochuodho, 2017).

6.2 Policy Agenda

The Kenya Vision 2030 recognizes the diaspora contribution as an important enabler to the growth and development of the economy and is accordingly identified as a flagship project. The diaspora is expected to drive investments in the priority sectors of the economy, including physical infrastructure, education, financial services, health, housing, ICT-enabled services, Business Process Outsourcing (BPO), manufacturing and tourism. Apart from financial remittances, there is enormous potential in skills, expertise and knowledge by Kenyans abroad (Government of Kenya, 2014c).

The Kenya Diaspora Policy (2014) stipulates an implementation, monitoring and evaluation framework for mainstreaming and ensuring effective participation of Kenyans abroad in the national development agenda. The policy seeks to empower Kenyans abroad to effectively make greater contribution to the development of the country. Specifically, it aims to tap into remittances, skills, expertise and transfer of knowledge.

The key institutions involved include the Ministry of Foreign Affairs and International Trade, which is mandated to manage and facilitate coordination of diaspora matters in Kenya. Other key players include various line Ministries, Departments and Agencies (MDAs), associations of Kenyans, development partners, private sector, civil society, non-governmental organizations (NGOs), community-based organizations (CBOs) and faith-based organizations (FBOs).

There has been sustained regulatory reforms aimed at streamlining and effectively guiding diaspora remittances over the past decade. Some of the key legislations enacted include the Central Bank Act (Cap 491) and the Money Remittance Regulations 2013, the National Payment System Act 2011, and the E-money Regulation 2013. The money remittance regulations under the Central Bank Act provide guidelines for licensing and operations for remittance operators and anti-money laundering measures. Implementation of these laws and regulations has led to increased use of formal channels of remittances, such as banks, away from the informal channels.

Moreover, there is growing partnership between local and international money transfer providers under the guidance of the Central Bank of Kenya. There are also regional and global efforts towards mobilizing and channeling diaspora contribution towards economic development. The African Union recognizes the role of the diaspora in the development of Africa. Indeed, the Global Africa Diaspora Summit of May 2012 underscored the need to build sustainable partnerships between the African continent and the African diaspora through sustainable dialogue and effective collaboration with governments where diaspora populations are located (Government of Kenya, 2014c). Kenya ratified the Amendment to the AU Constitutive Act Article 3(q) that invites and encourages the full participation of the African diaspora as an important part of the continent in the building of the African Union. In addition, the African Diaspora Network in Europe (ADNE) advocates for the voice of diaspora to be included in development policy planning both in Africa and in Europe (Madichie and Madichie, 2017).

According to Madichie and Madichie (2017), African governments and other stakeholders could work towards actualization and effective implementation of three key initiatives, namely: (i) leveraging diaspora remittances, trade and investment; (ii) capacity building (transfer of skills, knowledge and technology); and (iii) advocacy and involvement in development policy making and implementation process. Another regional initiative is the World Bank's "Send Money Africa" remittance-price database project launched in 2011. The project monitors the cost of sending money to Africa and enables users to compare the costs charged by several providers to send money from 16 major remittance-sending countries (across Europe, the Middle East, North America and within Africa itself) to 28 African remittance-receiving countries. Kenya also hosts the African Union's African Institute of Remittances which is expected to build capacities of member States, remittance senders and recipients, and other stakeholders to manage remittances once it becomes fully operational.

So far, policy reforms have contributed in considerable progress in making the mobile payment systems serve as a model for remittance markets in Sub-Saharan Africa. The convenience of mobile transfer has further contributed to increase in volume of remittances. The move has also opened the market for mobile technology, with the introduction of M-Pesa by Safaricom, an electronic payment system easily accessible through mobile phones, and the recent cooperation of Safaricom with Western Union. This will further see transfer of knowledge, skills and expertise.

At the global level, the SDGs provide a unique opportunity to create a convergence between the goals of remittance families, government development objectives, private sector strategies to tap underserved markets, and the traditional role of civil society to promote positive change (IFAD, 2017; 2019). Thus, initiatives such as the Global Compact for Safe, Orderly and Regular Migration demonstrates the international community's recognition that remittances support hundreds of millions of people across the globe and strengthen their development impact on families and communities. Specifically, SDG No. 10 seeks to reduce remittance costs to less than 3 per cent and to eliminate remittance corridors with costs higher than 5 per cent by 2030.

6.3 Performance of Diaspora Remittances

6.3.1 Inflow of remittances

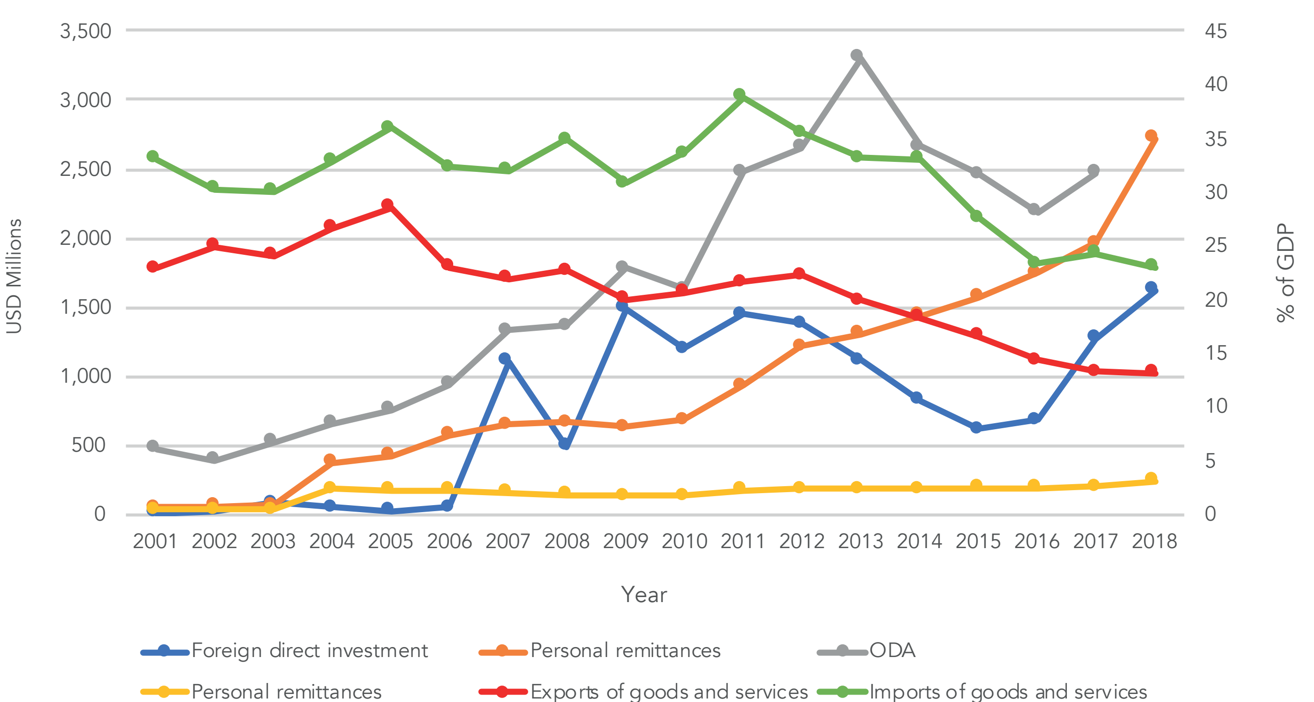
Remittances have in the recent past proven to be a major source of economic growth and development the world over. According to the Global Migration Indicators (2018), low income countries and developing countries received US$ 466 billion in form of international migrant remittances in 2017 out of the world's total of US$ 613 billion that was sent by migrant

labour to their home countries. In Kenya, total remittance inflows more than tripled during the last one decade, increasing from US$ 645 million in 2017 to US$ 2.7 billion in 2018 (Figure 6.1). During the period 2016 to 2018 alone, total remittances increased by about 60 per cent from US$ 1.7 billion to US$ 2.7 billion. The slow growth in remittances during the year 2008 was mainly attributed to the global financial crunch. Despite the upward trend in growth of personal remittances, its share to GDP in Kenya is relatively low at an average of 2.5 per cent compared to the share of total exports of goods and services which stood at about 14 per cent during 2017.

The improved personal remittances are largely attributed to improved information systems, adoption of new savings and resource mobilization tools, including savings and infrastructure bond issues and subsequent awareness campaigns about formal channels of investments by diaspora groups. Besides, development of new technologies in financial services has transformed and expanded the remittances industry. These developments coupled with modern regulatory frameworks have together enabled increased competition among money transfer providers, thus reducing transaction costs and encouraging the use of formal remittance channels.

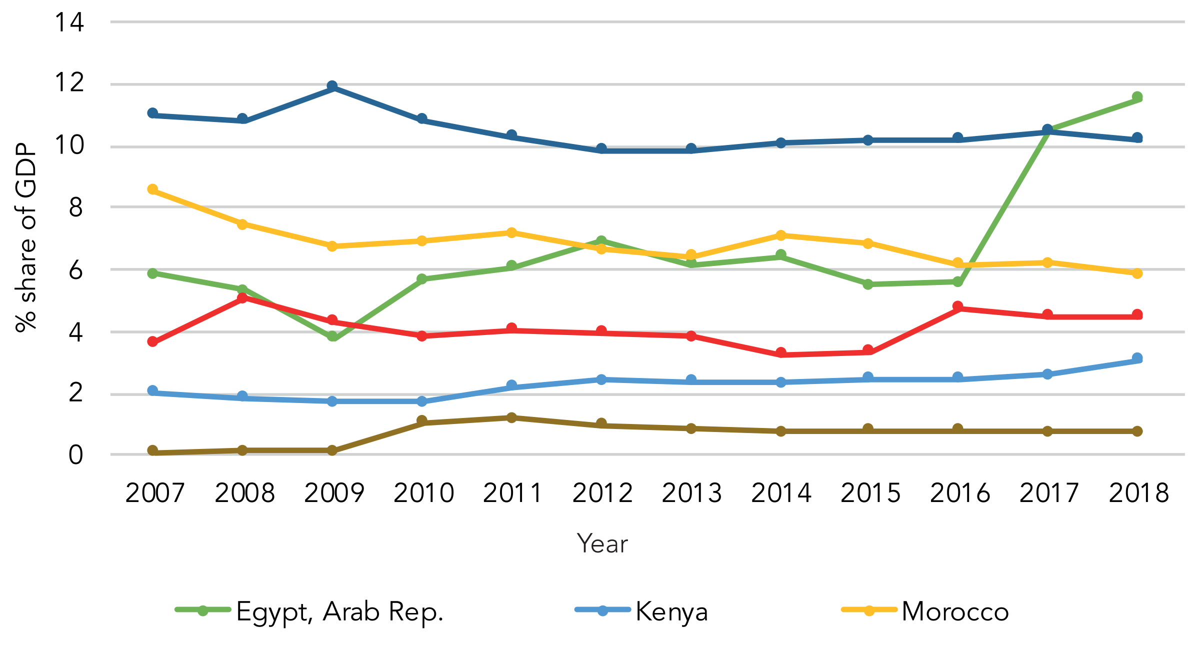
The importance of remittances is further demonstrated by the rise in share of remittances to GDP. According to the Central Bank of Kenya (2018b), the increase in remittances reflects continued resilience partly supported by the success of mobile money services. These have partnered with traditional remittance providers in availing alternatives to the traditional models, including instant online money transfers to mobile accounts. Over time, online transfers have become more convenient and cheaper, thereby increasing the volume of inflows into the country. However, remittances into Kenya, which stood at about 3 per cent in 2018, are low compared to other comparator countries. For instance, remittances for Egypt were about 11.5 per cent of GDP in 2018 whereas the Philippines, Morocco and Uganda registered 10.2, 5.8 and 4.5 per cent, respectively (Figure 6.2).

Figure 6.1: Performance of remittances and other inflows into Kenya, 2001-2018



Source: World Bank (2019), World Development Indicators

Figure 6.2: Comparative share of remittances to GDP, 2007-2018



Source: World Bank (2018), World Development Indicators

6.3.2 Sources of diaspora remittances to Kenya

According to the 2016 Kenya Diaspora Survey (Whitaker and Ochuodho, 2017), Kenyan emigrants are spread across 67 countries, with largest concentrations in the United States (33%), United Kingdom (8%), Japan (7%), Uganda (5%), China (5%), and Canada (5%). In terms of remittances, 65 per cent of respondents send money to family, friends, or associates in Kenya at least once each month.

Consequently, the leading sources of remittances into Kenya in the recent past are North America, Europe and Asia (particularly the United Arab Emirates and Saudi Arabia). During 2018, remittances from North America amounted to about US$ 1.38 billion while those from Europe were about US$ 862.6 million and rest of the world US$ 446.3 million (Figure 6.3).

In terms of bilateral inflows, the United Kingdom was the biggest source of remittances accounting for 35 per cent of total remittances followed by United States of America at 30 per cent in 2017. The leading sources of remittances into Kenya from Africa are Tanzania, Uganda and South Africa which accounted for 7 per cent, 5 per cent and 3 per cent, respectively.

While 33 per cent of diaspora population lived in the United States compared to 8 per cent in the United Kingdom, 34 per cent of total remittances came from United Kingdom compared to 30 per cent from United States during 2017. This implies that per capita remittances from the United Kingdom is higher compared to those from United States. This could also mean that there are better skilled migrants and better paying jobs in the United Kingdom compared to United States.

Figure 6.3: Sources of remittances into Kenya by region and in US$, 2007-2018

US$

1,200,000
1,000,000
800,000
600,000
400,000
200,000
-

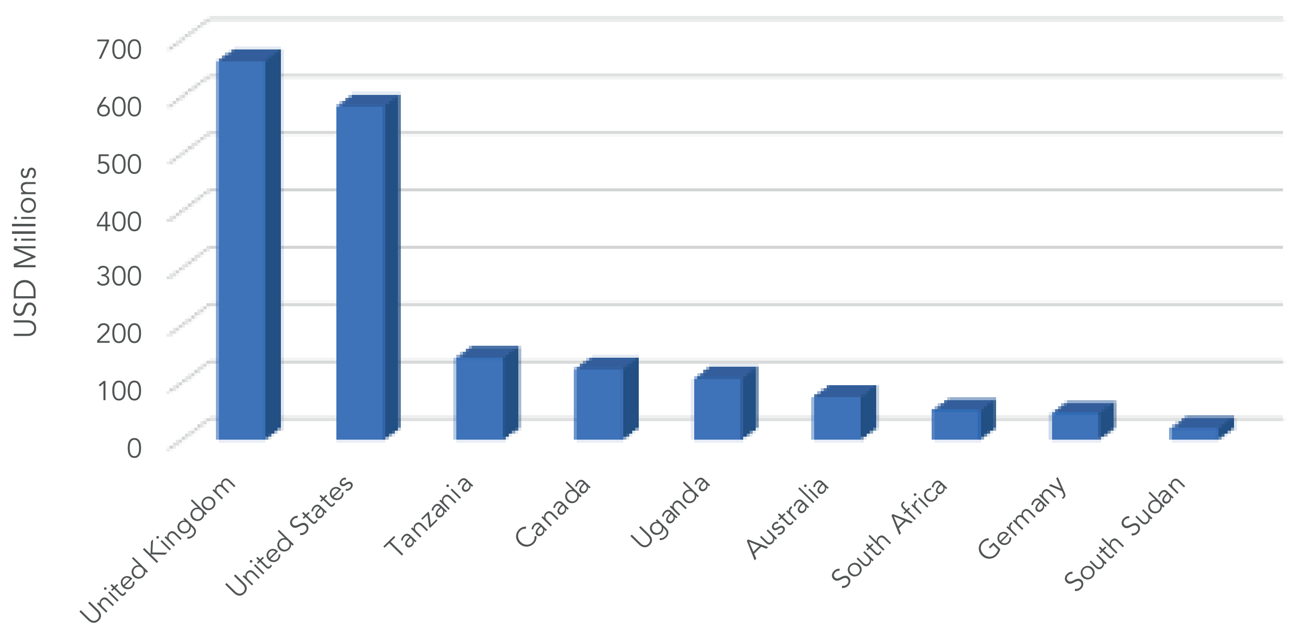
2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

Year

North America Europe Rest of the world

Source: World Bank (2018b), World Development Indicators

Figure 6.4: Bilateral inflow of remittances to Kenya in 2017



Source: World Bank (2018b), World Development Indicators

6.4 Migration and Remittances: Some Lessons from Best Practices

Countries such as China, India, Mexico, the Philippines and Israel have significantly benefited by capitalizing on links with their diaspora. They do this by instituting measures to design policies and legislation to create an enabling environment for the diaspora to participate fully and contribute to the development of their countries. The Philippine government has, for instance, taken a two-pronged approach to facilitating the flow of remittances from overseas. One is to improve financial services regulations and providing incentive-based programmes, including savings and investment facilities and tax discounts to encourage formal remittances where the government provides investment facilities to social enterprises. The other strategy is the use of the Diaspora Bond, which is a debt instrument issued to raise financing from its overseas diaspora. Moreover, remittance securitization, which involves a bank pledging its future remittance receivables to an offshore Special Purpose Vehicle (SPV) which issues the debt, provides access to a reliable, cheaper and relatively stable source of financing.

Similarly, Israel and India use investment bonds to raise development funding. In 2013, Israel bond investments exceeded US$ 1.12 billion. The State Bank of India's first offering of this nature was India Development Bonds in 1991. This was followed by Resurgent India Bonds in 1998 and India Millennium Deposits in 2000. More than US$ 11 million have been raised from these issuances.

South Africa has developed new and unconventional methods to make formal remittance transfers cheaper, faster and safer. Some of the strategies undertaken include lifting of ownership restrictions on foreign participation for Authorized Dealers with Limited Authority (ADLAs) to increase remittance market competitiveness, improve financial system infrastructure, and pursue policies conducive to harnessing emerging technologies. South Africa has increased regional cooperation by engaging the private sector using the Southern African Integrated Regional Electronic Settlement System to reduce the processing cost. The other strategy is to improve transparency and consumer protection of remittance transfers, which is guided by the National Consumer Financial Education Strategy that creates consumer awareness on the informed and appropriate use of remittance services.

6.5 Key Messages and Recommendations

Diaspora remittances play a big role in Kenya's economy, especially with respect to fiscal sustainability, savings, investments and household income generating activities. Apart from financial remittances, the skills, expertise and knowledge of Kenyans living abroad can be harnessed to support and effectively contribute towards national development.

6.5.1 Key messages

1. Role of diaspora in national development: Diaspora contributions have great potential to effectively contribute towards economic development through remittances, circulation of skills, knowledge and technology. Under the Kenya Vision 2030, the role of the diaspora is geared towards driving investments in the priority sectors of the economy, including physical infrastructure, education, financial services, health, housing, ICT-enabled services, Business Process Outsourcing (BPO), manufacturing and tourism. In addition, remittances could play an important role in improvement of the current account balance.

2. Remittances and poverty reduction: It is estimated that 60 per cent of remittance flows globally constitute household incomes that directly improve the livelihoods of migrant families in meeting basic needs, increasing savings and building assets for

future stability. In Kenya, there has been rapid growth of diaspora remittances over the last one decade, increasing from US$ 645 million in 2007 to US$ 2.7 billion in 2018.

3. Size and diaspora earnings: The per capita earnings and size of remittances depend on the skills levels of migrants, and the type of jobs available in the destination countries.

4. High costs of sending remittances: According to World Bank (2018b), the global average cost of sending remittances has remained nearly stagnant at 7.1 per cent in the first quarter of 2018, more than twice the SDG target of 3 per cent. These costs largely arise from de-risking practices by global financial institutions, exclusivity agreements which undermine competition among remittance services providers, and weak institutional and regulatory frameworks. These factors constrain the anticipated gains from introduction of cheaper and more efficient technologies such as Internet and smartphone apps, and blockchain in remittance services.

5. Strengthening and sustaining global partnerships: There is growing partnership between Kenya and the international community in leveraging diaspora remittances, trade and investment; capacity building and transfer of skills; and involvement of diaspora in development of enabling policy.

6. Compliance, supervision and data management: The basic legal framework for regulation and supervision of remittances service providers, especially for agents, is weak in Kenya just like in many other countries. In addition, there are complexities associated with enforcement of anti-money laundering laws and combating the financing of terrorism. The licensing and registration processes require improvement, as do the data to the extent that there are no reliable figures about the size of migrant remittances to Kenya.

6.5.2 Policy recommendations

1. Collaboration and coordination of diaspora resources mobilization: Enhancing diaspora contribution requires strengthened collaboration and coordination between the government, migrant destination countries, private sector and diaspora groups/associations to fully tap into the financial resources, skills and expertise of Kenyans living abroad. This would provide a conducive environment to identify and address existing regulatory challenges and constraints and facilitate increased use of formal channels to sending remittances. Besides, it would facilitate establishment of appropriate information gathering and data management systems necessary for appropriate policy measures in the sector.

2. Protection of migrant workers' rights and conditions of work: The protection of migrant workers' rights abroad is critical for long term sustainability of remittances. Kenya has only recently institutionalized efforts for protection of workers in the Gulf region following cases of abuse of its workers. Strong bilateral labour accords and government institutions to protect workers during the recruitment and deployment phases should be put in place. This will ensure an enabling environment for remittances to be earned safely and, more generally, by including all aspects of migration in development-planning policies. In addition, the recruitment of migrants and transferring of remittances from the country of destination to the country of origin are mostly done by private business entities. Greater collaboration between the private sector actors and the government regulatory body is crucial to improving the existing business practices and environment.

3. Sensitization on financial inclusion and diaspora remittances: Financial education initiatives for migrant workers and recipient households are a proven way of increasing the likelihood that remittances directly impact the life of recipients and their communities. The International Organization of Migration (IOM) advocates for the improvement of access to duly regulated, reliable and efficient financial services and products. This is necessary for improved financial infrastructure and for financial literacy opportunities for remittance senders and recipients.

4. Development of an integrated database on Kenyans abroad: There is need to improve data collection with a view to establishing diaspora networks to facilitate the circulation of knowledge, ideas and technology for capacity building to take off. Prerequisites to improving data on remittances require an understanding of the transaction channels that are available and the ability to compile or estimate data that cover all channels that are heavily used. The transaction channels used depend on the financial system, the overall institutional environment of the sending and receiving countries, the convenience and costs associated with use of these channels, and the demographic characteristic of the senders and receivers.

5. Strengthening partnerships: There is need to strengthen and sustain partnerships with the international community in leveraging diaspora remittances, trade and investment; capacity building and transfer of skills; and involvement of diaspora in developing the enabling policy.

CHAPTER

7

EXTRACTIVES SECTOR

Kenya's extractives sector has traditionally been contributing less than 1 per cent to the national economy, but it has the potential to contribute up to 10 per cent to GDP especially with the discovery of more high value minerals and hydrocarbons. The sector is important in mobilizing domestic resources. Providing an enabling environment (including up to date geological data and geophysical surveys), strong and well-coordinated institutions, development of appropriate infrastructure, and a favourable fiscal regime will serve to attract investors in the sector and enhance resource mobilization. There is also need to address other challenges in the sector, including ensuring linkage with other sectors of the economy, efficient and peaceful exploitation of transboundary resources, and equitable sharing of benefits accruing between present and future generations. Formulation of local content policy and fast-tracking of enactment of Local Content Bill into law will give the sector the impetus to further contribute to economic development.

7.1 Introduction

The extractives industry in Kenya comprises mining, oil and gas sub-sectors with an abundant largely untapped natural resource wealth. Minerals in Kenya are found within specific geological settings. Precious metals (gold and silver) and copper occur within the Archean-Nyanzian craton of Western Kenya. The protozoic Mozambiquan belt traversing the central, northern and southern parts of the country host gemstones (ruby, garnet, sapphire, emerald, aquamarine, etc), kyanite, graphite, kaolin and magnesite. The sedimentary rocks of Paleozoic age are widely distributed in the country and host deposits of limestone, iron ore, base metals (lead, zinc and barite) and heavy mineral sands (titanium). Minerals such as trona (soda ash), gypsum, calcite, diatomite, fluorspar, natural carbon dioxide, geothermal fields and recently a variety of gem quality rubies are found within the Rift Valley (Government of Kenya, 2010a).

Kenya is under-explored in areas of minerals, petroleum and natural gas resources. This is confirmed by most recent discoveries of oil in the tertiary block, largest water aquifer, gas fields in Lamu, and the discovery of rare earth minerals (niobium) in Kwale County and coal in Kitui County despite many years of exploration. However, Kenya is witnessing increased exploration activities and huge interests by multinational companies (MNCs) following these discoveries. Thus, the extractives sector has the potential to generate significant direct and indirect benefits to the Kenyan economy and provide important opportunity for economic development. A salient feature of the sector, especially in mining and oil, is

the dominance in exploration and exploitation of resources by multinational MNCs, which remain an indispensable source of capital and technology investment for the industry. The sector is also labour-intensive, with over 300 local and foreign firms prospecting for minerals or producing on a small scale, with artisanal miners as key producers of gold and gemstones.

7.2 Sector Performance

7.2.1 Mining

Kenya has not benefited fully from its mineral potential because the sector has been predominantly dominated by non-metallic low value minerals, with the sector contributing a paltry less than 1 per cent to GDP annually. Despite this dismal performance, the sector has the potential to contribute to GDP. Table 7.1 shows that the sector grew by 14.9 per cent especially after commencement of titanium mining in Kwale. However, since 2015, the sector growth has been declining, with a paltry 2.8 per cent growth in 2018.

The low growth in the value despite high mineral prices is associated with decreased earnings from fluorspar, gemstones, and salt. Further, the sharp decline in revenue from fluorspar is attributed to a sustained decline in the global market, which prompted the Kenya Fluorspar Mining Company to stop operations and hand the mines and other assets back to the government. The impact of the huge decline in earnings from minerals slowed down the industry's growth, leading to stagnation in the contribution of the sector to GDP. This obligates the government and all other institutions including the private sector to refocus efforts in ensuring the sector is given the attention it deserves in order to contribute to economic development of the country.

The mineral sub-sector is not only a resource but it has huge potential of contributing to resource mobilization and economic development. It is expected to be a major driver in employment creation over the medium term through value addition. For example, ongoing construction of a gemstone value addition centre in Taita Taveta, development of the proposed gold refining centre in Kakamega, and formalization of artisanal and smallscale mining (ASM) in line with the Mining Act 2016 will enable the government to attract more revenue through value addition and thus better returns from the mining sector.

When the airborne geophysical surveys are carried out, the government will be able to target and quantify commercial mineral deposits and thus be able to attract investors in the sub-sector. The new geological maps show several commercially viable mineral deposits in Baringo, Mandera, Isiolo, Meru and Tharaka Nithi counties. These mineral deposits will significantly increase the mineral resource base in the country. The challenge is to turn around the extractives sector to enable it contribute to

Table 7.1: Mining sub-sector contribution to GDP, 2014-2018

Indicator	2014	2015	2016	2017	2018
GDP growth	**5.4**	**5.7**	**5.9**	**4.9**	**6.3**
Growth of the sector (%)	14.9	12.3	9.5	4.5	2.8
Contribution to GDP (current prices)	0.8	0.9	0.8	0.8	0.8
Sources of growth (constant prices)	2.5	2.1	1.7	1.0	0.5

Source: KNBS (2015; 2019), Economic Survey

Table 7.2: Revenue projections from the mining sub-sector

Mineral	Estimated reserves (proven)	Projected value (US$ billions)
Coal	400 million tonnes	12.0
Base resources		0.3
Rare earth minerals	40 million tonnes	60.0
Others (gold, gems, etc)	-	0.4
Total		**72.7**

Source: State Department of Mining (2018)

resource mobilization for the achievement of national development goals.

The revenue projected from the mining sector is more than US$ 72.7 billions and is expected to be drawn from various minerals as shown in Table 7.2. Coal alone is expected to contribute about US$ 12 billions to the economy.

The data for value of mineral produced and royalties collected between 2014 and 2018 provides a picture of the mining sector. From Tables 7.3 and 7.4, we note that while total revenue from mining grew by Ksh 12.965 billion, royalties to the government declined by Ksh 386.67 million in the same period. The increase in the value is majorly from increased production of titanium (rutile, zircon and Ilmenite), which added Ksh 11 billion over the period.

The comparison of royalties with all streams of revenue may show a different picture if the data was available for other streams of revenue/ royalties. Nonetheless, indications are that the country has been losing revenue from the sector (Table 7.4) possibly due to weak institutions

Table 7.3: Summary of the value of selected minerals produced, 2014 and 2018

Mineral	Value (Ksh millions)		Change
	2014	2018	(2014-2018)
Titanium (rutile, zircon and Ilmenite)	9,063.4	20,094.7	11,031.30
Salt	173.5	19.4	(154.10)
Soda ash	7,840.8	6,837.7	(1,003.10)
Fluorspar[1]	1,901.0	-	1,901.00
Crushed refined soda	568.4	579.9	11.50
Carbon dioxide	503.9	225.8	(278.10)
Gold	790.1	2,021.1	1,231.00
Diatomite	70.6	87.6	17.00
Gemstones[2]	309.6	518.3	208.70
Total	**21,221.3**	**30,384.5**	**12,965.20**

[1] Fluorspar Mining Company ceased operation, no production in 2018
[2] Includes cut and rough gemstones

Source KNBS (2019), Economic Survey

Table 7.4: Main royalty revenue streams (Ksh), 2014/15 and 2017/18

Royalty/Product	2014/15	2017/18	Change
Cement Minerals	800,687,928.45	355,610,036.00[1]	-445,077,892.45
Carbon Dioxide	1,008,093.00	46,411,674.00	45,403,581.00
Exports and Extraction	88,399,244.90	45,211,988.00	-43,187,256.90
Gold Exports	4,958,158.20	35,994,276.00	-31,036,117.80
Export Permit Fees/Mineral Dealers License fees	3,028,274.00	32,260,050.00	29,231,776.00
Base Titanium Products	243,783,515.00	319,356,814.00	75,573,299.00
Magadi Soda Products	114,644,267.50	97,060,668.00	-17,583,599.50
Total	**1,251,551,322.85**	**931,905,506.00**	**-386,676,210.65**

[1]Royalty streams for two cement companies in 2018 missing

Source: http://www.petroleumandmining.go.ke/state-department-for-mining; accessed on 29.08.2019

responsible for enforcement and compliance with royalty payments. There is potential for improvement in the sector following additional discoveries of mineral sands, rare earth deposits and other mineral deposits, and establishment of the institutions envisaged in the Mining Act 2016 and the coming into force of the Petroleum Act 2019.

7.2.2 Oil and gas

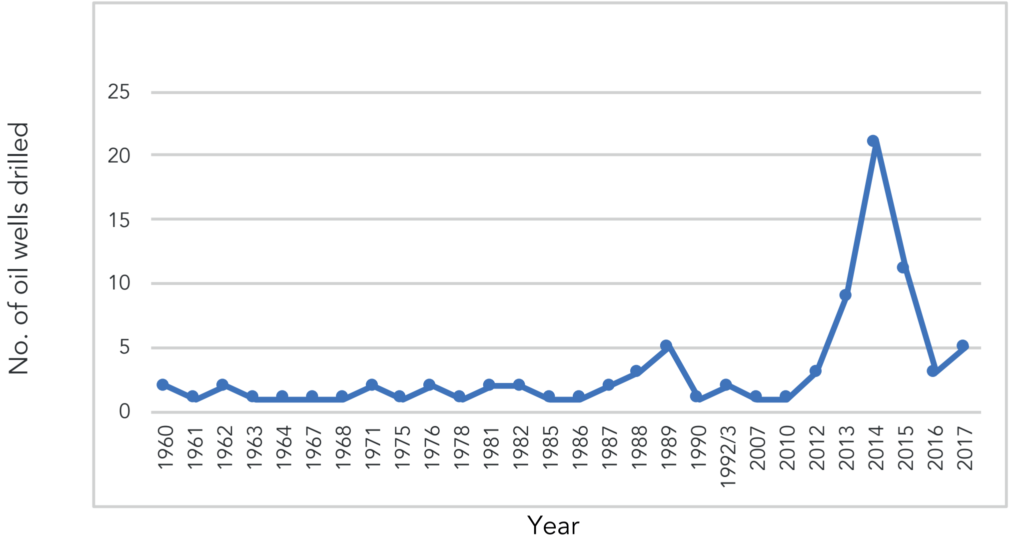
Oil exploration is an extremely capital-intensive undertaking. For countries without any proven commercial discoveries, it is difficult to attract major oil prospecting companies. In addition, volatility in world prices can constrain exploration activities especially when world oil prices are on a decline. Previously, Kenya status as a frontier exploration area was a key disincentive to major international oil companies' participation in petroleum exploration. As such, high-profile oil prospecting companies diverted their risk capital to countries with proven hydrocarbon reserves that promise return for their capital investment.

Petroleum exploration in Kenya begun in the 1950s, with the first well drilled in 1960. British Petroleum (BP) and Shell began exploration in Kenya in 1954 in the Lamu Embayment where they drilled ten (10) wells with none completed for production despite several indications of oil staining and untested zones with gas shows. Since 1975, several other companies had exploration activities. In 1975, for example, Texas Pacific and other companies drilled their first well, Hargaso-1 in block L-1B in Lamu and encountered oil and gas shows. Chevron, Esso, Marathon and Union had exploration activities majorly in Lamu and Anza basin from 1976.

Exploration activities picked up in 2010 after government sustained effort to market the country to investors. Interest in the Kenyan upstream oil and gas sector has developed significantly following discoveries of oil in Uganda and gas discoveries in offshore East Africa and Mozambique. This interest intensified following Tullow Oil's announcement in March 2012 that they had discovered oil in Kenya in the Tertiary Rift Basin. Figure 7.1 shows the trend in number of oil wells drilled since 1960.

Kenya's confirmation of the existence of commercial oil deposits by Tullow in 2012 marked a bright path of the country into joining the league of oil producing nations. As at December 2018, there were eight (8) confirmed oil wells in Turkana and Mandera with an estimated capacity of 700 million

Figure 7.1: Trends in number of oil wells drilled, 1960-2017



Source: Authors compilation based on data from National Oil Corporation of Kenya website

barrels. One (1) natural gas well was discovered in Lamu in 2014 by British Gas Group. With these discoveries, the nascent extractives sector is expected to attract more investments. As Kenya's fledgling oil industry brightens with opportunities for foreign investments, and as the industry transitions from exploration to appraisal activities for the various discoveries, investments in the development phase are likely to be higher than in the exploratory phase, especially after Kenya officially flagged off its first crude oil ship for export through the Early Oil Pilot Scheme.

Various projects are proposed in MTP III, including the construction and completion of some phases of the Lamu Port South Sudan Ethiopia Transport (LAPSSET) Corridor project, such as construction of an oil refinery in Lamu, and expansion of pipelines. The construction of the refinery will lead to forward and backward linkages with industries within the country and spur investment in related industries. In addition to the appraisal phase, Kenya commenced the Early Oil Pilot Scheme (EOPS) in early 2018. The scheme entails the transportation of stored crude oil drawn from the testing oil wells and the production of 2,000 barrels of oil per day over a two-year period. The flagging of the first ship of crude oil of 200,000 barrels in August 2019 shows government commitment to developing infrastructure that will enable full scale drilling of crude oil in Turkana and other regions where oil has been discovered.

7.2.3 Extractives sector contribution to resource mobilization

There are various incentives the government has put in place to ensure resource mobilization in the extractives sector, such as development of online mining cadastre, provision of accurate and up to date geological data, a predictable environment evidenced by stable economic growth averaging more than 5 per cent in the last 10 years, and political stability and justice systems that promote social justice and international dialogue. The government has also been holding dialogue in policy formulation through business and investment associations such as the Kenya Private Sector Alliance, Kenya Chamber of Mines, among others.

Since 2013, Kenya has improved its physical infrastructure especially in regions where natural resources have been discovered to reduce the cost of doing business. The country's economy is fully liberalized, and the foreign exchange market allows free inflow and outflow of foreign capital. In 2019, Kenya was ranked position 61 globally, up from position 80 in the 2018 World Bank Ease of Doing Business Index (World Bank, 2018f).

7.3 Policy, Legislative and Institutional Framework

7.3.1 Policy and legal framework

At regional level, the African Mining Vision (2009) emphasizes the importance of the extractives sector in driving growth in African member States. It requires countries to develop country mining visions to domesticate the AU's vision. At the country level, the overarching policy instrument is the Constitution of Kenya 2010 which underscores efficient and equitable utilization of mineral resources and vests that responsibility with the national government. The Kenya Vision 2030, through MTP II and III, recognizes the important contribution of the sector to economic growth.

The Ministry of Petroleum and Mining developed Sessional Paper No. 7 of 2016 on mining and minerals policy to guide the sector. The Mining Act 2016 is the regulating framework for the mining sector, and it gives effect to Articles 60, 62 (1)(f), 66 (2), 69 and 71 of the Constitution in so far as they apply to minerals, except for petroleum and hydrocarbon gases. It also introduces Community Development Agreements, mandatory for all holders of largescale mining rights, and sharing of royalties among the national government, the county governments and the communities. The Act seeks to formalize and regulate the artisanal small-scale mining sector. The enactment of the Act is one of the biggest milestones in the history of extractives sector in Kenya. It replaced the pre-independence Mining Act Cap 306 of 1940.

Other laws related to mining include Community Land Act 2016, National Land Commission Act 2012, the Forest Conservation and Management Act 2016, the Wildlife Conservation and Management Act 2013, the Water Act 2012 and the EMCA Act 2015. The petroleum sub-sector is regulated by the Production Sharing Contract and the most recently assented to Petroleum Act 2019. The detailed framework for the extractives sector is presented as Annex 7. This includes: Companies prospecting for oil, the blocks allocated and the results (Annex 7.1); Oil wells drilled between 1960 and 2017 (Annex 7.2); Quantity of mineral production, 2014-2018 (Annex 7.3); Value of mineral production, 2014-2018 (Annex 7.4); Results of drilled petroleum exploration wells in various basis and exploration blocks of Kenya (Annex 7.5); Kenya's sedimentary basins (Annex 7.6); Legislations for the extractives sector (Annex 7.7); and Institutions for the extractives sector (Annex 7.8)

However, the provision in the Mining Act 2016 that requires investors to obtain consent from the communities occupying the targeted land before being licensed to explore for minerals and extractives does not endear itself to a conducive environment for doing business in Kenya, and could make potential investors shelve their investment plans in Kenya due to the complexity of community land acquisation and compensation in Kenya.

7.3.2 Institutional framework

The overarching regulatory body for both the mining and petroleum sub-sectors is the Ministry of Petroleum and Mining, which has developed legal and technical frameworks for investors to work through, including the Production Sharing Agreement/Contracts (PSA) and the recently assented to Petroleum Act 2019. Other bodies in the petroleum sub-sector include the National Oil Corporation of Kenya, which participates in joint exploratory ventures, the Kenya Pipeline Company whose role is to distribute petroleum, and the Kenya Oil and Gas Association, which brings industry players together.

In the mining sub-sector, the National Mining Corporation is the investment arm of the national government on matters minerals while the Mineral Rights Board is charged with determining rightful royalties and taxes payable to government. The National Mining Institute offers technical training in extractives industry while the Kenya Chamber of Mines represents investors in the sector.

However, most of the institutions envisaged in the Mining Act 2016 and Petroleum Act 2019 are yet to be fully operationalized to perform their mandates. The key policy issue is whether these institutions have the required capacity and are facilitated with the resources they require to enable them perform their mandates transparently, effectively, and efficiently. Given the many institutions in the sector, there is need for greater coordination to ensure seamless sharing of information, especially information that relates to revenue collection and distribution. When implemented, the Mining (Dealings in Minerals) Regulations 2017 that seek to track fraudulent removal of minerals from Kenya may cure the problem of under reporting, and tax avoidance and evasion.

7.4 Fiscal Regime

Fiscal regime represents one of the key issues that resource companies consider before investing in extractives sector of any country. This stems from the fact that investment in extractives is a capital-intensive undertaking, immovable in nature and done over extended periods of time. At the same time, the government has high expectations in terms of revenue flows to support development, while communities that host the resources have high expectations on the benefits they are likely to receive in terms of employment, social amenities and other utilities. Thus, host countries are faced with the challenge of designing a favourable fiscal regime against very high expectations, with appropriated revenue sharing arrangements between host country/county and investors for economic development.

A stable and fair fiscal regime, therefore, provides a suitable business environment for the government and prospective investors. For government, it provides a basis for promotion of natural resources, ensures a steady flow of revenue and ensures that Kenya will receive equitable share of revenue from its natural resources. For investors, it provides the confidence necessary to consider investing in extractives' activities in the country. The most important incentive for investors is availability of geological data on mineral deposits and a stable regulatory environment (Ministry of Mining, 2015). Without a good fiscal regime, Kenya's extractives sector is likely to greatly miss opportunities for foreign investment as they shift from Kenya to countries with a well-designed fiscal regime that favours foreign investors.

For Kenya, the Income Tax Act 2014 and Tax Procedure Code 2015 are currently in use, with Schedule 9 detailing taxation of extractives industries and Part II specific to the mining sector. Companies in the extractives industries are subject to corporation tax, income tax, and payment of royalties. Taxes in Kenya are mainly corporate income tax (30% for resident, 37.5% non-resident), VAT (16% on inputs) and levies, duties and other charges.

The oil and gas sector uses Production Sharing Contracts or Agreements where revenues from oil and gas produced are shared between the government and oil companies at an agreed rate, after taxes have been paid. A corporate tax rate of 30 per cent for resident and 37.5 per cent for non-resident companies in the extractives industry sector applies for capital gains tax.

The Mining Act 2016, Section 183, outlines sharing of revenue from mining activities at 70 per cent to the national government, 20 per cent to the county government and 10 per cent to the community where mining activities occur, while the Petroleum Act 2019, Section 58, outlines the sharing of profits derived from upstream petroleum operations at 75 per cent to the national government, 20 per cent to the county government and 5 per cent to the local community. Currently, Table 7.5 shows the rates of royalties charged for different types of minerals as contained in various gazette notices.

The Mining Act 2016 (Part XII on Financial Provisions), Sections 182-183, outlines how revenue from mining is collected and remitted

Table 7.5: Rates of royalties for different types of minerals in Kenya

Type of mineral	Royalties charged (%) of gross sales value
Gold[1], fluorspar[4], diatomite[1], natural carbon dioxide[1]	5
Metallic ores, Iron ores, manganese ore, chromium ore, nickel ore, bauxite and others[1]	8
Titanium and zircon[1]	10
Gemstones[1]	5
Industrial minerals (gypsum, limestone and silica sand)[1]	1
Cement mineral levy[2]	140/= per ton
Diamonds[1]	12
Magadi soda products (soda ash, salt, crushed refined soda)[3]	5
Rare earth elements and radioactive materials[1]	10
Niobium[1]	10
Coal[1]	5
Construction minerals[1]	2

[1]Legal Notice No. 187; [2]Legal Notice No. 222; [3]Legal Notice No. 221; [4]Legal Notice No. 220

Source: Ministry of Petroleum and Mining (2013), Various Gazette Notices and Regulations

to the government. The Petroleum Act 2019 Section 53 gives the Kenya Revenue Authority (KRA) the mandate to collect petroleum taxes, subject to provisions of the Income Tax Act and royalties and the government share of profit from oil. This requires building capacity to collect and avail information from the sector. A key challenge that faces collection of revenue in the sector is information asymmetry between mining and petroleum extraction companies and revenue collection bodies, which can expose the country to tax avoidance and evasion by the companies. The implementation of the Petroleum Act 2019 and the Mining Act 2016 will, to some extent, enforce disclosure by the companies and enable the government to collect revenue from mining and petroleum sub-sectors.

Even though the sharing mechanisms for mineral and petroleum revenue are clearly stipulated in the Mining Act 2016 and Petroleum Act 2019, with the formation of the bodies to receive the community share, more needs to be done to ensure that revenue collecting institutions implement the provisions of both the Mining Act 2016 and the Petroleum Act 2019 and the envisaged bodies to develop the mechanisms to outline how the communities will benefit from their shares and through which projects.

7.5 Key Messages and Recommendations

7.5.1 Key messages

1. Discovery of more high value minerals and hydrocarbon resources will increase the contribution of the extractives sector to GDP. Kenya has abundant minerals and hydrocarbon resources that are either under-explored or under-exploited which, if properly tapped, can potentially generate direct and indirect benefits for Kenya. The sector has the potential to contribute to GDP up to 10 per cent if fully exploited. For example, while the sector has traditionally

contributed about 1 per cent to GDP, it managed to add an extra 1.5 per cent in 2014 and only 0.5 per cent in 2018. However, the commencement of full-scale oil extraction and gold and coal mining has the potential to contribute up to 10 per cent to GDP growth as envisaged in the Kenya Vision 2030.

2. Under-developed institutional capacity is hindering performance and revenue collection in the sector. Although the government has enacted progressive laws and created institutions necessary for improved sector performance, the institutions have not been fully operationalized. For example, the Mineral Rights Board is mandated to advise the government on appropriate levels of royalties and taxes payable to government by the mining companies. More than two years since the Board was inaugurated, it is still putting in place structures to enable it undertake its new roles in addition to clearing the backlog of work that had accumulated on renewal of licences during the period when the Mining Act 2016 became operational and the appointment of the Board.

3. There are delays in royalty flow from the central government to sub-national levels. The central complexity regarding sharing of extractives revenues where the revenue is centrally collected is the timing of the flow of funds to sub-national levels. Currently, royalty revenue is paid to the Consolidated Fund. To ensure timely flow of funds to sub-national levels, a creation of royalty fund as envisaged in the law will ensure accessibility of the funds by the counties and communities in a timely manner.

4. Formalization of Artisanal and Smallscale Miners (ASMs) has the potential to increase resource mobilization from the sector. ASMs dominate the sector and largely contribute to production that is not officially recorded. They are largely unorganized, uncontrolled and use rudimentary tools in exploiting mineral resources. Their formalization will create order in their operations, remove middle-men and increase their earnings. In return, the government will be able to collect data and document the players, the production and increase revenue through taxation of the resources from the sector.

5. Significant amounts of investments are required to support the development phase of the sector. Despite the discoveries of various mineral and oil deposits in commercial quantities and increasing investor interest, there are challenges in retaining and attracting new investors into the sector. For instance, Base Titanium, the largest mining company in Kenya, may close mining operations by 2021 owing to the end of current mines life and as a result of drop in production in the current site. Although it has obtained licence to exploit minerals in the southern dune, the company's stay will be dictated by the amount of minerals available on that site. There are also minerals that have been discovered in commercial quantities that the government can attract investors to exploit.

6. Kenya discovered and is exploiting oil and coal at a time when there is a growing shift towards use of greener energy world over. The country must balance the utilization of these resources while ensuring reduction in green house emissions, and keeping in line with international commitments the country has committed to, such as the commitment to United Nations Framework Convention on Climate Change (UNFCCC).

7. There are challenges in the development of transboundary minerals and oil resources due to insecurity and boundary disputes. Extractives resources exist in regions with poor infrastructure due to decades of neglect, areas that pose security threats to investors and lead to an extra cost of

security to the investors. Besides, there are boundary issues between Kenya and Ethiopia, and Kenya and Somali which need to be addressed urgently through infrastructure development and inclusion of the communities in national development.

7.5.2 Recommendations

1. Institutional strengthening through adequate resource allocation to enable them perform their roles effectively and efficiently: The fast-tracking of the setting up of the institutional and administrative structures envisaged in both the Mining Act 2016 and the Petroleum Act 2019 will be crucial in facilitating development of the extractives sector, ensuring enforcement and compliance in law, promoting value addition, and capacity building and supporting KRA in revenue collection from the extractives sector.

2. Strengthen the institutional structure for revenue collection in the sector: This can be done through strengthening of the institutions mandated to determine levels of revenue and taxes to be charged for extractives sector, and those mandated to collect the revenue, such as KRA. The unique aspects of the extractives sector compared to other sectors means that efficient revenue collection is a combination of skills rarely found in one government agency such as the KRA. While collection is undertaken by the agency, which falls under the National Treasury, close collaboration with agencies regulating other aspects of the extractives industry, and those that have specialized knowledge of it, such as the Mineral Audit Board and the Ministry of Petroleum and Mining will be essential.

3. Resource planning is necessary to catalyze links between and within sectors and to foster economic diversification. Such diversification, and links from natural resources to other sectors, will add value through beneficiation and leverage the development of other sectors, and will inject innovation into the economy. These linkages should include production linkages representing forward (downstream) and backward (upstream) links, fiscal linkages that connect to resource rents collected by the government from the commodity sector in the form of corporate taxes, and royalties and taxes on employees' incomes. The increased fiscal revenues can be used to promote industrial development in other sectors of the economy. Finally, the consumption linkage should connect to the demand for output produced by other sectors arising from the income earned or expenditure incurred in the extractives sector. The demand generated by employees in the sector has the potential to spur industrial production through spending on local products and services, further enabling local economies to benefit from the extractives sector.

4. Fast-track the formalization of ASMs in line with the Mining Act 2016: The registration of all ASMs will ensure increased revenue for the government through taxation, increased ASMs earnings from their products through elimination of middlemen, and ensure good environmental stewardship.

5. Fast-track the enactment of the Local Content Bill into law: This will ensure more use of local products, create more jobs at the local level, and attract more investment by local industries. This will in turn optimize resources generated from natural resource rents and expand the revenue base for the government.

6. Ensure timely flow of royalty revenue to the sub-national levels: A mechanism needs to be put in place through which funds collected at the national level from the extractives sector are channelled to the intended counties/communities in a timely manner.

CHAPTER 8

ENHANCING MOBILIZATION OF LAND RESOURCES

Land is critical in supporting affordable housing, infrastructure development, manufacturing, food security and agriculture. Although there are a number of mechanisms for the government to acquire land for public purposes, including through use of available public land, compulsory acquisition and transfer of land to the State by way of sale, transfer, surrender or reversion of leasehold, the legal requirements and processes regulating the use, allocation, acquisition and conversion are inconsistent and, in some cases, conflicting. Scarcity of land, speculative landholding, high cost of land, haphazard land use planning, uncontrolled or irregular change of user, lack of titles over land, incidents of irregular and illegal allocations of public land and corruption are some of the challenges hampering land use in Kenya. There is need to ensure availability, affordability and security of land. There is also need to protect the environment and the blue economy while undertaking land-based activities.

8.1 Introduction

Land is an essential resource for the socio-economic development of any country. It is critical in supporting various economic activities such as access to affordable housing, food security and agricultural development, provision of infrastructure and development of the extractives sector. As such, factors related to availability of land, pricing of land and the legal requirements should be considered in the acquisition or allocation of land for any purpose. Further, protection and sanctity of property rights to land, whether owned by communities, individuals, the State, public enterprises or companies is critical for rapid economic transformation as envisioned in the Kenya Vision 2030.

The Medium-Term Plan (MTP) III prioritizes the "Big Four" agenda that envisions food security, affordable housing and increased manufacturing which all require available and affordable land. Food security requires arable land, sustainable and productive management of land resources and environmental conservation. The affordable housing agenda and infrastructure development require available public land and in lieu thereof private or community land that is registered and free of encumbrances, and that can be acquired for public purposes. Resolving land registration, employing sustainable land use practices and guaranteeing due process in acquisition, allocation and use of land in Kenya is of paramount importance to ensuring the development agenda is realized.

Kenya occupies approximately 582,646 square kilometres (km^2) of land, which is categorized as public, community and private (Government of Kenya, 2017). Public land comprises approximately 77,792 km^2 (13%); community land 396,315 km^2 (68%) and private ownership 107,953 km^2 (19%) (Government of Kenya, 2017). Forest cover in Kenya is low, at approximately 7.28 per cent of total land area, which is below both the national and international standards of 10 per cent and 30 per cent, respectively. Total forest area is 4.2 million hectares of which natural forests cover an area of 4.0 million hectares while plantations cover an area of 191,300 hectares (KNBS, 2019). The area under agricultural land has steadily increased since independence from 25,210 ha in 1963 to 26,451 ha in 1996, 26,839 ha in 2001, 27,054 ha in 2006, 27,730 ha in 2012 and 27,630 ha in 2016 (FAO, 2017). The World Bank estimates that approximately 90 per cent of rural land in Sub-Saharan Africa is not registered, which makes it vulnerable to land grabbing, expropriation without fair compensation and corruption. In Kenya, it is estimated that less than 30 per cent of land is registered (Government of Kenya, 2018).

8.2 Institutional and Regulatory Framework Governing Land in Kenya: An Overview and Key Provisions

8.2.1 Legal definition of categories of land in Kenya

The Constitution of Kenya 2010 provides the legal definition of land in Kenya. Article 260 of the Constitution defines land in Kenya as the surface of the earth and the subsurface rock, any body of water on or under the surface, marine waters in the territorial sea and exclusive economic zones, natural resources completely contained on or under the surface and the airspace above the surface. The Constitution categorizes land as private, public and community land. It further assigns certain categories of land that belong to the national government and county governments. The Fourth Schedule of the Constitution also devolves certain functions to county governments, for example county planning and development, land survey and mapping and housing.

Public land is defined in Article 62(1) as land which at the effective date was unalienated government land as defined by an Act of Parliament in force at the effective date. It is land lawfully held, used or occupied by any State organ, except for any such land that is occupied by the State organ as lessee under a private lease. It also includes land transferred to the State by way of sale, reversion or surrender; land in respect of which no individual or community ownership can be established by any legal process; and land in respect of which no heir can be identified by any legal process.

Public land is also defined as all minerals and mineral oils as defined by law; government forests other than forests to which Article 63(2)(d)(i) applies, government game reserves, water catchment areas, national parks, government animal sanctuaries, and specially protected areas. In addition are all roads and thoroughfares provided for by an Act of Parliament; all rivers, lakes and other water bodies as defined by an Act of Parliament; the territorial sea, the exclusive economic zones and the sea bed; the continental shelf; and all land between the high and low water marks. Finally, public land includes any land not classified as private or community land under the Constitution, and any other land declared to be public land by an Act of Parliament.

Article 62(2) of the Constitution provides that public land shall vest in and be held by a county government in trust for the people resident in the county, and shall be administered on their behalf by the National Land Commission if it is classified under Article 62 clause (1) (a), (c), (d) or (e); and Article 62 clause (1) (b), other than land held, used or occupied by a national State organ. Article 62(3) of the Constitution provides that public land classified under Article 62

clause (1) (f) to (m) shall vest in and be held by the national government in trust for the people of Kenya and shall be administered on their behalf by the National Land Commission.

The above categories of land belong to the Government (as categorized between national government and county government) and form part of the resources belonging to the government. Public land shall not be disposed of or otherwise used except in terms of an Act of Parliament specifying the nature and terms of that disposal or use.

Community land is classified in Article 63(2) of the Constitution as land lawfully registered in the name of group representatives under the provisions of any law. It also includes land lawfully transferred to a specific community by any process of law; and land that is lawfully held, managed or used by specific communities as community forests, grazing areas or shrines; and ancestral lands traditionally occupied by hunter-gatherer communities. Community land also includes land lawfully held as trust land by the county governments, that does not include any public land held in trust by the county government under Article 62(2), and any other land declared to be community land by an Act of Parliament. Article 63(3) states that any unregistered community land shall be held in trust by county governments on behalf of the communities for which it is held.

Article 64 of the Constitution states that private land consists of registered land held by any person under any freehold tenure; land held by any person under leasehold tenure; and any other land declared private land under an Act of Parliament.

From the above, there are two sub-categories of land: alienated and unalienated land. Unalienated land is land which has not been leased or allocated and which thereby falls under public land as provided in the Constitution 2010. Alienated land is land which has been leased or allocated to a private individual or body corporate or community or which has been reserved for use by a government department, corporation, agency or institution or which has been set aside for another public purpose.

The key laws governing the administration, use, lease, transfer, disposal and management of land in Kenya are the Land Act 2012, Land Registration Act 2012, National Land Commission Act 2012 and the Land (Laws) (Amendment) Act 2012. These laws repeal previous laws to align the land laws with the Constitution of Kenya 2010, including the Land Titles Act for the ten-mile coastal strip, Governments Lands Act, Registration of Titles Act, Trust Lands Act, Registration of Lands Act, and Land Consolidation and Adjudication Act. The laws impact on land mobilization strategies and processes as they provide procedures to be followed in land administration as indicated in Table 8.1.

Other complementary laws which have some bearing on land use and management include the Sectional Properties Act 1987, the Environmental Management and Coordination Act 1999, the Environment Management and Coordination (Amendment) Act 2015, the Land Control Act Cap 302, the Urban Areas and Cities Act 2011, the Urban Areas and Cities (Amendment) Act 2019, the Forest Act Cap 385, the Physical and Land Use Planning Act 2019, the Water Act 2016, and the Wildlife Conservation and Management Act Cap 376.

Despite the existence of various land laws and institutions established to govern and regulate land use, management and administration, land mobilization and availability of land for use is bureaucratic and there is an ineffective framework and guidelines clarifying the inter-agency relationships and aspects of inter-agency coordination, leading to overlaps, conflicting mandates, inconsistent processes, and delays in processing which bring confusion in the land and conveyancing sector. There

Table 8.1: Land laws in Kenya

Law	Relevance to Mobilization of Land
Land Act 2012	This Act provides for the sustainable administration and management of land-based resources. It provides for management, conversion and administration of public, private and community land. The Act stipulates that any land may be converted from one category to another. It provides detailed provisions on the allocation of public land and requires that any substantial transaction involving the conversion of public land to private land is subject to approval by the National Assembly or County Assembly. The National Land Commission is granted discretionary power to allocate public land on behalf of National and County Governments. It also outlines the procedure for compulsory acquisition.
Land Registration Act 2012	This was enacted to repeal, harmonize and rationalize the various Land Registration Acts that were running concurrently, such as the Government Lands Act (Chapter 280), Registration of Titles Act (Chapter 281), the Trust Lands Act (Chapter 288) and Registered Lands Act (Chapter 300).The aim of using a single Land Registration Act was to ease registration and avoid the duplicities that were occasioned by having numerous land registration Acts in force (Government of Kenya, 2012). The aim of harmonization of the land laws was to allow more land in the country to be documented and to enhance authenticity of registration documents, which will facilitate land acquisitions in future.
National Land Commission Act 2012	This Act prescribes the functions of the National Land Commission. It provides that its functions are to, inter alia, manage public land on behalf of the national and county governments; advise the national government on a comprehensive programme for the registration of title in land throughout Kenya; initiate investigations, on its own initiative or on a complaint, into present or historical land injustices, and recommend appropriate redress; assess tax on land and premiums on immovable property in any area designated by law; and monitor and have oversight responsibilities over land use planning throughout the country. The National Land Commission Act further confers additional powers over and above those set out in the Constitution, including to: on behalf of, and with the consent of the national and county governments, alienate public land; monitor the registration of all rights and interests in land; ensure that public land under the management of the designated State agencies is sustainably managed for the intended purposes; and to develop and maintain an effective land information system for the management of public land.
County Governments Act 2012	Its objectives are to give effect to Chapter Eleven of the Constitution on Devolution; and to provide for county governments' powers, functions and responsibilities to deliver services. County governments have power to acquire, purchase or lease land. It requires that each county should have a ten-year county GIS-based database system spatial plan which should be part of the County Integrated Development Plan. The spatial plan is considered as the spatial development framework for the county.

Community Land Act 2016	Its objectives are to give effect to Article 63 of the Constitution which defines community land; to provide for the recognition, protection and registration of community land rights; management and administration of community land; and to provide for the role of county governments in relation to unregistered community land. The Act stipulates that community land can only be compulsorily acquired for a public purpose and upon prompt payment of just compensation to the person(s) in full or by negotiated settlement. Section 6 of this Act provides that county governments hold unregistered community land in trust on behalf of the communities for which it is held. Similarly, county governments hold any money which is payable to a community as compensation for compulsory acquisition for any unregistered community land. Upon registration of the unregistered community land, the county government is therefore required to release to the community all monies payable from compulsory acquisition, which monies shall be deposited in a special interest earning account by the county government.
Land Laws (Amendment) Act 2016	This Act seeks to amend the laws relating to land to align them with the Constitution; to give effect to Articles 68(c)(i) and 67(2)(e) of the Constitution; and to provide for procedures on evictions from land. This Act addressed inconsistencies in the National Land Commission Act 2012; Land Registration Act 2012; and Land Act 2012. It amended certain sections related to land. Further, the amendments were aimed at aligning the land laws to the Constitution and provide a legal framework for addressing historical land injustices.
Community Land Regulations 2017	The Regulations provide for conversion of community land into public land through compulsory acquisition as prescribed by the Land Act. A Community Land Management Committee is required to present any notice of intention to compulsory acquire part or the whole of the community land from the National Land Commission to the community assembly for information and any other direction on the matter regarding the compulsory acquisition process. Community land may also be converted into public land through transfer and surrender with the approval of at least two thirds of the community assembly. Community land may also be converted to private land through transfer subject to the approval of at least two thirds of the community assembly.
Land Regulations 2017	These Regulations place a mandate on the National Land Commission to require all public institutions vested with the control, care and management of public land to submit an inventory of all land under their control and actual occupation. The particulars of the inventory should include the name of the entity, the location of the land, the size of the land, the current use of the land, management plans, types of natural resources within the land and the value of land including any development on the land. The Regulations also prescribe guidelines for management of public land held by public agencies, statutory bodies and State corporations. It places obligations on all public agencies, statutory bodies and State corporations to maintain an inventory of all lands held by them and ensure that such lands are surveyed and titled. They are also required to maintain the land for the purposes for which it was allocated and prepare long term land-use and management plans for the land and deposit the plans with the National Land Commission. Public and State institutions should ensure that periodic valuations of their land are undertaken by the Chief Government Valuer.
Land (Conversion of Land) Rules 2017	The Rules prescribe requirements for conversion of public land to private land or community land and requires that where the national or county governments (on their own motion or upon request) identify public land that is to be converted, they must notify the National Land Commission of their intention to convert the land. Where the transaction is substantial, the National Land Commission shall refer the matter to the National Assembly or County Assembly for their approval. In cases where the transaction is not substantial, the National Land Commission is required to invite public consultations, comments on or objections to the proposed conversion through various means.

Land (Assessment of Just Compensation) Rules 2017	These regulations prescribe the factors that the National Land Commission should consider when assessing compensation, including the market value of the land; the damage sustained or likely to be sustained by persons interested at the time of the Commission's taking possession of the land by reason of severing the land from his or her other land; the damage sustained or likely to be sustained by persons interested at the time of the Commission's taking possession of the land by reason of the acquisition injuriously affecting his or her other property, whether movable or immovable in any other manner or his or her actual earnings; reasonable expenses incidental to the relocation of any of the persons interested or who will be compelled to change residence or place of business as a consequence of the acquisition; and damage genuinely resulting from diminution of the profits of the land between the date of publication in the Kenya Gazette of the notice of intention to acquire the land and the date the Commission takes possession of the land. It also specifies that the National Land Commission determines an award based on the market value of the land and outlines the criteria for assessment of market value to determine the award for the land to be acquired. The Regulations have also outlined factors which the National Land Commission should not consider when determining an award, including the degree of urgency which has led to acquisition, any disinclination of the person interested to part with the land; damage sustained by the person interested which if caused by a private person, would not be a good cause of action; damage which is likely to be caused to the land after the date of publication in the Gazette of the notice of intention to acquire the land or in consequence of the use to which the land will be put; any increase in the actual value of the land as at the date of publication in the Gazette of the notice of intention to acquire likely to accrue from the use to which the land will be put when acquired; any outlay on additions or improvement to the land, incurred after the date of publication in the Gazette of the notice of intention to acquire land, unless the additions or improvements were necessary for the maintenance of any building in proper state of repair.
Land (Allocation of Public Land) Regulations 2017	These Regulations outline processes to be followed in the allocation of public land. The National Land Commission, upon the request of the National or County Government, can allocate public land by way of public auction, application confined to a targeted group of person(s); public notice of tenders; public drawing of lots; public request for proposals; and public land exchange of equal value.
Sessional Paper No. 1 on National Land Use Policy 2017	Its objective is to provide legal, administrative, institutional and technological framework for optimal utilization and productivity of land and land-related resources in a sustainable and desirable manner at National, County and Sub-county and other local level.

is need to harmonize the frameworks and processes among all land agencies and county governments to enhance administrative efficiency in land processes and transactions, which may be achieved through formulation and development of guidelines.

The monitoring of land transactions and ensuring compliance with land use requirements in Kenya is weak. This is manifested in allocation to private individuals or corporations of public lands or lands dedicated or reserved for public purposes. Moreover, the land information system in Kenya is not comprehensively developed, and therefore verification of information on public land is tedious; an ordinary search does not suffice thus due diligence exercises and processes are often needed. Although either the NLC or the Ministry of Lands may make information on land available, the public ought to be educated on how to access the information and participate in consultation processes on land matters affecting them. Land transaction processes are often lengthy, with uncertain processing timelines which affect land transactions.

Relevant authorities along the land transactional chain may fail to flag transactions and developments that are likely to encroach on public or riparian land or land that is already registered in favour of another owner prior to registration due to informational gaps. Therefore, due diligence should be exercised by parties to a transaction, and by all relevant authorities whose consent is required for land transactions.

In addition, there is no law regulating land held for speculative purposes, or idle land. The law regulating transactions on agricultural land (the Land Control Act) does not provide adequate monitoring and oversight mechanisms to ensure agricultural land retains its integrity by controlling the number of sub-divisions, controlling change of use of agricultural land, and monitoring compliance with user of agricultural land or conditions imposed on the title to such property.

8.2.2 Key institutions governing land in Kenya

Various institutions have been established to regulate aspects along the value chain of land management, including land registration, adjudication and titling, processing of land

Table 8.2: Key institutions governing land in Kenya

Institution	Composition/Legal Status	Area of Focus
Ministry of Land and Physical Planning	Established pursuant to the Executive Order No.1/2016. However, the Ministry has undergone restructuring, with the scope of its mandate having previously been in charge of housing and urban development, which is now a separate Ministry	It includes Departments of Physical Planning, Survey and Land Administration (including land registration), the Land Reform Technical Unit (LRTU); the National Lands Information Management System (NLIMS); and the National Titling Centre. It is in charge of land registration and land titling, physical planning, land transactions, surveying and mapping, land adjudication, land valuation, plot allocations/alienations, settlement matters, rural settlement planning, land reclamation, national spatial infrastructure, land information systems and physical planning and preparation of development plans. It formulates policy, coordinates policy direction and executes and implements policy decisions regarding land matters.
National Land Commission	The National Land Commission was established under Article 67 of the Constitution and was further operationalized by the National Land Commission Act 2011	The functions of the National Land Commission are to manage public land on behalf of the national and county governments, and monitor and have oversight responsibilities over land use planning throughout the country. The National Land Commission has been conferred with additional functions under the National Land Commission Act, including to: on behalf of, and with the consent of the national and county governments, allocate public land; and it may develop and maintain an effective land information system for the management of public land.

National Environmental Management Authority	Established as a body corporate under the Environmental Management and Coordination Act 1999	Its objects and purpose are to exercise general supervision and coordination over all matters relating to the environment and to be the principal instrument of government in implementation of all policies relating to the environment. NEMA identifies projects and programmes which require environmental audit or environmental monitoring. It also grants environmental impact assessment licences after an environmental impact assessment study has been conducted by an expert or professional in the field before commencement of a project.
County Land Management Boards	These are established by the National Land Commission in consultation with national and county governments pursuant to Section 18 of the National Land Commission Act 2012	The County Land Management Boards are established for purposes of managing public land The County Land Management Boards process applications for allocation of land, change and extension of user, subdivision of public land and renewal of leases and perform any other functions that the National Land Commission or any other written law may assign to it. The functions assigned to the Board with regard to the processing of land allocation, change and extension of user, conducting subdivision of land, and renewal of leases are ordinarily the preparatory steps towards acquisition of ownership to land, which culminates in registration and issuance of title by the National Government. The purpose of these Boards is therefore to effect the devolution of land administration to the counties.
Community Assembly	Established under the Community Land Act 2016 and its functions operationalized under the Community Land Regulations 2017	This is the institution through which a community manages its land. Each registered community is required to have a Community Assembly. The Assembly comprises all adult members of the community. Decision making by the community must have a quorum of not less than two thirds of the Community Assembly. The Community Assembly elects between 7 and 15 members of the Community Assembly to form the Community Land Management Committee.

Community Land Management Committee	Established under the Community Land Act 2016 and its functions operationalized under the Community Land Regulations 2017	The Community Land Management Committee has responsibility over the day to day running of the functions of the community, managing and administering registered community land on behalf of its community, coordinating the development of community land use plans, promoting the cooperation and participation among community members in dealing with matters on the registered community land and prescribing rules and regulations to govern the operations of the community, which must be ratified and approved by the Community Assembly. Members of the Community Land Management Committee act as officers of the community who are responsible for management of any property of the community.
Environment and Land Court	Established by Article 162(2) (b) of the Constitution as a Court of Superior Status and of equal status as the High Court and its functions were further operationalized under the Environment and Land Court Act 2011	Its function is to hear and determine all disputes relating to environment and land. It has power to hear and determine disputes relating to environmental planning and protection, climate issues, land use planning, title, tenure, boundaries, rates, rents, valuations, mining, minerals and other natural resources; compulsory acquisition of land; land administration and management; public, private and community land and contracts, choses in action or other instruments granting any enforceable interests in land; and generally any other dispute relating to environment and land.
Magistrates Courts	The Magistrates Courts are re-established under the Magistrates Court Act 2015 which repealed the Magistrates Court Act Cap 10 and are part of the Subordinate courts established under Article 169 of the Constitution of Kenya 2010	The Magistrates Court Act 2015 amended the Environment and Land Court Act by empowering the Chief Justice to appoint certain magistrates to preside over cases involving environment and land matters of any area of the country, provided the value of the property in dispute does not exceed pecuniary limits set out under Section 7 of the Magistrates' Court Act 2015. It further provides that appeals from the designated magistrates' courts on matters shall lie with the Environment and Land Court

transactions, planning, management of public land, environmental management and resolution of land and environment disputes.

Although efforts have been made to devolve land governance, the existing institutional framework for land administration and management is bureaucratic and there is lack of a framework clarifying inter-agency relationships, inter-agency coordination and exchange of information. As a result, land administration and management is prone to informational gaps, lacks coordination in performance of mandates, and corruption and administrative inefficiencies.

There is conflict over the relationship between the Ministry of Lands and the National Lands Commission (NLC) and their constitutional and statutory functions and powers. Areas of conflict include lack of clarity on the employment relationship of Land Registrars and Land Surveyors vis-à-vis the NLC and the Cabinet Secretary of the Ministry of Lands, and their reporting obligations and responsibilities to these two institutions.

Also, there is lack of clarity on the functions previously performed by the Ministry of Lands which the NLC is required to take over and perform, duties previously performed by the Ministry of Lands that the NLC is now required to assume, the transfer of functions from the Ministry of Lands to the NLC including which functions are required to be transferred and within what period; the status of officers who previously performed functions in the Ministry of Lands and who have been transferred to the NLC, the employment status of officers who were working in various departments in the Ministry of Lands; which agency has the mandate to administer and manage dealings in private land; and overlaps relating to land taxation and revenue function.

Further, the County Land Management Boards have not yet adopted standardized procedures, fees and levies across various counties. There are several processes a developer must undertake to obtain approvals, for example building approvals, which impact turnaround timelines. There is need to standardize levies and permits, and for all counties to establish e-permitting systems. There is also need to embrace technology to speed up land transaction and approval systems. Standard procedure manuals and guidelines should be developed to guide the technical processes of land management and administration in national and county governments.

Failure to continuously review outstanding land rates, and weak notification and follow up systems to landowners for payment of land rates has undermined revenue collection and led to revenue arrears. Landowners only pay on need basis (i.e. when undertaking a transaction) and not as required by law. There is need for periodic review of land rates.

In 2015, the Statute Law (Miscellaneous Amendments) Act and the Magistrates' Courts Act 2015 were passed and introduced various amendments to the Environment and Land Court Act. The amendments empower the Chief Justice to transfer judges from the High Court and the Employment and Labour Relations Court to the Environment and Land Court and vice versa. They empower the Magistrates' Court to hear environment and land disputes. This has caused dispute as to whether the Magistrate's courts (being subordinate courts) have jurisdiction to hear and determine disputes falling under the jurisdiction of the Environment and Land Court (which is a superior court). Further, the Environment and Land Court handles more land cases compared to environmental cases, resulting in low environmental caseload and indicating low initiative to enforce environmental justice.

A key gap is lack of jurisdiction of the Environment and Land Court to hear and determine criminal cases relating to the environment and land. In addition to conflict over its jurisdiction, there are also delays in resolution of land cases and case load in the Environment and Land Court.

8.3 Mechanisms of Acquisition of Land

(a) Through use of available public land

As described earlier, there are certain categories of public land which belong to the national government and county governments. These form the coffers of the available land that already belongs to the government, with applicable exceptions. The County Governments Act

requires county governments to indicate desired patterns of land use within the county and where public and private land development and infrastructure investment should take place. This means that county governments are critical access points for parties who seek to use public land, because they provide the land required and undertake approval of plans.

It has been shown that public land coverage and area is smaller in size compared to private or community land. This raises concern over the stock of public land readily available for government use. This is further exacerbated by delayed transfer of land from the defunct Local Authorities to county governments, which reduces the portfolio of public land available and accessible for various uses.

It is important to note that use, conversion, alienation and allocation of public land is subject to certain regulations. Public land may be converted to private land by allocation, and public land may also be converted to community land subject to public needs or in the interest of defence, public safety, public order, public morality, public health or land use planning. Any land may be converted from one category to another in accordance with the law.

Certain categories of public land may be allocated by the National Land Commission upon request of the national or county government by way of public auction to the highest bidder at prevailing market value subject to and not less than the reserved price, and also by way of application confined to a targeted group of persons or groups to ameliorate their disadvantaged position. It can also be done through public notice of tenders, and public drawing of lots or public request for proposals or public land exchange of equal value.

Whenever the national or county government deems it necessary to allocate specific public land, the Cabinet Secretary or the County Executive Committee member responsible for matters relating to land submits a request to the Commission for necessary action. Any substantial transaction involving the conversion of public land to private land is subject to approval by the National Assembly or County Assembly as the case may be. The National Land Commission is granted discretionary power to allocate public land on behalf of the national and county governments.

Private developers can acquire land through allocation of public land to such private developers or individuals by following the correct and lawful procedure for such allocation. Administration, use, acquisition, allocation and management of land for infrastructural and project development must adhere to the regulatory requirements for validity and legality. However, the measures in place for management and preservation of public land are reactionary and focused on recovery of public land once it has already been transferred to third parties. Further, approval of Parliament is required only where a "substantial" transaction for conversion of public land is involved, and its oversight role is limited in this regard as transactions not considered as substantial may not be subjected to the oversight and monitoring process.

(b) Through compulsory acquisition of private or community land

Besides ownership of public land, the Government of Kenya can acquire and appropriate private land rights through two mechanisms: the principle of eminent domain (compulsory acquisition) and police powers (the power of the State to regulate private property in public interest). Eminent domain refers to the power of the government to extinguish and expropriate private rights through compulsory acquisition of property by the State or a designated agency.

Compulsory acquisition of land has been defined as the power of the State to acquire any title or other interests in land for public purpose

subject to prompt payment of compensation (Government of Kenya, 2008). This power is also called eminent domain and ensures availability of any land to the government when and where it is needed for public purposes. Compulsory acquisition is informed by the realization that while meeting public needs and providing public facilities is incremental, land is inelastic, and governments may lack adequate available land for current and future public needs. The power for compulsory acquisition of land is provided so that the government can never find itself in a situation where it fails to implement public projects because of lack of land. The assumption is that public interest projects take precedence over private interests. Compulsory acquisition requires balancing the public need for land and protection of right to property.

In Kenya, this power is derived from Article 40(3) (b) of the 2010 Constitution, although the specific procedures are detailed in the Land Act 2012. Section 9(2) (c) of the Land Act 2012 provides that private land may be converted to public land by various means, including compulsory acquisition. Community land may also be converted to private or public land. Public land may also be converted to private land in accordance with the stipulated legal process.

Further, under the principle of eminent domain, a State has a right to compulsory acquisition subject to and in accordance with a stipulated legal process and prompt, full and just compensation. These principles grant a State the right to acquire private or community land for public purposes or for its own acquisition. Through compulsory acquisition, the government has the right to claim private or community land as one of its resources. Nonetheless, good governance is required for prudent management, utilization, administration, alienation and disposal of land resources whether public, private or community land.

A number of infrastructure projects in Kenya have required compulsory acquisition of land, pointing to the critical role of land in project and urban development. To achieve the intended objectives of infrastructure development, one needs, *inter alia*, land which is available and free of encumbrances, at fair value, land which is acquired lawfully in accordance with the stipulated legal process and of quality. It is also critical that such land is serviced with necessary infrastructure including roads, electricity, water and drainage and sewerage systems.

Examples where compulsory acquisition has taken place in the recent past include the expansion of the Nairobi-Thika Super Highway, and construction of the Standard Gauge Railway (a single-track standard gauge railway between Mombasa and Nairobi) which required compulsory acquisition of land and wayleaves from private land owners. Konza Techno-City required acquisition of 5,000 acres of land while the Lamu Port-South Sudan-Ethiopia (LAPSSET) project which intends to provide transport and logistics infrastructure aimed at creating connectivity between Eastern African countries of Kenya, Ethiopia and South Sudan and consists of several subsidiary projects in Kenya all require land. Electricity transmission infrastructure by the Kenya Electricity Transmission Company (KETRACO) which was established to provide backbone for a national transmission grid, critical in providing electricity transmission for enterprises, households and the Vision 2030 projects, requires acquisition of land and easements for wayleave corridors. Similarly, construction of the Dongo Kundu free port and a road that connects Mombasa mainland west to Mombasa mainland south bypassing Mombasa Island required compulsory acquisition of land. The road is a traffic corridor for traffic to and from Tanzania and to the interior of Kenya and beyond and will ease traffic on Likoni Ferry.

Compulsory acquisition in Kenya was previously governed by the Land Acquisition Act, Cap 295, which was repealed by the enactment of the Land

Act 2012. However, it still applies to parcels of land which had been gazetted for acquisition prior to the enactment of the Land Act 2012, pursuant to Section 162 of the Land Act 2012. This Act provides for compulsory acquisition of land. The Land Acquisition Act provides that where land is compulsorily acquired, full compensation shall be paid promptly to all persons interested in the land. In determining the amount of compensation to be awarded for land acquired under the repealed Land Acquisition Act, the Commissioner of Lands shall consider the market value of the property, among other factors, with an addition of 15 per cent of market value to cater for disturbance. According to the Land Act 2012, parcels of land that had been gazetted for compulsory acquisition before its enactment are governed by the repealed Land Acquisition Act. However, this has led to application of varied methodology and assessment of varied criteria, which differs from the current legal regime.

The Constitution of Kenya 2010, Article 40(3), provides for prompt payment of full and just compensation of land to the person whose land is compulsorily acquired for a public purpose, while Article 40(4) provides for compensation to occupants in good faith of acquired land who may not hold title or formal registration to the land. Section 111 of the Land Act 2012 states that "if land is acquired compulsorily under this Act, just compensation shall be paid promptly in full to all persons whose interests in the land have been determined". The Community Land Act 2016 provides for prompt and fair compensation of persons affected through compulsory acquisition. The methodology of arriving at "prompt" compensation and consequent interpretation of the same is, however, yet to be clarified.

The Land (Assessment of Just Compensation) Rules 2017 define market value as the value of the land at the date of publication in the Gazette of the notice of intention to acquire the land. These rules clarify the factors to be considered by the National Land Commission when assessing compensation. The factors include the market value of the land, and the damage sustained or likely to be sustained by interested persons as a result of severing the land to be acquired from other land, and damage sustained or likely to be sustained by persons interested at the time of the Commission's taking possession of the land by reason of the acquisition injuriously affecting his or her other property, whether moveable or immovable, in any other manner or his or her actual earnings. Further, it includes reasonable expenses incidental to the relocation of any of the persons interested or who will be compelled to change residence or place of business as a consequence of the acquisition, and damage genuinely resulting from diminution of the profits of the land between the date of publication in the Gazette of the notice of intention to acquire the land and the date the Commission takes possession of the land. The Commission thereafter adds a sum equal to 15 per cent of the market value to the amount of compensation as compensation for disturbance. Under the rules, the duration of ownership or holding of the property is not among the factors that the National Land Commission considers when assessing compensation payable.

However, the method of and criteria for assessing the "likelihood" of damage to be sustained is not standardized. Further, the definition of "damage" is wide and open to interpretation. The period within which compensation must be paid remains undefined. It is not clear whether such compensation is payable immediately, within a specified and defined period, on an appointed date or whether the same should await certain processes to be concluded.

Article 40 (3) (i) of the Constitution provides for compulsory acquisition after prompt payment in full of just compensation to the property owner. However, the determinants of what amounts to prompt payment are not clear in

determining whether a landowner has been denied the right to prompt compensation as provided for in the Constitution. Further, in the event there is a delay in payment, there is no mechanism for a land owner to enforce a claim for monetary compensation besides resorting to court proceedings. There is no mechanism to reverse the compulsory acquisition, or initiate repossession, thus occasioning loss and economic hardship to land owners. As a result, aggrieved land owners resort to court proceedings to obtain injunctions or conservatory orders to restrain the parties undertaking compulsory acquisition (including their employees, agents or developers) from entering, further remaining, constructing, excavating, demolishing, destroying or interfering with any structures and developments on the land or carrying out any activities on the land. Imposition of injunctions, conservatory orders, caveats or cautions prevent any transaction from being carried out on such land, with the effect being stalled projects, breach of completion timelines and risk of incurring financial implications on parties.

Compulsory acquisition in Kenya faces challenges particularly regarding disputes over quantum of compensation awarded, disputes over the assessment of awards, disputes over the methodology and factors considered in determining the quantum of compensation payable, and litigation surrounding non-payment or delayed payment of compensation by the National Land Commission.

(c) Through conversion of private or community land

In addition to compulsory acquisition, the State may also acquire land through sale, transfer, surrender of private or community land, or reversion of leasehold interest of private land. Thus, the law enables private land to be converted to public land through compulsory acquisition, surrender, transfer or reversion of leasehold interest to the Government after expiry of the term of a lease. Community land may also be converted into public land through compulsory acquisition, transfer and surrender with the approval of at least two thirds of the community assembly. Nonetheless, any land may be converted from one category to another in accordance with the stipulated legal process.

(d) Impact of environmental considerations on utilization of land resources

Environmental considerations impact utilization of land resources as it is a constitutional requirement under Article 60(1) of the Constitution, which provides that land in Kenya shall be held, used and managed in a manner that is equitable, efficient, productive and sustainable, and in accordance with the principles of equitable access to land; security of land rights; sustainable and productive management of land resources; transparent and cost effective administration of land; and sound conservation and protection of ecologically sensitive areas.

Further, Article 69(1) provides that the State shall ensure sustainable exploitation, utilization, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits, establish systems of environmental impact assessment, environmental audit and monitoring of the environment and eliminate processes and activities that are likely to endanger the environment. Therefore, environmental considerations and environmental regulations must be taken into account particularly in construction and infrastructure development projects.

Further, Section 58 of the Environmental Management and Coordination Act (EMCA) 1999 provides that a project cannot commence, proceed or be carried out without an environmental impact assessment conducted by an expert or professional in the field and an environmental impact assessment

licence granted by the National Environmental Management Authority (NEMA). The Environmental Impact Assessment and Audit Regulations 2003 and the Environmental Impact Assessment Guidelines and Administrative Procedures of 2002 were formulated to regulate and guide the Environmental Impact Assessment and Strategic Environmental Assessment processes. The EMCA (1999) and Environmental Impact Assessment and Audit Regulations 2003 were amended to align them with the Constitution. Thus, the Environmental Management and Coordination (Amendment) Act 2015 was enacted.

The Second Schedule of EMCA (Amendment) Act 2015 lists all projects that should undergo an environmental impact assessment, which includes those involving changes in land use, including large scale resettlement schemes, urban development projects including establishment of new housing developments exceeding 30 units. If NEMA determines that the intended project may or is likely to have or will have a significant impact on the environment, it may refuse to grant an environmental impact assessment licence.

NEMA also carries out environmental audit of all activities that are likely to have a significant effect on the environment. Therefore, any activities or projects that could endanger the environment or activities which, through an Environmental Impact Assessment or Environmental Audit, have been identified as being harmful to the environment could be prevented from progressing or could delay project completion timelines. This would include attempts to raise and mobilize revenue from minerals such as oil which are averted due to environmental concerns.

EMCA establishes the National Environmental Management Agency Tribunal which hears and determines disputes relating to the administration of EMCA. Section 125 of EMCA specifically provides for the right to appeal to the National Environmental Management Tribunal against a decision by NEMA to grant a license to entities to undertake a project. It is therefore important for parties undertaking a project to take into account environmental considerations pertaining to their projects and follow the correct and lawful process to ensure that projects are carried out lawfully and procedurally and to avoid dispute over the same. Project developers must obtain EIA licence before commencing any project and must comply with specific conditions imposed on any environment impact assessment licences granted.

For example, the construction of the Standard Gauge Railway through the Nairobi National Park faced opposition from environmental conservationists who argued that the railway, which was passing through the park, would cause damage to the environment and flora and fauna, thus inhabiting the park. The issue was raised that the Standard Gauge Railway project was being implemented without taking into account the environmental and cultural issues. This caused delay in the project due to litigation and court dispute.

Moreover, where activities are being carried out on land that falls within a national park or game reserve, environmental considerations must be made and an environmental impact assessment carried out. Article 62 of the Constitution provides that national parks and government game reserves vest in and are held by the national government in trust for the people of Kenya and shall be administered on their behalf by the National Land Commission. Therefore, national parks and game reserves are not among the land that vests in county governments.

In the same vein, management of national parks and game reserves is not a function that has been devolved to the county government under the Fourth Schedule to the Constitution. National parks and national reserves are regulated under the Wildlife (Management and Conservation) Act 2013, which provides

restrictions over certain activities proposed to be carried out in a national park. For example, mining or quarrying in a national park requires approval and consent of the Kenya Wildlife Service. The Second Schedule of the EMCA 2015 further provides that projects which are required to undergo an environmental impact assessment include establishment or expansion of recreational areas in national parks, national reserves, forest and nature reserves and any areas designated as environmentally sensitive. However, there are often delays in issuance of environmental impact assessment licences, and conflicting and overlapping mandates among agencies; for example, issuance of effluent discharge license which is done by NEMA and county governments. There is also inadequate public consultation in project development. Therefore, there is need to streamline processes among the lead agencies and county governments and enhance environmental awareness of the public.

Similarly, consideration must be made towards riparian reserves when undertaking any development or activity on land that borders a water course. The Land Act 2012 defines "riparian reserve" as the land adjacent to the ocean, lake, sea, rivers, dams and water courses. Land in Kenya is classified as public, community or private. Article 62(1) of the Constitution defines public land to include all rivers, lakes and other water bodies as defined by an Act of Parliament.

Generally, riparian areas are commonly thought of as those lands bordering water bodies such as streams, rivers, and lakes. Such land acts as a buffer zone to conserve and protect ecologically sensitive areas and ensures that an appropriate distance is maintained between a river bank/ stream and any nearby physical development or human activities. Therefore, while rivers, lakes and other water bodies are public land, they may border private land, prompting regulation of the use of land abutting the water body.

Currently, there are a number of laws with bearing on the definition, use or management of riparian land, such as the Environmental Management and Coordination Act 1999, the Environmental Management and Coordination (Amendment) Act 2015, Environmental Management and Coordination (Water Quality) Regulations 2006, the Water Act 2016 (which repealed the Water Act of 2002), the Water Resources Management Rules 2007, the Agriculture Act Cap 318, the Forest Act 2005, the Land Act 2012, the Physical and Land Use Planning Act 2019, the Survey Act Cap 299, and the National Land Commission Act 2012. Kenya is also a signatory to the Convention on Wetlands of International Importance especially as Waterfowl Habitat (or simply the Ramsar Convention). These laws place restrictions on the use of land which abuts a water body, including restrictions on distance and on certain activities which cannot take place within the recommended riparian distance or on the riparian land.

Restrictions on riparian zones impact infrastructural and development projects and activities as they must be within the legally stipulated distance of a water body. Proper surveying and due diligence must be exercised by investors when purchasing or developing land for infrastructure projects to avoid encroachment on riparian zones. Failure to comply with the recommended riparian distance has resulted in buildings being demolished, with loss of resources that could have been channelled to construction of the buildings and business establishment.

8.4 Role of Land in Supporting the "Big Four" Agenda

(a) Affordable housing

The right to adequate housing has been underscored in Article 43(1) (b) of the Constitution. It provides that 'every person has the right to accessible and adequate housing,

and to reasonable standards of sanitation'. Under the Constitution 2010, a number of functions have been devolved to county level as specified under Part 2 of the Fourth Schedule, including county planning and development, land survey and mapping and housing. According to the Fourth Schedule of the Constitution, the national government oversees the housing regulatory and policy framework whereas county governments are required to implement the framework. Implementation of the affordable housing agenda requires availability of county land and infrastructure such as roads, sewerage and drainage systems. Further, county governments must have title to the properties they claim as belonging to the county, and which must also be free of any encumbrances. However, a number of counties do not have titles to the land they claim while other properties have contested ownership.

Where counties lack ownership documents and title to properties, they may be unable to transact with such property. It is also difficult to obtain construction and building approvals from relevant authorities such as the National Construction Authority without title and appropriate ownership documents. Letters of allotment and share certificates may not suffice.

The power of compulsory acquisition can also be exercised by NLC on behalf of national government and county governments to acquire private or community land for affordable housing. Conversion of private or community land through sale, transfer or surrender is another mechanism to avail land to the government.

Scarcity of land, scarcity of marketable land parcels, high cost of land, haphazard planning and lack of titles are issues that could hinder the realization of adequate, affordable and decent housing. Shortfall in housing results in proliferation of squatter and informal settlements. For future planning of urban centres, counties have recognized the need to ensure that land is set aside and reserved for housing through spatial plans.

The affordable housing project will be implemented through the State Department for Housing and Urban Development across the country and in partnership with county governments, private developers and other relevant stakeholders. However, a clear framework between the two levels of government needs to be developed regarding housing.

(b) Food security and agriculture

The importance of land use in the economic and social activities of a society makes it imperative that land is accessible, its potential for productivity is enhanced and sustainability guaranteed. Kenya's economy is largely based on agriculture, which contributes about 30 per cent of GDP and provides livelihoods to over 80 per cent to the population (Government of Kenya, 2017). Approximately, 80 per cent of Kenya's total dry land surface is classified under Arid and Semi-Arid Lands (ASALs). This land supports 26-30 per cent of the total population, 50 per cent of the livestock sector, and 70 per cent of a wide variety of wildlife that form the basis for Kenya's tourism. The livestock sector contributes about 12 per cent to the country's GDP (Government of Kenya, 2017).

For these reasons, land should be available, accessible, affordable, of value and usable to ensure it can be used to support various sectors that are predominantly reliant on land and land resources. Land should be used in a sustainable manner that ensures viability and optimization of land productivity. Land is critical to the livelihoods of communities because it provides space for crop growth, supports agricultural activities, and provides pasture for livestock grazing.

High population growth coupled with rapid and uncontrolled urbanization, poor land use planning, and high demand for rural and urban settlements has caused intense competition for land. In several parts of the country, agricultural potential is limited because of soil erosion, low fertility, rockiness and acidity of the soils, and dangers of landslides. The adverse effects of climate change limit the available amount of arable agricultural land. Poor utilization of land including overgrazing, land subdivision, poor farming methods, over-reliance on land resources for economic development, urban sprawl into prime agricultural land, unsustainable agricultural practices, encroachment into fragile ecosystems and protected areas and resource use conflicts have detrimentally affected the agriculture sector. Urbanization and growth of cities has led to subdivision and conversion of agricultural land into residential, commercial and other uses. Uncontrolled subdivision of land into several parcels held under separate titles reduces agricultural productivity. Sustainable land use practices are key to the achievement of food security and for other economic activities for development.

The Land Control Act Cap 302 stipulates measures for controlling transactions on agricultural land. However, it is ineffective in controlling or preventing uncontrolled subdivision of land into uneconomical units. Increased subdivision of agricultural land has led to agriculturally useful land being fragmented into non-viable sub-units or small units, making agricultural land too small to be economically viable for farming.

The grounds on which the Land Control Board can refuse consent are ineffective in protecting agricultural land from destructive practices and activities, as there are no means to verify, at the point of granting consent, whether (in terms of the criteria specified under the Land Control Act) the applicant is unlikely to farm the land well or to develop it adequately, or is unlikely to be able to use the land profitably for the intended purpose owing to its nature, or already has sufficient agricultural land, which are some of the grounds upon which the Land Control Board can refuse consent. Likewise, there are no follow up mechanisms after consent has been granted to ascertain whether or not the landowner has farmed the land well or has developed it adequately or used it profitably for its intended purpose. There are no mechanisms for inspection or audit of the economic development of the land concerned or the maintenance or improvement of standards of good husbandry within the land control area after consent has been granted. Further, even where the landowner is found not to have complied, there are no enforcement mechanisms or corrective measures prescribed under the Land Control Act to enable appropriate action to be taken against the landowner(s).

The law needs to prevent uncontrolled subdivision of agricultural land. A legal framework may also prescribe measures to rectify situations where land has been subdivided and has resulted in uneconomical farming. Land consolidation may be one of these options, with the aim of readjusting unfavourable land subdivision and promoting the appropriate use of real property. However, this may not rectify the effects of subdivision unless there is land adjacent and available for consolidation. Therefore, the best way is to prevent subdivision in the first place by curbing increasing fragmentation of arable farming land by regulating future subdivision.

The repealed Subdivision of Agricultural Land Act of South Africa regulated subdivision of all agricultural land in South Africa. The purpose of the Act was to prevent the creation of uneconomic farming units, and it required that the Minister of Agriculture, Forestry and Fisheries must consent to the proposed subdivision. The stated purpose of the Act was to prevent the degradation of prime agricultural land in South Africa (Republic of South Africa Select Committee on Subdivision of Agricultural

Land Report SC 9-64 (1964). This function was previously performed by the Development of Natural Resources Board of South Africa, but it was felt that it was necessary to consolidate and centralize the controlling authority as opposed to having regulations which were national and provincial and only affected certain areas. The scope of the Act also applied to actions that may result in subdivision of agricultural land. Although this Act was repealed by the Subdivision of Agricultural Land Act Repeal Bill on grounds that it was not appropriate for government to interfere in the determination of the size of agricultural land and that the position should be regulated by the agricultural sector, land users and the market, it offers insights into international practices on management of subdivision of agricultural land.

Experiences of Asian countries have demonstrated that land consolidation is technically and economically feasible. Farmers' cooperation and the governments' strong political will and commitment to address farm production inefficiencies has contributed to success in land consolidation. For example, in the Philippines, corn farmland clustering, which is a prelude to land consolidation, is now being recognized as a strategy for efficient corn mechanization. The Department of Agriculture in Cagayan Valley initiated the clustering projects for corn, a step towards full-scale land consolidation under the Philippine setting. Clustering involves the removal of fences and other obstructions along farm property boundaries to form contiguous farm areas that increase the efficiencies of operation of large machines for synchronized land preparation, planting, and harvesting; minimize turns at headlands and other interruptions; and reduce energy inputs. It also provides the environment for adoption of high-technology initiatives such as precision agriculture, automation, environmental protection, and organic farming, which further increase competition.

Agrarian reconstruction and land reclamation are key features of land consolidation and land redistribution operations in European countries, whereby land consolidation operations have been coordinated with land reclamation and soil improvement measures. For example, in Southern Europe, soil improvement has been identified as a critical aspect of agrarian reconstruction in combination with land redistribution and land consolidation operations.

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(c) Manufacturing

Land is critical for establishment of technology and innovation centres, industrial parks and required infrastructure. Land is also essential in providing the raw materials (such as cotton and sisal) required to support the textile industry in the manufacturing sector. The Medium and Small Enterprises (MSEs) also require land and worksites which have access to electricity and access to water supply. An ideal MSE worksite requires various physical infrastructure, including water, sewerage and sanitation, solid waste management services, access roads and drainage, and power supply. There is need for proper drainage and sewage systems to manage waste and waste disposal accrued from manufacturing processes. However, there has been encroachment on land reserved for MSEs and the *Jua Kali* sector, which was documented in the Ndung'u Report of 2004. For example, land belonging to the Kenya Industrial Estate, which was reserved for industrial use and provision of worksites through the incubator model, has been irregularly allocated to private developers (Moyi, 2005). According to the Ndung'u Report, land that was initially reserved for development of markets and MSE worksites within the main municipalities has been irregularly re-allocated and diverted for other purposes such as residential, commercial, private use, etc, leading to scarcity in the public land available and multiple, incompatible land use in a development area.

There is need to ensure availability, affordability and security of land which is properly zoned and planned. However, land is increasingly becoming very expensive. Further, security of land rights is not guaranteed with respect to multiple-ownership claims over the same parcel of land and irregular change and conversion of designated land use.

(d) Blue economy

The blue economy in Kenya covers aquatic and marine spaces including oceans, seas, coasts, lakes, rivers and underground water. It comprises a range of productive sectors such as fisheries, aquaculture, tourism, transport, ship building, energy (oil and gas), underwater mining and related activities. The concept of blue economy also recognizes that the productivity of healthy freshwater and ocean ecosystems is a pathway for aquatic and maritime-based economies. The sector plays a significant role in the social and economic development of Kenya.

Kenya's strategic location along the Indian Ocean coast and its inland waters endows it with resources, opportunities and potential for transforming into a maritime economy. However, in advancing the blue economy, there is need to address the impact of land-based sources and activities and physical degradation of the coastal and marine environment for enhanced protection of the marine environment against pollution from land-based activities. There is need to pay attention to the sources of pollution of the marine and coastal environment, including pollution from substances entering the marine environment through run-off from land, rivers, pipelines and other outfall structures and pollution from the atmosphere, generated from land-based activities.

Delimited maritime boundaries create certainty as to the extent of coastal States maritime jurisdiction to exploit, among other things, living and non-living resources. The East African Coastal States have adopted the mechanisms in the 1982 United Nations Convention on the Law of the Sea (UNCLOS) to delimit their overlapping adjacent and/or opposite maritime zones by establishing a boundary. However, according to the Application Instituting Proceedings, in 2014, Somalia instituted proceedings against Kenya at the International Court of Justice (ICJ) disputing maritime delimitation in the western Indian Ocean. Somalia's application stated that both States disagreed about the location of the maritime boundary in the area where their maritime entitlements overlap. Kenya's argument on the maritime boundary is that it should be 'a straight line emanating from the State's land boundary terminus and extending due east along the parallel of latitude on which the land boundary terminus sits, through the full extent of the territorial sea, Exclusive Economic Zone and continental shelf, including the continental shelf beyond [200NM]'.

However, Somalia submitted that this practice is not in line with Kenya's own domestic Maritime Zones Act or international law. In terms of Kenya's Maritime Zones Act, it provides that 'on the coastline adjacent to neighbouring States, the breadth of the territorial waters shall extend every point of which is equidistant from the nearest points on the baselines from which the breadth of the territorial waters of each of the respective States is measured'. Concerning the Exclusive Economic Zone (EEZ), Kenya's Maritime Zones Act provides that the 'northern boundary of the EEZ with Somalia shall be delimited by notice in the Gazette by the Minister pursuant to an agreement between Kenya and Somalia based on international law'.

Somalia argued that the boundary line in the territorial sea should be the median line as provided for in Article 15 of the UNCLOS and Kenya's Maritime Zones Act and not according to Kenya's current practice. Furthermore, Somalia argues that in the EEZ and continental shelf, the boundary should be established in terms of the 'three-step process' applied by the ICJ in its interpretation of Articles 74 and 83 of UNCLOS.

This process first requires that the Court draws a provisional equidistance line. Secondly, the Court is to 'determine whether there are 'relevant circumstances' that render the provisionally drawn equidistance line inequitable'. Thirdly, the Court is to 'test the proposed delimitation line to determine whether it results in any gross disproportion'.
Somalia argued that Kenya seeks to exploit both living and non-living resources on Somalia's side of where it purports the boundary determined in terms of international law should be. As far as non-living resources are concerned, Somalia stated that Kenya has awarded petroleum blocks to multinational oil and gas companies, some of which lie on what Somalia considers to be its maritime space. It is paramount in the interests of security, economic development and better maritime governance that this issue is resolved.

8.5 Development Control and Land Use Planning

Article 66 of the Constitution grants powers to the State to regulate the use of any land or any interest in or rights over any land in the interest of defense, public safety, public order, public morality, public health, or land use planning. The Physical and Land Use Planning Act, 2019 is the principal law governing planning, use, regulation and development of land. The Act also regulates the functions of the institutions in charge of development control, procedures, and requirements. There are several other land us-related laws that guide development control, including the County Governments Act 2012, Environmental Management and Coordination (Amendment) Act 2015, and Urban Areas and Cities (Amendment) Act 2017. Sessional Paper No. 3 of 2009 on National Land Policy stipulates the principles and values that govern regulation of land use and empowers all planning authorities to regulate the use of land in public interest. Sessional Paper No. 1 of 2017 on National Land Use Policy (2017) provides the legal, administrative, institutional and technological framework for optimal utilization and productivity of land-related resources in a sustainable and desirable manner at national, county and community levels.

Section 2 of the Physical and Land Use Planning Act defines development as carrying out any works on land or making any material change in the use of any structures on the land. Development control is the process of managing or regulating the carrying out of any works on land or making of any material change in the use of any land or structures and ensuring that operations on land conform to spatial development plans and policy guidelines, regulations and standards issued by the planning authority from time to time in to achieve a purposeful utilization of land in the interest of the general welfare of the public.

Where a change of user of property is being conducted, the developer is required to place an advertisement in at least two (2) local dailies of wide circulation, giving fourteen (14) days' notice of the intended change of user and inviting comments and/or objections. It is thus important to consult and seek comments from the residents of the area. Objections may be raised on varied grounds, for example where the proposed change of user for the development project is not compatible with the surrounding neighbourhood or does not complement or suit the development trends of the area, or is likely to result in diminution in the value of the property or is likely to inflict any negative effects on the land and the neighbouring properties or lead to negative environmental and health impacts. Such concerns and objections must be addressed. The county government then reviews the change of use proposal/brief with the public, objections received if any and pass a resolution, recording reasons regarding its consideration or non-consideration for the change. Usually, conditions will be imposed on the change of user. It is therefore important for residents to submit their objections within 14 days, failing which their views may not be

considered. It is also crucial for developers to assess compatibility of their proposed project with the area.

Nonetheless, in spite of the regulatory framework put in place, there has been haphazard housing development and planning due to uncoordinated land use planning in the country. There is incompatible land use development and uncontrolled change of user whereby a change of user leads to a development project which is not compatible with the surrounding neighbourhood or does not complement or suit the development trends of the area. In urban areas, rural-urban migration has exerted pressure in provision of employment, housing, education and other services leading to development of informal settlements. Encroachment by squatters and landless individuals on land reserved for public purposes could be an additional issue that could hinder infrastructure development. Illegal and irregular allocation of land reserved for public purposes to private developers also leads to diminution in the stock of public land available and incompatible land use where the use of the property is incompatible with the original intended use of the public land which is reserved for public purposes.

There are incidents of land originally reserved for certain purposes being irregularly converted to other uses which are divergent from the original intended use of the property. This uncontrolled change of use and weak thresholds for consideration of change of use applications has led to creation of incompatible land uses and multiple users of land lying side-by-side. In addition, not all land in the country is titled. Where property is not titled, construction takes place outside the regulatory framework, making it difficult to ascertain the beneficial owners of the property. Further, where buildings are erected on property that has no title, it becomes difficult to enforce regulatory standards, compliance mechanisms and sanctions.

A National Spatial Plan for the period 2015-2045 has been prepared by the National Department of Physical Planning in the Ministry of Lands and Physical Planning. The Plan supports the implementation of strategic national projects, specifically flagship projects under the Kenya Vision 2030, by indicating their spatial locations and providing a framework for absorbing the spatial impact of these projects. It seeks to provide a guide for development planning by the counties as they discharge their responsibility of preparing county and local plans. The National Spatial Plan provides physical planning policies which the plans at county level are expected to articulate and propagate. These policies include protection of rich agricultural land, conservation of identified environmentally sensitive areas, urban containment, and promotion of industrial development, among others. The Plan proposes that Land Banks be established to provide required land for investment in the emerging sectors. To minimize future land acquisitions for infrastructure, the Government of Kenya through the Ministry of Lands has come up with a National Land Use Policy (Sessional Paper No. 1 of 2017) where appropriate infrastructure is provided for to support land use.

The County Governments Act 2012 requires each county to have a ten-year county GIS-based spatial plan which should be part of the County Integrated Development Plan. Generally, spatial plans delineate present and future major land uses, transportation networks, conservation areas and directions for further growth. The spatial plan is considered as the spatial development framework for the county and should, *inter alia*, contain strategies and policies that indicate desired patterns of land within the county and identify programmes and projects for the development of land within the county. So far, Kiambu, Lamu, and Makueni counties have done this.

Although counties are obliged to prepare GIS-based County Spatial Plans (CSP) to guide their long-term development agenda, they do not have sufficient awareness and training on what a CSP entails and its role and centrality

in development, including its envisaged role as a key instrument to realize environmental protection, and principles of county planning, including budgetary allocations. Further, counties have inadequate allocation of funds for the CSP process and face challenges in costing the development of the CSP. Data acquisition and management is a major challenge. Where counties have the GIS data, they may not have technical expertise to analyze or interpret the data, thus it becomes difficult to utilize the data to inform the planning and development process. There is need for sensitization, training and capacity building of all county officers and the public on the CSP.

8.6 Challenges and Key Issues Undermining Land Mobilization in Kenya

There are several challenges impacting on mobilization of land as a resource in furtherance of the development agenda, and include the following:

(a) Management of land

Corruption affects land management, including aspects regarding registration (such as multiple registered owners over the same parcel of land), forgeries in land transactions, illegal and irregular allocation of public land, illegal and irregular allocation of land reserved for public purposes, land grabbing of private, community and public land, failure to pay land rates and rent, and stamp duty evasion. This leads to lack of security of land rights. It also erodes investor confidence. There are also incidents of conversion of land use without regard for their intended purposes and change of use from intended use and purposes using unlawful means. This has led to multiple and incompatible land use, and reduction in availability of land reserved for certain public purposes. Lack of integrity and poor governance in land management create uncertainties. Due diligence exercises are often inconclusive and unreliable, leading to uncertainty in land ownership. It is important for members of the public to undertake thorough due diligence, physical verifications and engagement of competent and experienced professionals before entering into any contractual obligations. Automation of land transactions would be beneficial in enhancing transparency and accountability. Upgrading the security features and security labels on title deeds would improve the ability to distinguish between genuine and forged title documents and enhance detection of forgeries.

Land availability: Speculative land holding, mass accumulation of land, concentration of land ownership, and hoarding of land has hampered land availability whereby large tracts of land are held for speculative purposes or for speculative investments and remain largely unutilized or idle. There is inadequate quantity of available land, thus distorting demand and supply. High demand with low supply causes an upsurge in the price of land. This impacts land affordability and availability of land (Government of Kenya, 2017).

Land banking is one of the mechanisms in which the government would be able to access land and make it available for investment and development. Land banks are quasi-government entities created by counties or municipalities to effectively manage and repurpose an inventory of under-utilized, abandoned or foreclosed property (Government of Kenya, 2018). While land banks are mentioned in the National Land Policy 2009 as one of the strategies for the government to implement, there is no legal framework governing or regulating their composition, functions, powers, processes and relationships with other land administration agencies.

Although the Kenyan framework provides for the State's right to expropriate land against compensation in public interest, and the law provides legal procedures to secure land necessary in the common interest and needed

for the execution of consolidation schemes, it does not adequately regulate acquisition of land for the purpose of enlarging uneconomic holdings, since the terms for expropriation generally do not cover land acquisition for the purpose of enlarging private farm units. Land banks would require a separate legal and institutional framework that is harmonized with the current existing structures and land holding policies. There is also need to create awareness and sensitization of the public on the function, purpose and nature of land banks.

A number of countries have adopted land banks, including the United States of America, India, Columbia and South Africa, although there are different conceptualizations on the nature and functions of land banks across different countries. The term land bank is used in the United States of America to describe a government entity that focuses on the conversion of vacant, abandoned and tax-delinquent properties into productive use (Alexander, 2005), which appears more aligned with Kenya's perspective of land banking. Land banking in the 1960s was viewed as an important mechanism through which public authorities could control urban development (Alexander, 2005). Land banking implies that the government acquires land in advance of needs. The main advantages are that it allows the purchase of land, relatively cheaply, for public purposes and provides a tool to influence the pattern of development in accordance with overall planning objectives (UNESCAP, 1993).

In the Gauteng Province of South Africa, land banking has been identified as one of the strategies to acquire land for affordable housing. Land banking in South Africa is viewed as a strategy where governments acquire land cheaply and hold it for future housing developments. Land banking was identified as an area of interest for the Gauteng Department of Housing in 2006. Given the difficulties in accessing suitable land for affordable housing in Gauteng, land banking is one approach for addressing the locational disadvantage often associated with low-cost housing. Land banking practices in Chile, India and Turkey have not been successful in delivering land to the poor primarily due to lack of finance, and administrative inefficiencies.

Inadequate information on status of land: Data on the status of land coverage, land resources, land ownership, land use and land holding in Kenya is insufficient, scattered and not updated to reflect the current circumstances. Neither has such information been publicized for public consumption. Further, lack of standardized definitions and criteria on land use, difficulty in monitoring compliance with land use conditions and ascertaining the original specified land use against current land use makes it challenging to determine land use patterns and current status of compliance. Data availability, accessibility and dissemination remains limited. Providing accurate, complete and up to date information on the status of land would enable strategic identification of land for use and development.

Lack of land inventory: Kenya is yet to develop a comprehensive inventory of all the land, its registered owners, size and use. This undermines the ability to take stock of available public land and available private or community land to enable proper planning. There is also lack of a price reference system for public land.

High cost of land: Land in Kenya is expensive due to various reasons. Land speculation and exaggeration of compensation claims have rendered land expensive. Speculative holding of land and mass accumulation and hoarding of land with no regulation of minimum and maximum acreage of land holding has also made land expensive. Although Article 68 of the Constitution requires Parliament to enact legislation to prescribe minimum and maximum land holding acreages for private land, the Minimum and Maximum Land Holding Acreage Bill introduced in 2015 was not passed by

Parliament due to loopholes in the Bill. Where land is available, it may not be serviced, further escalating the cost of land.

Ineffective zoning policy: Generally, in towns and cities, the general planning and zoning sets aside land for infrastructure and other infrastructural establishments. However, because of delay in developing the reserved public lands, much of this land is sometimes misappropriated or inhabited by squatters. Land is not utilized to optimal levels due to an ineffective zoning policy. There is need for an appropriate zoning policy to ensure and encourage optimal development.

Weak revenue collection system for property rates: Most county governments are inefficient in collecting land rates, land rent and property rates. Similarly, landowners have an accumulation of arrears and penalties on properties, land rent and land rates in counties, with minimum efforts by county governments to recover the owed amounts, thus denying the county of revenue. The government is therefore unable to tap into the value of property as a means of raising own source revenue. This impacts on revenue mobilization, whereby revenue collected is low. It is important for counties to maximize on revenue collection and implement efficient and expeditious revenue collection systems, mechanisms and procedures to enable counties to utilize the revenue collected. They need to eliminate manual revenue collection systems and entrench central management of revenue collection systems to avoid revenue collection systems that are managed, collected, recorded and documented separately and internally within various departments/revenue collection systems. There should also be a harmonized revenue collection system across counties.

Over the years, the manual and paper-based land records management system has become ineffective for land transactions. The bureaucratic and long processes, procedures and practices have impacted negatively on service delivery due to frequent misplacement of records, ineffective document movement and tracing systems and deteriorating paper records. Section 5(2) (d) of the National Land Commission Act provides that the NLC may develop and maintain an effective land information system for the management of public land. Prior to enactment of the Land Laws (Amendment) Act, this same section of the National Land Commission Act previously provided a mandatory obligation on the National Land Commission to develop and implement a nationwide land information management system at both national and county levels. To help the Commission in this quest, the National Land Information Management System (NLIMS) directorate was created.

The National Lands Commission in conjunction with the Ministry of Lands has embarked on development and implementation of NLIMS to digitize land transactions and enable effective and efficient access to land data. Thus far, it is possible to conduct an online land search through the e-citizen online portal. Comparably, in the United Kingdom, it is possible through online land register systems, through the online title register and the title plan, to search for the owner of property, ascertain how far the boundaries of the property extend, whether the property is at risk of flooding and the price an owner paid for the property. The Title Register contains a description of the property. From the Title Register, an applicant can find out who owns a house or land, the address of the owner, the tenure, price paid/value stated information and any rights of way or restrictions and covenants on the land noted on the register. It contains details of the registered charges and leases (if any) affecting the property. The Title Plan shows the general extent of the property by red edging and includes the outline of the surrounding properties. It may also contain references to leases, rights of access, easements, charges, boundary maintenance liability, etc. If an applicant does not know the full postal address of the property or it cannot be described by an address (for example a rural land), one can

use the system's built in digital map to mark a land or building after which it will be possible to carry out the search using the coordinates. After marking the area with a red pin, this would allow the system operators to identify the coordinates of the property and carry out the search on behalf of the applicant. Inclusion of such information, detail and technology would be crucial in modernizing the land information system in Kenya for ease of undertaking, tracking and facilitating land transactions and reducing incidents of fraudulent land transactions.

Further, there is weak surveillance on land use, and an ineffective monitoring framework to enable real-time tracking and notification of transactions and any changes in ownership, change of user, compliance with conditions imposed and compliance with user specifications.

(b) Land ownership

Multiplicity of land laws: Due to multiplicity of land laws and different registration systems since independence, the systems of land registration in Kenya are yet to be fully aligned and harmonized. Although there are a number of new land laws, there are still conflicting and out-dated laws which are operating concurrently in relation to the properties registered under them and operations resulting in delays in resolution of pending land and boundary disputes, conflicts, confusion in conveyancing transactions, delays and overlapping mandates.

Difficulty in verifying and ascertaining the rightful owner of land: Where most land is not registered and proof of ownership cannot be ascertained, it becomes increasingly difficult to determine the real owners of a given parcel of land. There are several disputes reported, where more than two people or communities claim ownership over the same parcels, leading to double and multiple allocation and lack of security of property rights. There are also delays in resolution of land cases particularly where ownership documents are missing or where there are multiple claims of ownership, making it difficult even for courts to determine the rightful owner of property whose ownership is in dispute.

Lack of land ownership documents to verify ownership: Individuals, and national and county governments lack titles and land ownership documentation, hampering the ability to dispose, allocate, alienate or acquire the land. Lack of titles also leads to multiple claims of ownership and difficulty in ascertaining ownership. Due to lack of documents, it is not easy to determine the true boundaries and sizes of all the land in Kenya. Boundary disputes make it tedious to determine actual sizes of land plots and parcels owned and/or occupied. Yet, valuation requires that the size of the land must be known (accurately) for its value to be assessed. This is a key issue when undertaking valuation.

Cases of multiple ownership claims over the same parcels exist, and these disputes over ownership lead to uncertainty in the valuation process. This would hinder a compulsory acquisition process. Further, lack of security and certainty over property ownership may affect investor confidence. In addition, land owners are unable to obtain approval from relevant authorities such as the National Construction Authority to undertake construction without title deeds. Allotment letters and share certificates may not suffice as proof of ownership.

Counties that undertake construction of projects on contested land are subject of litigation and legal dispute, which could undermine implementation and sustainability of projects on such land. Lack of proof of ownership does not grant the counties security of title over the property.

Trespass and illegal occupation of land: Encroachment by squatters and landless individuals on land reserved for public purposes could hinder infrastructure development. The

law on adverse possession should be reviewed, and intensified sensitization on the rights of landowners conducted.

Breach of conditions imposed on land held on leasehold tenure: Landowners fail to comply with conditions attached to the lease, including conditions on user of the property, subdivision or renewal. Lessees do not comply with covenants or conditions imposed on the lease, or fail to maximize on the limits of the conditions, utilize the land for incompatible uses or hold land beyond the leasehold term. Section 13 of the Land Act provides for lessees' pre-emptive rights where any land reverts to the national or county government after expiry of the leasehold tenure. The Land (Extension and Renewal of Leases) Rules 2017 allow lessees to, at any time before expiry of a lease, apply to the National Land Commission for an extension of the lease. The rules require applicants for extension or renewal of leases prior to their expiry to furnish evidence that the lessee has complied with the terms and conditions of the existing lease to the satisfaction of the lessor. This only requires evidence of compliance upon application for extension or renewal. There is no provision for periodic assessments or audits on compliance with lease covenants or conditions.

Where the term of a lease has expired, lessees are required to apply for renewal of the lease. The rules prescribe a procedure for when expiration of the lease is approaching, including notifying the lessee five (5) years before expiry of a lease through registered post, publishing the notification in two newspapers of nationwide circulation where the lessee fails to respond to the newspaper notification, undertaking physical verification of the land to ascertain the status of land, and advising the lessee of the need to apply for renewal and consequences of failing to apply for the renewal. The rules do not specify the consequences referred to when a lease expires and no application for renewal is made. Although in other land laws this is referred to and isknown as reversion of the leasehold interest to the State, the rules do not explicitly stipulate this.

Section 13 of the Land Act provides that where any land reverts back to the national or county government after expiry of the leasehold tenure, the National Land Commission shall offer to the immediate past holder of the leasehold interest pre-emptive rights to allocation of the land provided that such lessee is a Kenyan citizen and that the land is not required by the national or the county government for public purposes. However, this does not deter or prevent breach of leasehold user covenants. It also does not prompt lessees to apply for renewal.

c) Compulsory acquisition of private or community land

Failure to follow procedures and processes: According to the Kenya National Land Policy (2008), problems related to compulsory acquisition arise from the fact that the established procedures are either abused or not adhered to, leading to irregular acquisition. The National Land Commission and the acquiring bodies (such as the Kenya Urban Roads Authority and the Kenya Highways Authority), among other parties in compulsory acquisition, have faced litigation due to alleged unprocedural seizure of private land by the government, which is not in accordance with due process or which has not adhered to requirements on fair administrative action. Disputes also arise in relation to compensation systems and awards. In addition to disputes concerning determination of the amount of compensation to be awarded to land owners, parties also litigate due to delayed payment of compensation awards which are due and payable to them.

There are other factors that acquiring authorities must take into consideration while undertaking compulsory acquisition, including constitutional requirements to provide fair administrative action and access to information, which

includes written reasons and/or sufficient data and analysis of the factors the relevant authorities took into account in assessing the compensation award. Even though the making of an inquiry may be part of fair administrative action, there are other requirements that may need to be observed to ensure that parties affected by an acquisition notice are availed a fair hearing. This is particularly as regards written reasons for a decision, as Article 47(2) of the Constitution provides that where a right or fundamental freedom of a person has been or is likely to be adversely affected by administrative action, the person has the right to be given written reasons for the action. Misunderstanding over the requirements to fulfil prior to compulsory acquisition leads to dispute and protracted litigation, which delays implementation of projects.

Varied methodology in valuation of property earmarked for compulsory acquisition: There are varied assessment systems under various legal regimes leading to dispute over compensation, including the valuation methodology used in computing the quantum of compensation, the final award, the process followed, and the criteria considered in arriving at the final determination of compensation payable. For gazettement of parcels acquired before enactment of the Land Act 2012, the applicable law for purposes of the acquisition according to Section 162 of the Land Act 2012 is the repealed Land Acquisition Act. Similarly, the Constitution specifies a different valuation for compulsory acquisition in that it should be "just" and "fair" compensation; this is open to wide and varied interpretation.

Questions arise as to whether just compensation includes both the present and potential/speculative value of the land being acquired had the owner thereof been allowed to continue using it for the purposes he or she intended. It is also debatable whether factors such as the intended use of its property and the benefits that would have accrued therefrom were it not for the compulsory acquisition would apply. Other criteria which have been proffered include that the compensation of compulsorily acquired property be quantified in accordance with the principle of equivalence, and that one must receive a price equal to his pecuniary detriment. It has also been argued that prompt full and just compensation does not mean any speculative value of the land, but an equivalent value which could be the contract value or market value. Where the valuation methodology is not standardized, and fixed indicators and criteria for assessing compensation and market value established, the system is susceptible to exaggeration of figures for compensation or undervaluation of property. Ultimately, determinations by the National Land Commission on quantum of compensation payable are open to challenge. Use of varied criteria and standards in valuation of property earmarked for compulsory acquisition has led to delayed compensation, disputes among land owners and the National Land Commission and other government parties, legal action and delayed implementation of projects where litigation ensues. This impacts on project completion timelines, complicates financing arrangements, attracts interest penalties and exposes parties to liability for breach of contract.

Lack of a National Land Value Index: There is no National Land Value Index in Kenya, nor is there a price reference system. This leads to high, inconsistent and unpredictable compensation awards. Further, where land is unregistered and undocumented, it becomes difficult to ascertain its value. This also poses challenges when determining the applicable land rates, land rent and stamp duty payable as this requires valuation of the subject property. This undermines resource mobilization at county level, where potential for revenue collection is reduced due to inability to ascertain applicable land rates. There is currently a Land Value Index Law (Amendment) Bill 2018 which seeks to, *inter alia*, provide for the assessment of land value index in respect of compulsory acquisition of land, and its enactment should be fast-tracked.

The Bill also attempts to define the meaning of "prompt" compensation as "within a reasonable time of the taking of possession of the land by the Commission, or a written undertaking indicating the appointed dates, not being more than one year from the date of the undertaking, when compensation is to be made". However, this provides the Commission with discretion to elect between a payment within reasonable time or pursuant to a written undertaking indicating specific dates.

Speculative purchasing of property along development corridors identified for compulsory acquisition: When individuals learn of prospective compulsory acquisition being undertaken for a project, they speculatively purchase the subject property along the development corridor being targeted for compulsory acquisition in anticipation that the value of the land will escalate. This results in high compensation awards. This is particularly the case where there is conflict of interest and self-dealing transactions among project developers or parties involved in the transaction or privy to information related to the project.

Disputes over creation of wayleaves and easements: At times, to supply electricity or expand the electricity grid, electricity transmission lines may traverse private property. Whereas electricity distribution is a public utility, it may require wayleave from private land owners. The National Land Commission is required to notify all affected land owners about any wayleave acquisition through an advertisement appearing in the local Kenyan daily newspapers as per the requirements of Section 146 of the Land Act 2012. However, this process is at times not complied with. Increased land disputes by individuals can disrupt and delay implementation and completion of infrastructure projects. It is important for relevant authorities to exercise due diligence in following the legal process.

(d) Asset management and land data

Lack of updated land records at counties: Some counties do not have titles or ownership documents for their properties, thus risking land grabbing, irregular and illegal allocation of land, encroachment and disputes over land ownership. Regulation 136(1) and (2) of the Public Finance Management County Regulations provide that the Accounting Officer shall be responsible for maintaining a register of assets under his or her control or possession as prescribed by the relevant laws and the register of land and buildings shall record each parcel of land and each building and the terms on which it is held, with reference to the conveyance, address, area, dates of acquisition, disposal or major change in use, capital expenditure, leasehold terms, maintenance contracts and other pertinent management details. Effective management of assets and liabilities is necessary to ensure that public investments provide value for money. This requires that county government assets are clearly recorded and managed, any risks are identified, and land transactions are prudently planned, approved, and monitored.

Where county land is not available due to lack of land documentation such as title deeds because of poor record keeping and delayed verification of county assets, or where county land is subject of dispute and litigation, any purported use of the land is rendered nugatory. County governments are unable to lease, allocate, alienate, charge, mortgage or in any way dispose of the land without title to the property. This impacts transactions and projects that require land belonging to county governments.

e) Illegal and irregular allocation and acquisition of public land

Encroachment by private developers on public land: There are incidents of encroachment by private developers on land reserved for public purposes. This further reduces the stock of

available public land. Attempted reclamations of land from parties who have acquired such land results in protracted dispute where landowners have already obtained titles to the property, granting them an indefeasible title to ownership of the land. There are also cases where the land has been resold to third parties who are also *bona fide* purchasers for value/bona fide purchasers without notice. Section 24 of the Land Registration Act provides that the registration of a person as the proprietor of land shall vest in that person the absolute ownership of that land. Section 25 of the Land Registration Act further provides that rights of a proprietor, whether acquired on first registration or subsequently for valuable consideration or by an Order of Court cannot be defeated except as provided under the same Act. Section 26 states that the a Certificate of Title issued by the Registrar upon registration, or to a purchaser of land upon a transfer or transmission by the proprietor is *prima facie* evidence that the person named as proprietor of the land is the absolute and indefeasible owner and the title of that proprietor shall not be subject to challenge, except on the ground of fraud or misrepresentation to which the person is proved to be a party; or where the certificate of title has been acquired illegally, unprocedurally or through a corrupt scheme. Thus, a title can only be challenged where there is evidence of fraud or misrepresentation where the person is proved to be party or where the title was acquired through illegal, unprocedural or corrupt means.

Therefore, anyone alleging fraud must have particularized his claim on fraud with sufficient detail and must give evidence of a high standard to show that the landowner and/or with others procured the title to the property fraudulently or was a party to the fraud. One cannot give generalized allegations of fraud. The threshold permitting cancellation or revocation of a title is thus very high, and the grounds upon which a title may be challenged are limited to the two grounds stated above, which in turn have high standards of proof. Where the system is reactionary, recovery of land once it has already been illegally and unprocedurally transferred to third parties becomes difficult in these circumstances.

Further, there is no clear monitoring framework for alienation, allocation, disposal or acquisition of public land, including ownership, location and changes in ownership. The Registrar of Titles ought to issue notifications vide the Kenya and County Gazette, newspapers of wide circulation or directly to the National Land Commission and any owners of public land regarding any transaction or application regarding public property prior to registration of interests and issuance of titles for the property.

Historical illegal and irregular allocation of public land which has diminished the public land portfolio and resulted in irregular change of land use of land reserved for public purposes: Land as a key resource ought to be conserved and utilized in accordance with the principles of sustainable development. However, there have been cases of land grabbing as documented publicly in the Report of the Ndung'u Commission of Inquiry into the Illegal/Irregular Allocation of Public Land (Ndung'u, 1994). The report highlighted various means used to illegally and irregularly allocate or acquire public land, including making of grants of government land to individuals without following the legal process or procedure in disregard of public interest and for political or individual gain. In summary, the report's findings concluded that the wide and unfettered discretionary powers vested in the President and Commissioner of Lands had been grossly abused. For this reason, land has been inextricably linked with graft.

The report highlighted various irregular allocations as at the date of publication, and also provides lists of thousands of houses which have been illegally allocated throughout the country, and hundreds of allocations of land made to individuals and companies from forests, game parks and reserves. The

Commission found that only 1.7 per cent of the 3.0 per cent of the country, which was covered by gazetted forests at independence remains, with most of the reduction having come about as a result of illegal and irregular excisions, usually made without any reference to scientific considerations or under the guise of settlement schemes. Similarly, many allocations of land around riparian sites have been illegally allocated by the Kenya Wildlife Service, with many such allocations – such as those made since 1995 to some 14 beneficiaries around Lake Naivasha – being known to have severely affected the ecosystem.

The Ndung'u report noted that it is dubious whether any of the land irregularly allocated was put to any productive use. Of more importance is the effect of the change of use of the properties which were irregularly allocated and the effect of the land grabbing on the economy. The historical land grabbing has reduced the public land portfolio and has diminished the public land stock available for government's own use.

Non-implementation of the Ndung'u report recommendations: Among the recommendations by the Ndung'u report was revocation of titles of properties found to have been illegally allocated and return of properties to their lawful owners. The core recommendation of the Ndung'u report was that all titles for illegally or irregularly acquired land should be cancelled and the properties repossessed. Nonetheless, historical irregular and illegal allocation of public land is yet to be fully remedied or resolved. It should be noted that implementation of cancellation and revocation of titles may have undesirable implications on third parties and *bona fide* purchasers for value and legal considerations surrounding indefeasibility and sanctity of title.

Contemporary and on-going irregular and illegal allocations and acquisitions of public land: In as much as the Ndung'u report documented historical incidents of public land which are yet to be comprehensively implemented, there are allegations of current illegal and irregular allocations and acquisitions of public land, further reducing the stock of public land available.

(f) Incompatible land use and encroachment of riparian land

There are several challenges impacting on enforcement of the law on preservation and protection of riparian zones, which has led to encroachment on riparian land with undesirable effects, including river pollution and environmental degradation due to pollution from garbage, industrial liquid effluence, agrochemicals, and petrochemicals, among others. High-pollution levels, and several human activities encroaching on riparian zones, hinder riparian reserves from effectively fulfilling their roles as buffers. Also, river banks and hilly areas are exposed to soil erosion. Similarly, haphazard planning has resulted in the construction of buildings and other structures on riparian land. Encroachment into riparian land poses undesirable risks and effects on land use and planning due to incompatible and multiple land use. Encroachment on riparian land has resulted in inappropriate land use and over-utilization, conversion of wetland to agricultural land, unsustainable exploitation of resources, and increased land subdivision and fragmentation (UNEP Kenya Wetlands Atlas, 2012). The effects of encroachment into riparian land include pollution, loss of land cover, introduction of invasive species, reduced water quantity and quality, loss of biodiversity, flooding and reduced fisheries (UNEP Kenya Wetlands Atlas, 2012).

Some of the challenges hindering effective protection of riparian land as intended are highlighted below, including multiplicity of inconsistent laws hindering effective protection of wetlands and riparian land.

Conflicting approach to defining the recommended riparian distance for different water bodies under various laws: There are contradictions in determination of riparian land distance and boundaries across various laws regulating the protection and use of riparian reserves.

The Survey Act under Section 111 sets reservation on all tidal rivers to be not less than 30 metres in width above high-water mark for government purposes, except for special conditions where the Minister allows for less. Part IX Rule 116 of the Water Resources Management Rules 2007 regulates conservation of riparian and catchment areas and provides that riparian land on each side of a watercourse is defined as a minimum of 6 metres or equal to the full width of the watercourse up to a maximum of 30 metres on either side of the bank, and the width of the watercourse shall be equal to the distance between the top edges of its banks. Further, riparian land is measured from the top edge of the bank of the watercourse, and this will apply to seasonal and perennial watercourses. The riparian land adjacent to a lake, reservoir or stagnant body of water is defined as a minimum of 2 metres vertical height or 30 metres horizontal distance, whichever is less, from the highest recorded water level. Riparian land adjacent to the eye of a spring should be a minimum radius of 3 metres to a maximum radius of 15 meters, measured from around the edge of the spring whereas riparian land adjacent to the ocean is defined as a minimum of 2 metres vertical height or 30 metres horizontal distance from the high-water mark, whichever is less.

The Agriculture Act stipulates that it is an offence to cultivate or destroy the soil, or cut down any vegetation or depastures any livestock, on any land lying within 2 metres of a watercourse unless one obtains written permission from an authorized officer. Further, if the watercourse is more than 2 metres wide, the land to remain uncultivated should be within a distance equal to the width of that watercourse up to a maximum of 30 metres. This places an unreasonably high expectation on landowners to continuously measure the width of the watercourse and the cultivation points.

The above inconsistencies risk adoption of incorrect or conflicting interpretation by landowners, surveyors, planners and enforcing authorities. The laws and regulations are open to wide interpretation, whereby parties may misconstrue the requirements or may be unclear as to which requirements and recommended distances are applicable in their case. Landowners are likely to adopt different measurements across their land to assess the appropriate distance from the water course.

Unclear classification of riparian land: Riparian reserves, riverine wetlands and other fragile ecosystems are protected by law. However, they may fall adjacent to or border private property. Therefore, there may be land owners whose land abuts a water course. Rule 119 of the Water Resources Management Rules 2007 provides that riparian land does not imply a change of ownership but imposes management controls on land use for water resource quality, protection of the water course and protection of the ecosystem that relies on the water source. Misunderstanding arises when riparian land forms part of privately-owned property as land owners resist government interference, claiming they have private land ownership rights. However, there is a distinction between rights of ownership and rights of use. The rights to land use are not absolute and are subject to regulation. Land use management and planning are key in ensuring land use is sustainable and in conformity with the obligation to protect the environment as provided in the Constitution and laws. Landowners argue that as they own the land which falls within a riparian area, they should be allowed to use their land as they wish whether or not it falls within a riparian area as was the case in V/D Berg Roses & Project Agro Lease Limited v Attorney General & Minister for Environment and Mineral Resources [2016]

eKLR. The nebulous classification of riparian land has led to perceptions of riparian land which falls on private land as available for the landowners' own unrestricted use or as community land or land which is either free or idle for construction or dumping.

Conflicting public interest vs private, commercial and development interests in land use and water resources: There are cases where a private land owner's land borders a water course. Where developers or land owners seek to implement projects and carry out activities that impact a sensitive or fragile ecosystem, competing interests arise. The law places restrictions on riparian land to prevent uncontrolled land use. However, there has been encroachment on riparian land by private individuals pursuing private development or commercial interests. As the global population grows, there is an increasing need to balance all the competing commercial demands on land and water resources but still preserve the land and water ecosystems. For example, it has been noted that the riparian reserve along River Ruaka has a wide range of uses, including several human activities such as farming and agriculture, residential uses, commercial enterprises and industrialists including car wash stations, hawking and informal commercial hubs which are encroaching on the riparian zone (Kiithia, 2012).

Disputes arising from retrospective cancellation of projects and licences or demolition of already approved developments: Disputes arise when projects are cancelled or developments demolished where the landowner or developer had already applied for and obtained approval from relevant authorities, including NEMA or the relevant county government. This is particularly contentious for *bona fide* purchasers and their financiers who may have relied on the planning approvals provided by the developer. Further, where government agencies have granted title, authorized the construction of a building, provided approvals, accepted payment of land rent and rates from property owners without raising the issue of encroachment only to claim later that the same approvals were irregularly issued is undesirable. Further, the position of financiers who had provided lending facilities to property owners with the demolished property acting as security for the mortgage/charge facility is similarly contentious. However, it is important to note that approvals may have, in the first place, been issued irregularly or fraudulently. This is indicative of weak enforcement. Without adequate prevention, adequate notice, due diligence and inspection by authorities at the stage of approval, this may lead to disputes.

Lack of a specific sectoral law to deal with riparian zones: As seen above, riparian zones have been regulated across a multiplicity of laws. Riparian land is regulated under both the EMCA 2009 and the Water Act 2016, among a plurality of other complementary laws. NEMA has also published regulations on wetlands, whereas the Water Resources Authority (WRA) has published the Water Resources Management Rules 2007, and implementation may therefore be difficult as different approaches and definitions may be employed. There is lack of overarching regulations on riparian reserves.

Conflicting institutional mandates over management of riparian land: Currently, NEMA is the over-arching lead agency in protection of the environment, whereas the Water Resources Authority established under the Water Act 2016 (which replaced the Water Resources Management Authority under the repealed Water Act 2002) is tasked with regulating the management and use of water resources. Similarly, there is a Ministry of Environment and Forestry, and Ministry of Water and Sanitation and the National Land Commission, which creates overlaps at the point of enforcement and lack of clarity in determining the institution that should act in relation to protection of water resources. It may also foster inertia or inaction by one agency due to the existence of another institution with the mandate to enforce.

The institutional overlap precipitates lack of accountability as responsibility lines are blurred. Also, the fragmentation leads to unclear enforcement coordination between institutions such as NEMA, and WRA.

The laws on riparian land/reserves/zones should be harmonized with clear and consistent definitions and with clear demarcations as to the recommended riparian distance. Riparian zones ought to have their own sectoral regulations to avoid reference to a multiplicity of statutes and regulations on definitions of riparian land and recommended distances. Various parties also ought to exercise enhanced due diligence when purchasing or developing property. This includes seeking advice from conveyancing lawyers who should go beyond undertaking routine official land searches to requiring physical inspections of the property, obtaining advice from surveyors and planners as part of the due diligence process, and obtaining appropriate warranties from landowners when purchasing property.

There is need for agencies such as NEMA, the WRA or the line ministries in charge of water and the environment to create widespread awareness on understanding riparian land. This should incorporate public participation and stakeholder involvement, to educate the public and enforcing authorities who issue approvals at various stages of a development project such as NEMA, the National Land Commission, County Councils, National Construction Authority and planners, surveyors, real estate agents, conveyancing lawyers and judiciary officials.

Although there is currently a Kenya Wetlands Atlas in existence, NEMA should prepare a comprehensive inventory which also identifies, surveys and delineates riparian reserves. Similarly, riparian reserves should be declared protected areas. This can be done in consultation with the relevant lead agency (which is any government ministry, department, state corporation or local authority in which any law vests functions of control or management of any element of the environment or natural resource) or on the recommendation of NEMA on its own motion. NEMA is also permitted to initiate the process of declaring an area to be a protected wetland on its own motion.

Creation and separation of the enforcement unit from the approval unit could also be considered to prevent overlaps between the various departments and units. This will allow for division of responsibilities and accountability.

8.7 Opportunities for Management of Land to Support Resource Mobilization

All land to be titled: All land in the country should be registered and titled to reduce incidents of fraud, encroachment and land grabbing. It will also enable identification of land owners who have violated the laws and regulations. Issues of titles to land owners would make it possible for landowners to transact with the land.

Clarity on procedure for compulsory acquisition: The National Land Commission should publish guidelines or regulations on the process to be followed prior to and after compulsory acquisition to avoid ambiguity. The regulations and guidelines should provide specific requirements on length of notice and means to be employed in providing notice. Further, there should be guidelines on duration for payment of compensation schemes to avoid dispute over delayed payments.

Creation of a National Land Value Index: The National Land Commission, in collaboration with national and county governments, surveyors, planners, economists and other stakeholders, should create a National Land Value Index to regulate land values. Once developed, it would improve the predictability of valuations, standardize the valuation methodology and harmonize compensation award assessments. This would also reduce disputes and litigation over compensation awards for land acquired through compulsory acquisition.

Improved asset management: County governments should maintain an accurate, current and complete Fixed Assets Register. They should maintain records of details, charge-out rates, land titles or ownership documents of the parcels of land and each building and the terms on which it is held, with reference to the conveyance, address, area, dates of acquisition, disposal or major change in use, capital expenditure, leasehold terms, maintenance contracts and other pertinent management details. The assets register should be up to date with accurate details and particulars.

Creation of a national land inventory: The National Land Commission in collaboration with other stakeholders including the Ministry of Lands, and county governments should fast-track the establishment of a National Land Inventory with accurate details and data on the status and stocks of land, land holding and land use patterns. Such could include details of ownership, current and past owners, registration of interests including lessees and chargors or mortgagors, any restrictions placed on the property including caveats or cautions, value, size, location, current user, recorded changes in user of the property and percentage of land holding. This would provide a complete representation and reference point on the status of land in Kenya and enhance monitoring of any changes.

Audit of status of implementation and update of the Ndung'u Report: A review of irregular and illegal allocations of public land from the date of publication of the Ndung'u Report in 2004 would highlight and document any irregular allocations that have taken place since publication of the report, with a view to instituting recovery of any government property which may have been subject of such irregular allocation. Updating the findings of the Ndung'u Report would assess current stock of illegal and irregularly acquired or allocated public land. This would also inform the public on any other properties which have since been the subject of irregular or illegal allocation and protect *bona fide* purchasers from purchasing illegally allocated public land in future. Ancillary to updating the Ndung'u Report is the need to conduct an audit of the status of implementation of the recommendations in the report to assess the status and use of lands identified in the report. This would inform on challenges in implementing the recommendations, and if there is need to review the recommendations. The National Land Commission should trace the status of properties adversely mentioned, audit their current ownership, and use and take steps for their recovery by reviewing grants and dispositions of public land.

Enhanced monitoring of compliance with land ownership and land use: There should be checks and due diligence processes at every stage of a land transaction and thereafter. It would flag incidents of fraud and monitor compliance with land regulations.

Enhanced monitoring of compliance with lease and user covenants and conditions: The National Lands Commission should collaborate with the national and county government entities for the time being in charge of land to ensure regular audits are undertaken prior to application for extension or renewal of leases to ensure compliance and to recommend appropriate action against non-compliant owners.

Enhanced reporting mechanisms: Relevant authorities including NEMA, National Construction Authority and the National Land Commission should establish a whistle blower policy to enable reporting of witnessed non-compliance with regulations and standards. These institutions should also undertake periodic inspections of buildings for flagging of buildings constructed outside the regulatory framework or on land with no title or encroaching on riparian or land reserved for public purposes. There should be collaboration and information exchange between institutions processing land transactions to reduce information gaps.

Regulation of minimum and maximum landholding acreages: Article 68 of the Constitution requires Parliament to enact legislation to prescribe minimum and maximum land holding acreages for private land. The Minimum and Maximum Land Holding Acreage Bill should be reintroduced to reduce incidents of speculative landholding and hoarding of land.

Land value capture: Establishment of new infrastructure development leads to increase in value of properties situated along the infrastructure corridor due to upgrading and establishment of new infrastructure that enhances accessibility. Land value capture would enable the recovery of profit generated by the increasing value of property because of public infrastructure investment through which newly developed infrastructure development is capitalized.

8.8 Key Messages and Recommendations

8.8.1 Key messages

1. Although there is an existing institutional framework for land administration and management, it is bureaucratic and there is an ineffective framework clarifying the inter-agency relationships and aspects of inter-agency coordination leading to overlaps, conflicting mandates, inconsistent processes and delays in processing which brings confusion in the land sector and land transactions.

2. Historical and ongoing incidents of illegal and irregular allocation of public land, and corruption in management of public land, have diminished the public land portfolio available for government use. The measures in place are reactionary and focus on recovery of properties after they have already been irregularly and illegally transferred to third parties. Further, approval of Parliament is required only where a "substantial" transaction for conversion of public land is involved.

3. Compulsory acquisition is a critical process that supports government infrastructure projects. However, it faces challenges particularly regarding disputes over quantum of compensation awarded, assessment of awards, over the methodology and factors considered in determining the quantum of compensation payable, and litigation surrounding non-payment or delayed payment of compensation, all of which affect project implementation.

4. Implementation of the affordable and adequate housing agenda requires available, registered and affordable land. Scarcity of land, scarcity of marketable land parcels, high cost of land, high cost of construction, haphazard land use planning and lack of titles are issues that could hinder the realization of adequate, affordable and decent housing. All land in the country should be titled, and a clear framework between the two levels of government developed with regard to development of housing.

5. Inadequate regulation and control of change of user applications have led to multiple and incompatible land uses within adjoining properties and haphazard land use planning. Change of user applications should be controlled through establishment of clear guidelines and criteria for approval.

6. Land is critical to support manufacturing for establishment of technology and innovation centres, industrial parks and required infrastructure. The Medium and Small Enterprises (MSEs) also require land and worksites with access to electricity, water supply, sewerage and sanitation, solid waste management services, access roads, waste disposal and drainage. However, some of the land initially reserved for development of markets and MSEs' worksites within the main municipalities has been irregularly

re-allocated and diverted for other purposes such as residential, commercial, or private use.

7. Kenya's economy is largely based on agriculture, which contributes about 30 per cent of GDP and provides livelihoods to over 80 per cent to the population and directly supports 26-30 per cent of the total population. However, uncontrolled subdivision and competing land uses have led to encroachment into agricultural land due to an ineffective regulatory framework for agricultural land.

8. Speculative land holding and mass hoarding of land has hampered land availability, where large tracts of land are held for speculative purposes and remain largely unutilized or idle due to lack of a framework regulating minimum and maximum acreage of land holding.

9. Multiple registration of land owners over the same parcel of land; illegal and irregular allocation of public land; illegal and irregular allocation of land reserved for public purposes; land grabbing of private, community and public land; irregular change of user and conversion of land use; irregular issuance of approvals; failure to pay land rates and rent; and stamp duty evasion are mainly due to corruption in the land management process.

8.8.2 Recommendations

1. The government should develop guidelines to harmonize the frameworks and processes among all land agencies and county governments to enhance administrative efficiency in land processes and transactions.

2. There is need to establish a clear monitoring framework for alienation, allocation, disposal or acquisition of public land, including ownership, location and changes in ownership to enhance management and preservation of public land.

3. Land value for compulsorily acquired land should be regulated through operationalization of the Land Value Index Laws (Amendment) Act, 2019 which seeks to regulate value of land in Kenya for purposes of determining land rent, land rates, stamp duty for land conveyance and compulsorily acquired land. The procedure and factors for compulsory acquisition should be clarified and applied consistently.
4. For future planning of urban centres, counties should ensure that land is set aside and reserved for housing and recreation facilities through spatial plans.

5. The National Land Commission needs to trace the status of properties identified in the Ndung'u Report, audit their current ownership and use, and take steps for recovery of irregularly and illegally acquired land by reviewing grants and dispositions of public land.

6. Land banking is one of the mechanisms in which the government would be able to access unutilized land and make it available for investment and development. Towards this end, a legal and institutional framework should be developed to govern and regulate the composition, functions, status, and processes in relation to land banking.

7. There is need to regulate minimum and maximum acreage of land holding and establish land value capture mechanisms.

CHAPTER 9

AGRICULTURE AND SUSTAINABLE DEVELOPMENT

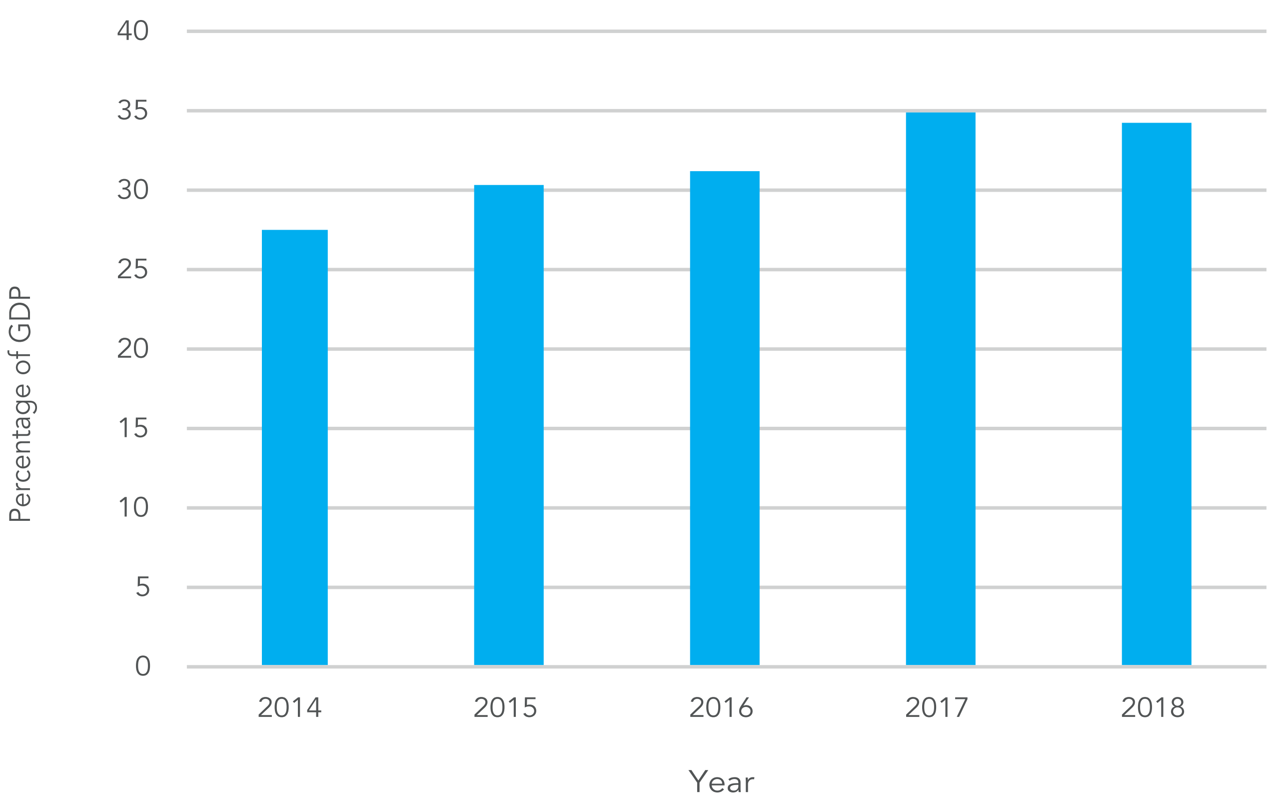
Agriculture sector's contribution to GDP increased from 26.3 per cent in 2012 to 34.2 per cent in 2018, despite its vulnerability to weather-related shocks. Devolution has since brought about unique challenges occasioned by lack of over-arching guiding policies, including the Agriculture Policy and Veterinary Policy which are still in the legislative process. In addition, several functions that were expected to be championed by counties have not been adequately realized, such as extension, maintaining food and nutrition security reserves, among others, due to systemic challenges. There is need to increase agricultural productivity by adopting technology and enhancing access to markets to spur the growth of the sector, and ensure that land, water and forests are used sustainably because they are critical in enhancing the resilience of the sector to climate change. The Agriculture Sector Growth and Transformation Strategy (ASGTS) 2018-2028 expects that 80 per cent of the financing for the strategy will come from the private sector and other types of financing. As with the "Big Four" agenda, the national government has only provided for 40 per cent of the total funds required. On average, both levels of government have spent an estimated 3.8 per cent of total budget in the agricultural sector, which is 6.2 per cent below the Malabo commitments.

9.1 Introduction

Agriculture sector directly contributes 34 per cent of Gross Domestic Product (GDP), and 27 per cent of GDP indirectly through linkages with manufacturing, distribution and other service-related sectors (KNBS, 2019). Approximately 45 per cent of government revenue is derived from agriculture, and the sector contributes over 75 per cent of industrial raw materials and more than 50 per cent of export earnings. The sector is the largest employer in the economy, accounting for 60 per cent of total employment. Over 80 per cent of the population, especially those living in rural areas, derive their livelihoods mainly from agricultural-related activities (KNBS, 2018).

The production system in the country is predominantly rain-fed, making it vulnerable to weather-related shocks. In 2017, the sector experienced depressed growth of 1.6 per cent compared to 4.6 per cent in 2016. This was occasioned by drought, pests and disease incidences which resulted in reduced crop and livestock production (Figure 9.2). However, in 2018, the sector recorded growth of 6.4 per cent (KNBS, 2019), which benefitted from the

Figure 9.1: Contribution of agricultural value added as a percentage of GDP, 2014 -2018



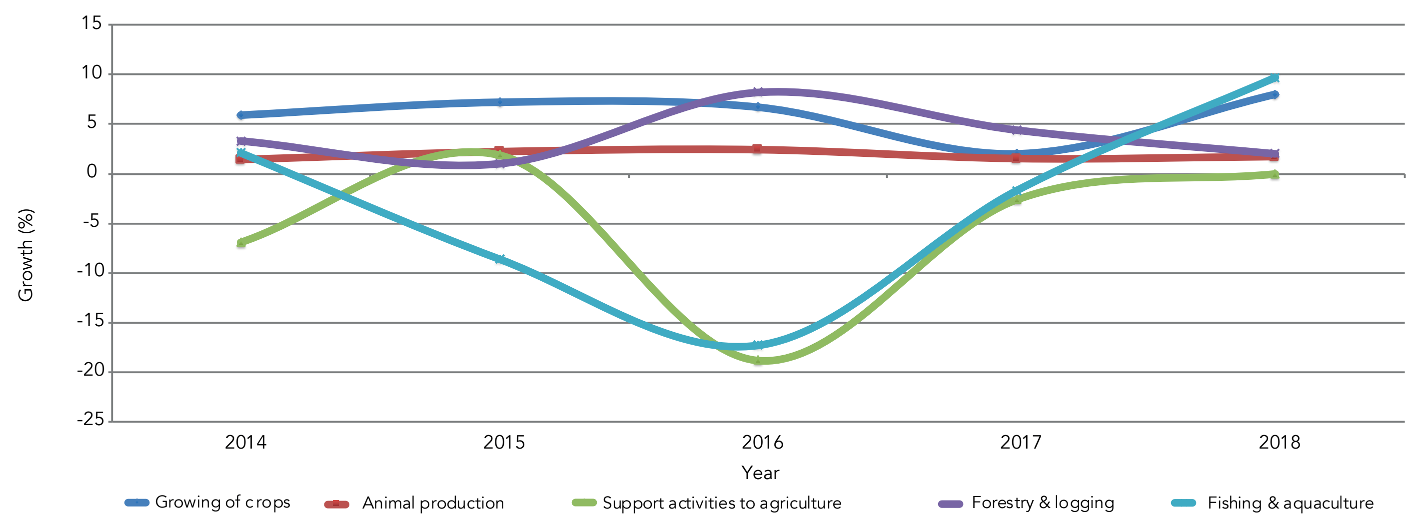
Source: Kenya National Bureau of Statistics (2019)

favourable long rains and preparedness of both levels of government to deal with pests and diseases, especially the fall army worm.

Taking into account the performance of the agricultural sub-sectors: the crops sub-sector comprising of food, horticulture and industrial crops contributed 27.8 per cent of national GDP and 81 per cent of agriculture Gross Domestic Product (KNBS, 2019). The livestock sub-sector contributed 4.1 per cent to national GDP and 11 per cent to agricultural GDP (KNBS, 2019). However, there is reason to believe that its contribution is under-estimated. Over 80 per cent of the value of livestock production is from ruminants and mainly comprises meat and milk (KNBS, 2018). The rest comprises poultry meat and eggs, pig, camel meat and milk, honey and rabbits, in that declining order. The forest sector is estimated to contribute about Ksh 7 billion to the economy and employs over 50,000 people directly and another 300,000 indirectly, according to the Kenya Forest Service (KFS, 2018).

To ensure 100 per cent food and nutrition security, the Third Medium-Term Plan prioritizes under the "Big Four" agenda the following flagship projects: (i) large-scale production - 700,000 new acres of maize, potato, and rice will be cultivated under a PPPs scheme; (ii) increase maize production from the current 40 million bags to 67 million bags by 2022 and potato from 1.6 million tons to 2.5 million tons over the same period; (iii) more use of locally-blended fertilizer; (iv) duty waivers for cereal-drying equipment and bags; and (v) duty waivers for fishing equipment. This will boost fisheries productivity with 68 new fishing vessels at the Coast, curb illegal fishing in

Figure 9.2: Percentage growth in gross domestic product by activity, 2014-2018



Data Source: KNBS (2019)

Kenya's waters, build a new shipyard; (vi) have traceability of animals to drive exports; (vii) a warehouse receipt system and a commodity fund for farmers; (viii) train 1,000 SMEs in food processing along the value chain; (ix) reduce the cost of food, contracted farmers will supply the strategic food reserve; (x) a subsidy model for farmers will see investments in post-harvest loss reduction; (xi) early warning systems; (xii) rehabilitation of fish landing sites on Lake Victoria (at Busia, Migori, Homa Bay); and (xiii) elimination of multiple levies along the value chain.

Given the importance of the agriculture sector in the economy, it is critical that the development of the sector takes into account sustainability, which entails the capacity to manage resources such as land, water, soil and biodiversity and at the same time maximize production. Further, for the sector to thrive, there must be an ecosystem that supports such development, implying that environmental resources and human well-being must coexist in a beneficial manner. Unfortunately, there is consistent loss of biodiversity as the number of animal and plant species available is declining rapidly. Climate change projections indicate that the earth's average surface temperature could rise by 1.4-5.8 degrees Celsius (2.5-10.4 degrees Fahrenheit) over the next 100 years, adversely affecting agricultural productivity in tropical zones, with Sub-Saharan Africa being the most vulnerable (IPPC, 2018).

9.2 Policy Environment, Institutional and Regulatory Frameworks

9.2.1 Policy environment

Globally, the Sustainable Development Goals (SDGs) recognize the inter-linkages between sustainable management of the environment and agriculture. This includes SDG No. 2 'End hunger, achieve food security and improved nutrition and promote sustainable agriculture'; SDG No. 6 'Ensure availability and sustainable management of water and sanitation for all'; and SDG No.15 'Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage

forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss'. Within each of these SDGs, there are specific targets for 2020 and 2030 that touch on different areas such as: (i) SDG 2.4 by 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality; (ii) SDG 6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes; (iii) SDG 15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, forests, wetlands, mountains and drylands, in line with obligations under international agreements (United Nations, 2015).

Continentally, Kenya is among countries that endorsed the Maputo Declaration (AUC, 2003) in 2003 and made recommitments in Malabo in 2014 during the 23rd Ordinary Session of the African Union Assembly to the (Comprehensive Africa Agriculture Development Programme (CAADP) principles and goals and defined a set of targets and goals referred to as the Accelerated Agriculture Growth and Transformation Goals 2025. Nationally, the Kenya Vision 2030 envisions that the agriculture sector will contribute significantly to double-digit economic growth by transforming smallholder agriculture from subsistence to an innovative, commercially-oriented and modern agricultural enterprise. The Medium-Term Plan III clearly outlines the projects that will propel the country towards achieving the Kenya Vision 2030 in the next five years. Specifically, the "Big Four" agenda identifies food and nutrition security and agro-manufacturing (leather and textiles) as the source of growth in the sector.

To align to the Malabo commitments, and devolution, the Ministry of Agriculture, Livestock, Fisheries and Irrigation (MoALF&I) has developed a ten-year strategy, the Agriculture Sector Transformation and Growth Strategy 2019-2029 (ASGTS) to be implemented through National Agriculture Investment Plans (NAIPs). This sector strategy was preceded by the Agricultural Sector Development Strategy (ASDS) 2010-2020.

The agricultural sector is a devolved function and Schedule 4 of the Constitution (2010) mandates the national government to provide the policy, legal and institutional direction, which are then domesticated by the counties. The national government is making progress towards ensuring that there is adequate policy, legal and institutional framework to guide the counties. In addition, the national government is running several programmes concurrently in collaboration with selected counties. However, harmonization is required to avoid duplication of resources and efforts as is the case with the fertilizer cost reduction programme and the Accelerated Agricultural Inputs Access

Table 9.1: Some of the achievements in the agriculture sector, 2013-2017

	Description	Achievement	Remarks
1.	Sector annual growth rate (%)	4.3% growth rate	Missed annual target by 2.7% set in the MTP II
2.	Annual contribution to GDP (Ksh millions)	Ksh 70,550 annually on average	Missed annual target by Ksh10,000 set in MTP II

	Description	Achievement	Remarks
3.	Policy documents	1. Agriculture Sector Growth and Transformation Strategy (ASGTS) 2018-228 2. Tuna Fisheries Development and Management Strategy (2014-2019) 3. National Agriculture Investment Plan (NAIP) 2012-2017 aligned to the Comprehensive Africa Agriculture Development Programme (CAADP) indicators 4. National Nutrition Action Plan (NNAP) 2012-2017 5. National Food Security and Nutrition Policy (NFSNP) 2011 6. Agricultural Sector Development Strategy (ASDS) 2009-2020	Some policies and strategies in the pipeline: 1. Agriculture Policy 2. Veterinary Policy 3. Livestock Policy 4. National Agriculture Sector Extension Policy 5. National Agriculture Insurance Policy 6. Fibre Crops Policy 7. Roots and Tubers Crops Strategy 8. National Agricultural Mechanization Policy and Strategy 9. National Agricultural Marketing Strategy 10. National Rice Development Strategy (2018-2028) 11. Food Waste Management Policy 12. Food Safety Policy and 13. Protocols for Food Defence
4.	Enactment of the Consolidated Agricultural Reform Bill	1. Agricultural Professionals and Licensing Bill 2018 2. Food Security Bill 2017 3. Fisheries Management and Development Bill 2016 4. Agriculture, Fisheries and Food (AFFA) Act 2013 (revised 2015) 5. Crops Act 2013 6. National Agricultural Research Act 2013 7. Development of the Veterinary Medicines Bill and Veterinary Medicines Regulations 8. Operationalization of Agriculture Food Authority (AFA), the Kenya Agricultural and Livestock Research Organization (KALRO) and the Veterinary Medicines and Drug Council; modernization of Kenya Meat Commission (KMC) 9. Development of disease and pest control contingency plans 10. Development of strategies for management of diseases of economic importance such as Foot and Mouth Disease, Peste des Petits Ruminants (PPR), Rift Valley Fever and Contagious Bovine Pleuropneumonia (CBPP)	Selected pending legislation 1. Enact legislation to make soil liming mandatory 2. Enact legislation to cap the cost of leasing land to attract private/ foreign investors 3. Enact legislation to halt further subdivision of arable land 4. Enact Warehouse Receipt System Bill 2016 5. Enact Food Security Bill 2014 6. Develop legal framework on pests of bees 7. Develop Regulations on Commodity Levies (sugar) Institutional Reforms required 1. Enforce the road legislation to eliminate multiple levies across counties 2. Enforce agriculture regulations – crops (tea, sugar, potatoes) 3. Restore commodity levies 4. Operationalize Veterinary Medicines and Drugs Authority 5. Establish Miraa Research Institute 6. Modernize and convert Agricultural Technology Development Centres into Centres of Excellence 7. Transform the Agriculture Information and Resource Centre (AIRC)

	Description	Achievement	Remarks
5.	Fertilizer Cost Reduction Project (a) Bulk purchases (b) Price of Di-Ammonium Phosphate (DAP) (c) Price of Calcium Ammonium Nitrate (CAN)	(a) 526,176 tons of assorted fertilizers were imported (b) DAP declined from Ksh 4,500 in 2013 to Ksh 3,100 in 2017 (c) CAN declined from Ksh 2,800 in 2013 to Ksh 2,600 in 2017	The Ministry was able to meet the target in regard to bulk importation of fertilizer and the cost reduction
6.	Fertilizer manufacturing plant	(a) Feasibility study was completed (b) Fertilizer blending plant with an annual capacity of 150,000 metric tons was completed	Complete – the factory is operational
7.	Kenya Disease Free Zones (DFZ)	Survey and design for Bachuma Livestock Export Zone (LEZ) was completed	Of the four earmarked DFZ in the northern and eastern corridors only one was partially completed
8.	Livestock marketing value addition and processing	(a) Forty-nine (49) milk coolers were purchased. These milk coolers have an annual capacity to hold 50 million litres of milk (b) Four (4) slaughterhouses in Isiolo, Garissa, Wajir and West Pokot were constructed (c) Poultry processing equipment was installed in Bungoma and Kiambu counties (d) Six (6) milk processing facilities and five (5) animal feed manufacturing facilities were inspected and licensed to ensure compliance with the required standards	The investments made are steps towards improving the quality of milk and livestock products
9.	Increasing the area under irrigation	47,058 Ha established	The target for area under irrigated agriculture is still not achieved by 552,942 Ha
10.	Accelerated Agricultural Inputs Access Programme	(a) 5,781 MT of assorted drought tolerant crop seeds, 18,515,379 sweet potato vines, 18,512,110 cassava cuttings were distributed to 2.5 million farmers in various sub-counties (b) 70 MT of seed and five (5) rice mills were purchased to promote production among small scale farmers (c) 150 extension officers were trained and eight (8) rice entrepreneur training sessions for farmers groups held (d) 72 tractors, 16 combine harvesters, 52 reapers and 22 threshers were distributed to rice farmers organizations to increase mechanization in rice farming	

Source: Government of Kenya (Various), Medium-Term Plan I, II and III

Programme where both levels of government have similar projects (Table 9.1).

9.2.2 Institutional and regulatory frameworks

Some of the institutions and legislation that are enforced in the sector are shown in Table 9.2. The organizations that were formed under the Consolidated Agricultural Reform Bill in 2013 are now operationalized. However, they require adequate funding; some institutions such as the Agriculture Food Authority (AFA), in addition to funding, require a substantive board of management. Organizations such as the National Environmental Management

Table 9.2: Summary of parent ministry, legislation and organizations

Parent Ministry	Legislation	Organizations	Details/Mandate	Remarks
Ministry of Agriculture, Livestock, Fisheries and Irrigation	AFA Act 2013	Agriculture Food Authority Horticultural Crops Directorate Tea Directorate Coffee Directorate Nuts and Oil Crops Directorate Fibre Directorate Sugar Directorate Pyrethrum and Other Industrial Crops Directorate	According to AFA Act 2013, Crops Act 2013 and the Kenyan Constitution (2010), the Authority has the following mandate: 1. To administer the Crops Act in accordance with the provisions of these Acts 2. To promote best practices in, and regulate, the production, processing, marketing, grading, storage, collection, transportation and warehousing of agricultural and aquatic products excluding livestock products as may be provided for under the Crops Act 3. To collect and collate data, maintain a database on agricultural and aquatic products excluding livestock products, documents and monitor agriculture through registration of players as provided for in the Crops Act 4. To be responsible for determining the research priorities in agriculture and aquaculture and to advise generally on research thereof 5. To advise the national government and the county governments on agricultural and aquatic levies for purposes of planning, enhancing harmony and equity in the sector 6. To carry out such other functions as may be assigned to it by this Act, the Crops Act and any written law while respecting the roles of the two levels of government	To date (January 2019) AFA has a board and senior management that is interim. This has implications on the operations and future of this institution

Parent Ministry	Legislation	Organizations	Details/Mandate	Remarks
	Crops Act 2013	All relevant organizations in the sector, including those listed above	Consolidated and repealed various statutes relating to crops; to provide for the growth and development of agricultural crops and avoid unnecessary regulatory bureaucracy in the crops' sub-sector: 1. Circumvent unnecessary regulatory bureaucracy in the crops sub-sector 2. Reduce unnecessary levies, taxes or other barriers to free movement of crop products and provide for a rationalized taxation system 3. Reduce unnecessary regulation or over-regulation of the crops sub-sector 4. Reduce duplication and overlap of functions among institutions involved in the regulation of crop agriculture 5. Promote competitiveness in the crops sub-sector and to develop diversified crop products and market outlets 6. Attract and promote private investment in crop agriculture	This is an ongoing process. However, at a national level, the organizations need resources and political good will to effectively deliver their mandates
	KALRO Act 2013	Kenya Agriculture Livestock and Research Organization	The Kenya Agricultural and Livestock Research Organization is composed of semi-autonomous institutes established under the Kenya Agricultural and Livestock Research Act of 2013. This Act empowers the Cabinet secretary, in consultation with the KALRO Board, to establish research institutes that may be necessary for the performance of KALRO's functions under the Act. The Act also recognizes the role of public universities in agricultural research and provides for partnerships with them as associate research institutes. Currently, sixteen (16) research institutes have been established	Agricultural research spending as a share of Ag-GDP fell from 1.33% in 2000 to 0.79% in 2014, reflecting declining research spending. In 2013, the government reallocation of commodity tax revenue to non-research related activities exacerbated the funding shortfall at KALRO in 2014/15 as a result of its restructuring (Beintema et al., 2016)

Parent Ministry	Legislation	Organizations	Details/Mandate	Remarks
	Seed and Plant Variety Act (Cap. 326)	Kenya Plant Health Inspectorate Service	Phytosanitary permits, national performance trial for seed releases, etc	This regulation assures seed quality
Ministry of Environment and Natural Resources	Forest Act 2005	Kenya Forest Service	Various access permits for logging	The bans on logging are necessary to ensure conservation of forest cover
	Environmental Coordination Act, 1999	National Environmental Management Authority	The Act makes provision for (selected): • Environmental (impact assessment and audit) regulations, 2003 • Environmental (prevention of pollution in coastal zone and other segments of the environment) regulations, 2003 • Environmental management and coordination (water quality) regulations, 2006 • Environmental management and coordination (waste management) regulations, 2006 • Environmental management and coordination (conservation of biological diversity and resources, access to genetic resources and benefit sharing) regulations, 2006 • Environmental management and coordination (wetlands, river banks, lake shores and sea shore management) regulations, 2009 • The environmental management and coordination (public complaints committee) regulations, 2012	These regulations need to be enforced to conserve the environment
Ministry of Higher Education, Science and Technology	Science and Technology Act, 1977 (Cap. 250)	National Council for Science and Technology	Research permits	Considerations should be made to allow traceability and data sharing to advance research and innovation
Ministry of Fisheries Development	Fisheries Protection Act, 1977 (Cap. 379)	Fisheries Department	Fishing permits	A review is needed to account for technology and advancements in the sub-sector

Parent Ministry	Legislation	Organizations	Details/Mandate	Remarks
Ministry of Industrialization	Industrial Property Act, 2001	Kenya Industrial Property Institute	Technology transfer licenses, patenting, microbe release permit	Promote awareness on their mandate

Source: Government of Kenya (Various documents)

Authority (NEMA) require resources to enforce the law and assure sustainable use of the environment.

9.3 Status of Agricultural Resources

a) Crops sub-sector

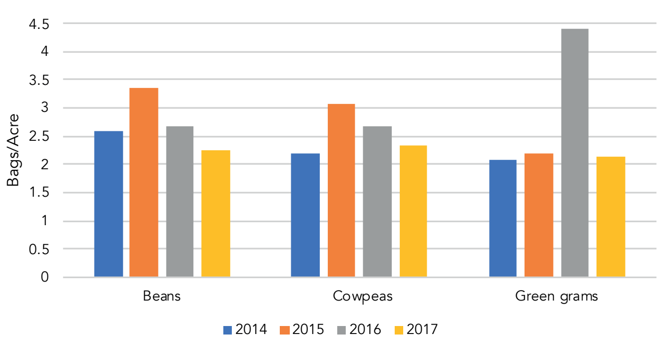
Several factors influence yields in the crops sub-sector, including weather shocks, obsolete varieties, low input use, and pest and disease incidences. Yields for cereal grains are significantly affected by production-related shocks such as adverse weather and prevalence of pests and diseases. For instance, maize yield national average was 6 bags per acre (2017) while the potential is 12 bags per acre (Figure 9.3). This is attributed to the prevalent use of obsolete varieties, despite KEPHIS releasing at least 60 new varieties of maize annually. Regarding pulses, the yields have stagnated over the years mainly due to low input use. Bean yields are at an estimated 2 bags per acre (2017) while the potential is estimated at 7 bags per acre. Pulses have potential for commercialization as seen in the recent past where counties especially in the eastern region of the country have taken up the challenge - '*ndengu* revolution' which aims to promote green gram production by smallscale farmers.

Input use is very low in the country, especially the use of improved seed and proper amount of fertilizer, which are critical for enhancing agricultural productivity. Fertilizer consumption in Kenya is estimated at 38.2kgs/ha, and although fertilizer use is increasing, there is high variability in its utilization depending on the crop and region. This is not unique to Kenya; fertilizer use in Sub-Saharan Africa (SSA) countries is hampered by high fertilizer prices, an under-developed private sector fertilizer retail market and inadequate access to credit (Hernandez and Torero, 2018; Oseko and Dienya, 2015). A comparison with the green revolution in Asia shows that most Asian countries were using over 100kg/ha (World Bank, 2018c).

A study by Tegemeo Institute in 2014 reported that about 66 per cent of farmers used inorganic fertilizer, 11 per cent used organic fertilizer, while 23 per cent did not use any fertilizer at all. Further, there were variations in inorganic fertilizer used by commodity. Tea, coffee and wheat farmers who regularly used inorganic fertilizer applied rates that were closer to the recommended application rates compared to maize farmers who only used about one-third of the recommended rate, on average (Mose, 2015). The low application rates imply that it will take longer to realize the desired levels of productivity unless mechanisms are put in place to implement integrated soil health management techniques. Nonetheless, both levels of government are credited for putting in place input subsidy programmes (Oseko and Dienya, 2015).

Another critical input is mechanization, which is still low compared to Asian countries during the green revolution. Farm mechanization is useful in improving labour productivity and efficiency of small farms. Tractor utilization in Kenya was 25 tractors per 100 sq km of arable land by 2015, increasing by two-thirds from the mid-1970s (World Bank, 2018c).

Figure 9.3: Productivity of selected crops, 2014-2017



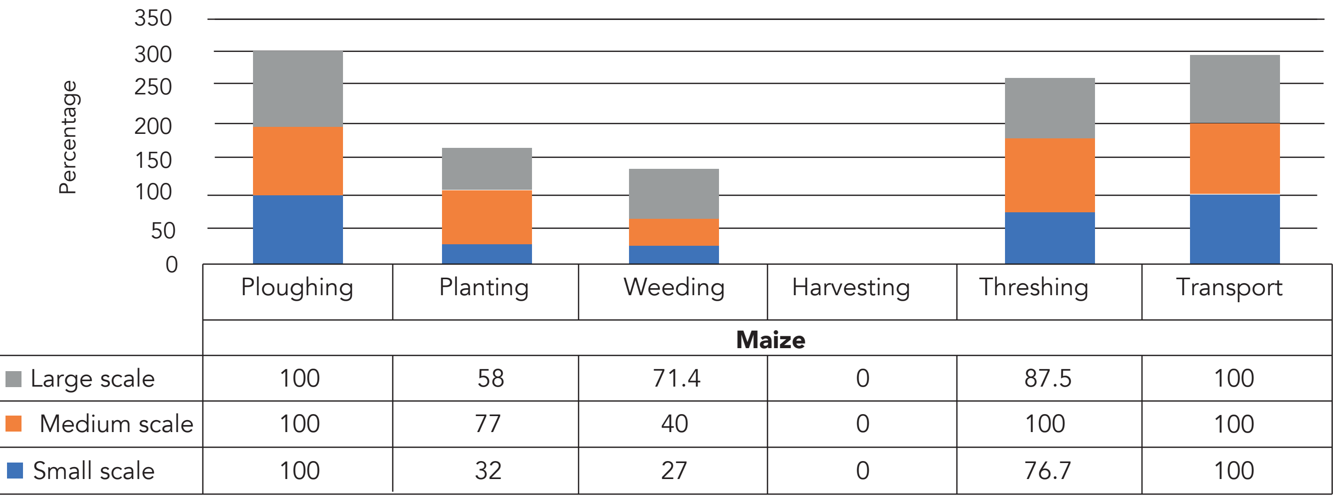
Source: State Department of Agriculture (2018)

A study by Wawire et al. (2016) on the status of agricultural mechanization in Kenya found that use of motorized power stands at 30 per cent, with hand and animal draught power at 50 per cent and 20 per cent, respectively. They gave an estimate that the country has about 10,000 tractor units and require an additional 11,000 units of tractors to meet its targeted 50 per cent mechanization threshold from the current 30 per cent. Figure 9.4 and 9.5 show the level of mechanization in the maize and wheat value chains. They show that there is room for expansion and innovation along value chains for the different production systems.

b) Livestock sub-sector

The country's livestock resource base comprises 18.3 million cattle, 25.7 million goats, 18.7 million sheep, 3.3 million camels, 2.2 million donkeys, 40 million indigenous poultry, 4.2 million layers, 3.7 million broilers and 1.2 million other poultry (MoALF, 2019). About 60 per cent of the livestock population is found in the arid

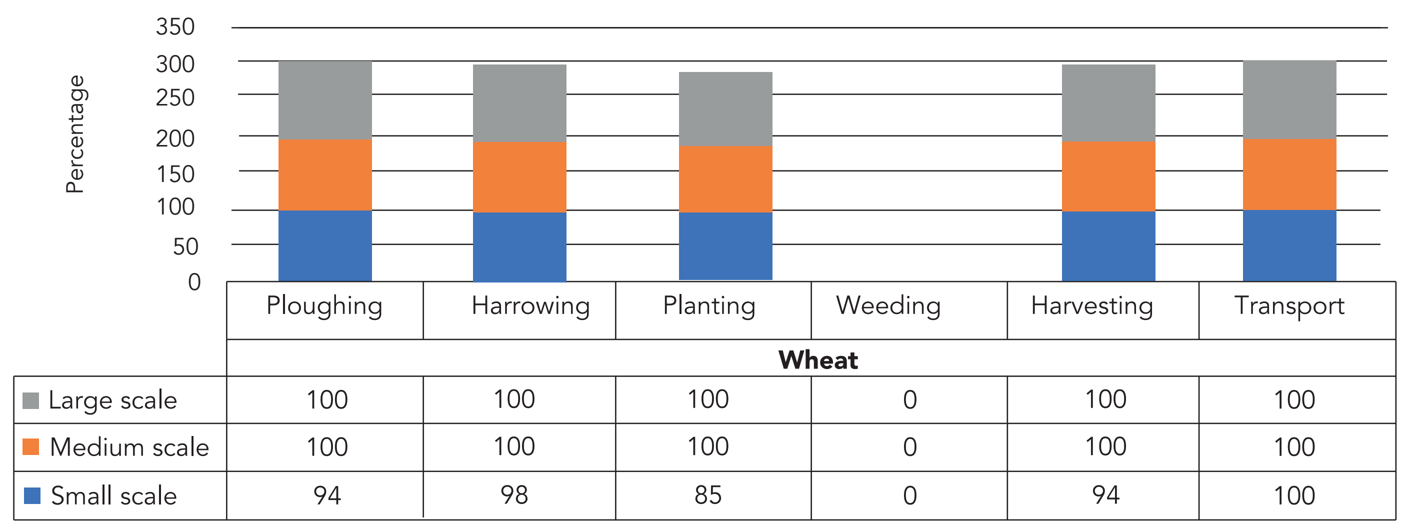
Figure 9.4: Level of mechanization for the maize value chain in Kenya



	Ploughing	Planting	Weeding	Harvesting	Threshing	Transport
	Maize					
Large scale	100	58	71.4	0	87.5	100
Medium scale	100	77	40	0	100	100
Small scale	100	32	27	0	76.7	100

Source: Wawire et al. (2016)

Figure 9.5: Level of mechanization for the wheat value chain in Kenya



	Ploughing	Harrowing	Planting	Weeding	Harvesting	Transport
	Wheat					
Large scale	100	100	100	0	100	100
Medium scale	100	100	100	0	100	100
Small scale	94	98	85	0	94	100

Source: Wawire et al. (2016)

and semi-arid lands (ASALs) where the industry employs nearly 90 per cent of the population. In the medium to high potential areas of the country, the sector provides employment and income mainly through dairy, poultry and pig production (NLP, 2017).

An estimated 75 per cent of ruminant meat comes from small scale agro-pastoral, large scale pastoral systems and, to a lesser extent, male animals and female culls from the small scale dairy production system (Behnke and Muthami, 2011). The ASALs supply an estimated 80 per cent of the national total meat supply (SDL Report, 2017). The livestock production systems are vulnerable to weather-related shocks. Over the last three years, it is only the poultry and camel production systems that have recorded increases (Table 9.3).

This sector is earmarked to provide the raw material for the leather industry. In the "Big Four" agenda, county governments need to support the growth of the leather industry along the value chain, first by ensuring that there are adequate numbers of animals to produce hides and skins and, secondly, by providing incentives to process leather locally.

c) Fisheries sub-sector

Total annual aquaculture production has never exceeded 200,000 MT/year (Figure 9.6). Prior to the government-funded Economic Stimulus Programme (ESP), about 7,500 fish farmers, mostly from the Rift Valley and central areas of the country, held about 7,477 production units in an estimated area of 722.4 ha (Musa et al., 2012). However, this has since declined since the expiry of the Economic Stimulus Programme (ESP).

Of concern is the increasing fish and fish product imports which threaten the growth of the domestic industry (Table 9.4). The per capita fish consumption has only grown by one percentage point between years 2008 and 2018, meaning that there is potential to increase the consumption of fish. Because fish is important for nutrition security, it is an important source of protein and micro-nutrients such as omega 3, which are important for nutrition security (KNBS, 2018).
Fish trade in the country revolves around artisanal fishers; the intermediaries are involved in product conveyance to the markets, usually with some value addition such as drying,

Table 9.3: Livestock products, 2015 -2017

Livestock Products	Unit	2015	2016	2017
Beef	Metric tonnes	489,064.73	528,989.94	481,799.45
Chevon	Metric tonnes	35,856.55	50,468.08	33,677.80
Mutton	Metric tonnes	26,692.19	27,900.97	17,766.96
Pork	Metric tonnes	9,715.00	10,767.50	12,988.63
Rabbit	Metric tonnes	1,060.10	940.96	779.278
Poultry	Metric tonnes	45,937.90	64,308.68	106,978.03
Camel	Metric tonnes	18,361.40	18,714.72	29,085.67
Milk	Million Kgs	3,444.20	4,115.50	3,560.70
Eggs	No. of trays	46,912,836	50,989,335	52,926,249
Honey	Kilogrammes	17,411,700	25,573,538	18,089,763
Wax	Kilogrammes	1,446,006	1,688,268	1,752,685
Hides	Number	1,831,585	1,837,380	2,657,167
Skins	Number	3,901,421	4,370,406	7,463,184

Data Source: State Department of Livestock (2019)

smoking and deep-frying, and a large-scale export-oriented processing sector currently consisting of about 18 EU-certified firms. This implies that there is potential to expand the sector along the value chain.

d) Forestry and logging sub-sector

Kenya's forests cover an area of 4,986,676 ha of which natural forests cover an area of 4,754,378 ha while plantations cover an area of 232,298 ha. Public or gazetted natural forests cover an area of 905,357 ha. Natural forests in community lands cover 3,849,021 ha of which 596,099 ha are national parks, hence 3,252,922 ha being the forest area under community management. Public plantations cover an area of 138,152 ha and community/private plantations cover an area of 94,146 ha. These forests have a sustainable yield for wood fuel of 0.9m^3 per ha per year (KNBS, 2018).

Forest ecosystems enhance landscape resilience to climate change by providing environmental services that include water quality and quantity, reduction of soil erosion, and creation of micro-climatic conditions that maintain and/or improve productivity. Forests are the most effective sinks of greenhouse gases that cause climate change.

The continued depletion of the country's forests will, in the medium to longer term, exacerbate the country's water insecurity, which will impact adversely on national productivity. In the 10-year period of 2000-2010, for example, deforestation in the country's water towers was estimated at 50,000 hectares, translating to a depletion rate of about 5,000 hectares per annum. This translates to a reduction in water availability of approximately 62 million cubic metres per year, with a consequent yearly loss to the economy of over US$ 19 million (UN-Environment, 2012). This has the potential to negatively impact the attainment of the Vision 2030 and the "Big Four" agenda.

Figure 9.6: Fisheries production, 2012-2016

Source: Fisheries Directorate (2018)

Table 9.4: Import of fish and fish products, 2015-2016

Product	2015	2016
Frozen whole tilapia	2,657,783	6,634,690
Frozen mackerels	3,802,360	5,292,010
Fresh tilapia	1,335,468	1,324,816
Fish waste		645,000
Fish feed	40,875	514,245
Tilapia fillets	188,760	459,490
Tuna fish meal	200,000	200,000

Source: Fisheries Directorate (2018)

Kenya has a wood supply potential of 31.4 million m^3 against a national demand of 41.7 million m^3, which translates to a current deficit of 10.3 million m^3. Table 9.5 shows the supply, demand and deficit. Forecasts for a 20-year period indicate a 20.0 per cent increase in supply and 21.6 per cent increase in demand by the year 2032, which signifies a gradually increasing deficit (Reytar, 2018). This means that the deficit is widening because replenishing of forest resources is not keeping pace with the rate of depletion.

9.4 Linkages with the Economy

The "Big Four" agenda aims to promote value addition in agriculture so that producers get more returns from their produce. Producers can add value to their products by participating in activities that change the form of the raw products from their farm, or by integrating into a value chain directly or indirectly with other actors along the value chain. For the purposes of checking which products in the agricultural sector have potential to contribute to the economy in terms of job creation and growth, we borrow results from a study based on the Kenya Social Accounting Matrix (2014) comprising seventy-three (73) commodities developed by the Joint Research Centre (JRC) (Causapé et al., 2018). The analysis uses multiplier values from the commodity columns and divides them by the average value for all sectors (using in this case domestic supply weights to avoid scale effects) to get the backward linkages, which are the values reported in Table 9.6. The backward linkages are used to compare the products capacity and potential to create employment and wealth.

This analysis is useful in providing insights on which agricultural products have the potential to generate more returns with the injection of one unit. The study showed that for every unit injected in maize it will generate 1.17 units of output, 1.39 units of employment, and 1.25 units in value added. Fruits will generate 1.23, 1.42, and 1.32 of output, employment and value added, respectively, while vegetables will generate 1.25, 1.53, and 1.33 of output, employment and value added, respectively, whose values are higher when compared with those of wheat (0.70; 0.84; 0.74) and rice (0.43; 0.51; 0.45). Regarding cash crops, tea (1.21;1.64; 1.36) records higher values than other cash crops in all the three aspects while sugarcane (1.46) and tobacco (1.46) show higher values for employment. Cotton records values that show that for every unit of injection, the output will be 0.36 units, 0.52 units of employment and 0.40 units in value added (Table 9.6).

H.E. President Uhuru Kenyatta launched the National Tree Planting Day at Moi Forces Academy in Kamukunji Sub-County, Nairobi on 12th May 2018. The national event's theme is '*Panda Miti*, *Penda* Kenya'.

The government has encouraged members of the public, corporates, organizations and other groups to heed the appeal by the Ministry of Environment and Forestry, which is implementing the initiative to participate by planting trees and donating trees to Kenya Forest Service (KFS) or county governments. This is in line with government plans to increase forest cover in the country to 10 per cent by 2022.

Table 9.5: Forest products quantities supplied, demanded and the deficit

Product	Quantity Supply (m3)	Quantity demanded (m3)	Deficit (m3)
Timber	7,363,414	5,262,624	2,100,790
Poles	3,028,907	1,409,482	1,619,425
Fire wood	13,654,022	18,702,748	-5,048,726
Charcoal	7,358,717	16,325,810	-8,967,093

Source: Reytar (2018)

All livestock products showed backward linkages on the economy, with higher values regarding output (around 1.2), value added (around 1.3), and employment where for every unit injected, two (2) more units are generated. This is also the case for the fishing and forestry sectors, although in the latter the employment is 1.55 times. For the agri-food industry sectors, value added numbers are around the average (with meat, grain milling and other manufactured food below) and very close to it in output, although the linkages are noteworthy in employment, around 1.3 (excluding grain milling 1.12). This therefore means that there is potential to generate employment and growth in the economy through investments in the livestock sub-sector, compared to other products in the agriculture sector.

Trade and distribution are critical for the agriculture sector as demonstrated by the rates that agricultural products generate in terms of value added, which are around 60 per cent in the case of the primary sector, while 30 per cent of the total value added is created in the services sectors.

In the food crops sub-sector, about 50 per cent of the value added generated is allocated to small scale farmers (familiar or with some degree of cooperatives), except for rice cultivation where this rate is just above 40 per cent. The rest of the value added embodied in primary sectors (around 10%) is allocated to large or medium-sized farms, with shares over 5 per cent for manufacturing. This emphasizes that agriculture is mainly dominated by small scale farmers and, therefore, policy interventions should take this into account. For instance, tea and coffee are mainly produced by small scale farmers; this is also the case for livestock products and fisheries sub-sectors.

Table 9.6: Linear multipliers and backward linkages of primary sector and food industry commodities, 2014

	Multipliers			Backward linkages		
	Output	Employment	Value added	Output	Employment	Value added
Maize	2.97	11.10	1.85	1.17	1.39	1.25
Wheat	1.79	6.70	1.10	0.70	0.84	0.74
Rice	1.10	4.10	0.66	0.43	0.51	0.45
Other cereals	3.01	11.13	1.88	1.19	1.39	1.27
Roots and tubers	3.17	11.98	1.98	1.25	1.49	1.33
Pulses and oil seeds	2.16	8.38	1.35	0.85	1.05	0.91
Fruits	3.12	11.41	1.96	1.23	1.42	1.32
Vegetables	3.17	12.25	1.97	1.25	1.53	1.33
Cotton	0.92	4.16	0.59	0.36	0.52	0.40
Sugarcane	2.52	11.73	1.57	0.99	1.46	1.06
Coffee	2.74	12.29	1.72	1.08	1.53	1.15
Tea	3.07	13.16	2.02	1.21	1.64	1.36

	Multipliers			Backward linkages		
	Output	Employment	Value added	Output	Employment	Value added
Tobacco	2.04	11.71	1.19	0.80	1.46	0.80
Other crops	3.09	10.46	2.06	1.22	1.30	1.39
Beef	3.15	17.30	1.95	1.24	2.16	1.31
Dairy	3.15	16.13	1.94	1.24	2.01	1.30
Poultry	2.98	17.58	1.85	1.17	2.19	1.24
Sheep, goat	3.08	16.78	1.88	1.21	2.09	1.26
Other livestock	3.12	17.10	1.90	1.23	2.13	1.28
Fishing	3.09	16.74	1.92	1.22	2.09	1.29
Forestry	2.86	12.43	1.95	1.13	1.55	1.31
Meat	2.99	10.51	1.43	1.18	1.31	0.96
Grain milling	2.77	9.01	1.33	1.09	1.12	0.89
Sugar and bakery	2.52	9.99	1.50	0.99	1.25	1.01
Beverages/ tobacco	2.82	10.14	1.67	1.11	1.27	1.12
Other manufatured foods	1.89	9.07	1.09	0.74	1.13	0.74

Source: Causapé et al. (2018)

9.5 Resources Required to Support the Agriculture Sector

Land

The per capita arable land available in the country has declined steadily by more than 50 per cent from about 0.2 hectares in the 1990s to 0.12 hectares in 2015 (Figure 9.7). This is compounded by land fragmentation which further aggravates the problem, because, in some cases, land plots owned by single households are scattered or a whole parcel of arable land is converted to residential use due to increasing demand for housing. This type of land distribution makes it difficult for farmers to adopt modern technology such as mechanization and increases the cost of agricultural production due to lack of labour and other inputs. This is despite efforts to increase the amount of land available for production through reclaiming of wetlands and irrigation. There is therefore need to put concerted efforts to ensure that county spatial and land use plans are implemented.

Forest cover has shown a decline in the 1990s, but turned to steady increase from the year 2000 due to tree planting campaigns by both levels of government.

Renewable fresh water resources

Kenya is classified as a water-scarce country. The natural endowment of renewable freshwater is currently about 21 Billion Cubic Metres (BCM) or 449 m^3 per capita per annum (Figure 9.9). A country is categorized as "water-scarce" if its renewable freshwater potential is less than 1,000 m^3 per capita per annum. By 2025, Kenya

Figure 9.7: Percentage of land area in relation to forest cover, arable land and arable land per capita, 1990-2015

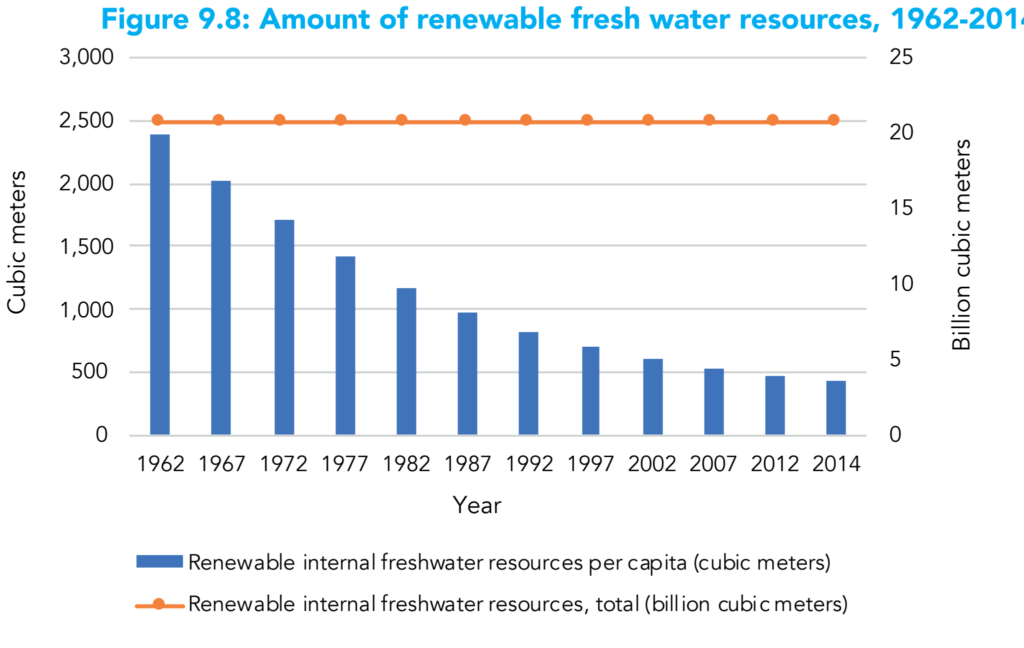
Forest area (% of land area)
Arable land (% of land area)
Arable land (hectares per person)

Data source: World Bank (2018), World Development Indicators

is projected to have a renewable freshwater supply of only 235 m^3 per capita per annum (Government of Kenya, 2006).

About 40 per cent of the renewable freshwater has potential for development, and this represents the safe yield. The remaining 60 per cent are required to sustain the flows in rivers to ensure ecological biodiversity and acting as a reserve for development beyond the timeframes of the strategies. The safe yield of surface water resources is 7.4 BCM per annum and the safe yield of groundwater about 1.0 BCM per annum. The current water abstractions are only a fraction (13%-19%) of the assessed safe yield or potential for

Figure 9.8: Amount of renewable fresh water resources, 1962-2014



Data source: World Bank (2018), World Development Indicators

development, which in 1992 amounted to 1.1 BCM per annum and is currently 1.6 BCM/annum, thus indicating an extremely low level of development (Government of Kenya, 2006).

Agriculture is the largest consumer of water, estimated at 70 per cent to annual total fresh water withdrawals and this implies the need to conserve water towers and explore other sources of renewable water to sustain agriculture and food production (Figure 9.10).

Agriculture expenditure

The Public Expenditures in Support of Agriculture Sector (PEAS) show that the country (national and county expenditures combined) spends an average 4 per cent of its total budget on the sector. The level of spending for the agriculture sector is still below the Malabo commitment (2014) of 10 per cent (Figure 9.10). Kenya needs to increase spending on agriculture sector to the level of at least 10 per cent of total national budget as committed under the Malabo commitments (2014). In addition, since this is

Figure 9.9: Annual freshwater withdrawals, as a per cent of total freshwater withdrawal

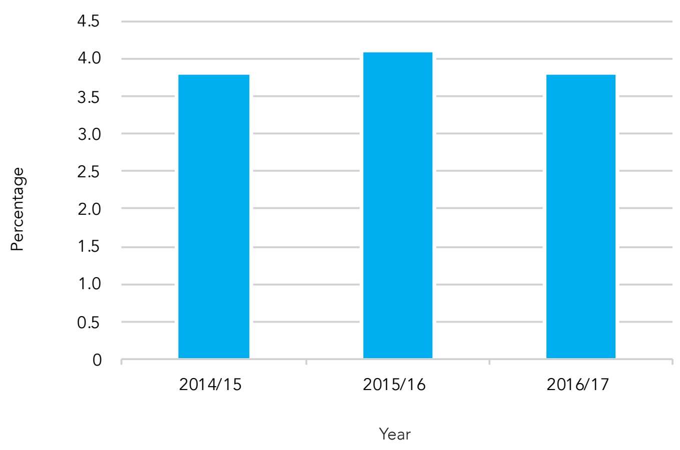
Industry
4%

Domestic
26%

Agriculture
70%

Data source: World Bank (2018), World Development Indicators

Figure 9.10: Share of agriculture public expenditure at national and county level 2014- 2017



Data Source: National Treasury (2018)

a devolved function, effort should be made to streamline the programmatic classification of budget items at the national and county levels to facilitate the monitoring and tracking of spending. This will strengthen the public financial management process.

Agriculture public spending by programmes at the national level

At the programme level, Public Expenditures in Support of Agriculture Sector (PEAS) analysis (Table 9.7) shows that, on average, infrastructure has the highest share of national PEAS at 26 per cent versus 22 per cent for subsidies, 21 per cent for knowledge (research, extension, training and inspection/quality control) expenditures and 20 per cent for multipurpose projects. These investments indicate, to some extent, that the sector has a broad-based support to develop.

Irrigation (21%) constitutes the largest spending component in the infrastructure category. There are several irrigation initiatives including the Mwea, Bura, Hola and Galana Kulalu, which mainly aim to increase food production in the country. Regarding the subsidy programme, input subsidies are mainly

Table 9.7: Heatmap table of the share (%) of agricultural functions at the national level from 2013/14-2016/17

	2013-14	2014-15	2015-16	2016-17	Average
Subsidies	**21**	**23**	**21**	**25**	**22**
Capital subsidies	0	0	1	0	0
Input subsidies	12	13	16	13	13
Storage subsidies	8	10	4	12	8
Knowledge	**12**	**24**	**26**	**22**	**21**
Research	6	15	20	15	14
Extension and advisory services	3	4	1	1	2
Training	0	1	1	2	1
Inspection/quality control	3	5	3	5	4
Infrastructure	**34**	**21**	**25**	**24**	**26**
Feeder roads	0	0	0	0	0
Irrigation	26	20	23	18	21
Other infrastructure	3	0	0	2	1
Processing and marketing	5	1	2	4	3
Multipurpose	**26**	**18**	**14**	**22**	**20**
Multipurpose projects	14	6	8	10	**9**
Multipurpose – SAGA	12	12	7	13	**11**
Administrative costs	**7**	**14**	**15**	**7**	**10**
Total	100	100	100	100	100

Data Source: MAFAP (2019) database

Note: red indicates low levels of financing; green red indicates high levels of financing

provided through several projects, notably the National Accelerated Agricultural Inputs Access Programme (NAAIAP), which targeted small scale farmers by providing fertilizer and maize seeds for one acre (Mason, et al., 2017; MoALF, 2017). The share of spending on knowledge (research, extension, training and inspection/ quality control) is 14 per cent, although it accounts for 0.1 per cent of GDP over the period. On average, it is ten times below the 1 per cent decided upon by the Executive Council of the African Union in the 2006 Khartoum Decision for Agriculture and Technology (African Union, 2006).

Multipurpose projects often include research components and are funded by donors (80%). Half of the multipurpose expenditures are spent through Semi-Autonomous Government Agencies (SAGAs), although they spend on other functions such as irrigation and research.

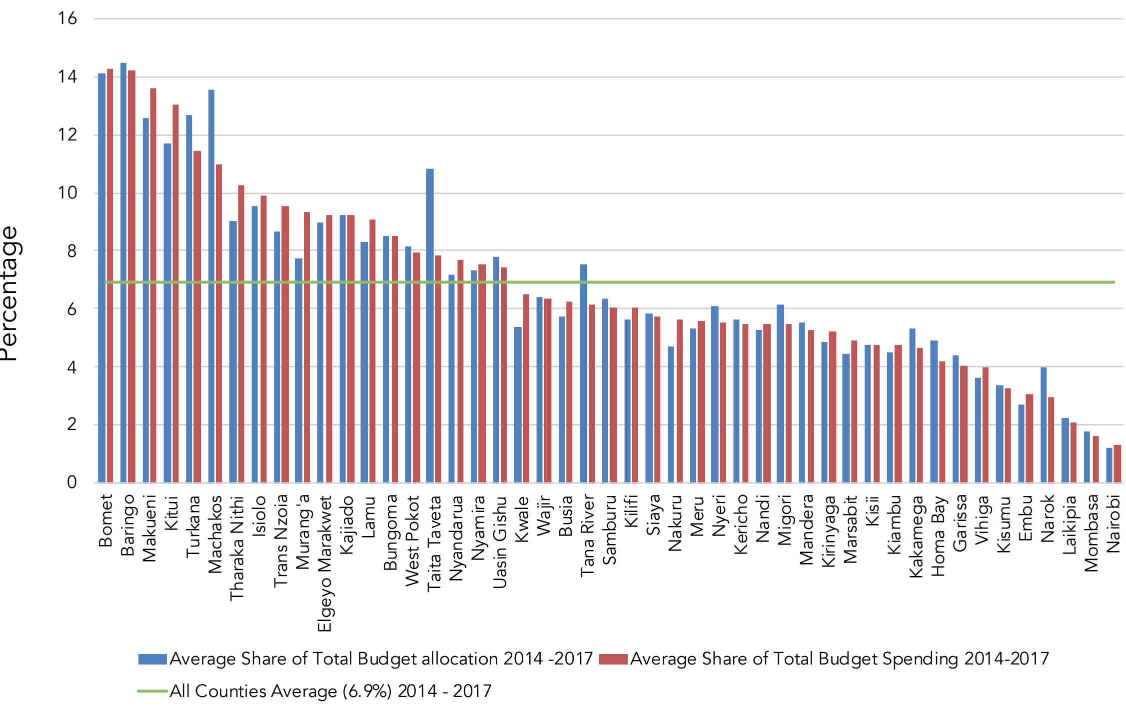
Agriculture public spending at county level

On average, counties spent 6.9 per cent of their total budget on agriculture (Figure 9.11). However, the variance between allocation and actual spending indicates, to some extent, the issues around poor planning, inefficient expenditures and budget leakages. A large portion of the recurrent budget is used to pay salaries and wages, leaving very little for operations (Onyango et al., 2018). This has adversely affected key programmes such as the provision of extension services. The counties that recorded a higher percentage of spending had irrigation spending as part of agriculture, considering that they are in the arid and semi-arid areas of the country.

Investments by development partners

The International Development Association (IDA - World Bank/IMF) dominates with 43 per cent of donor support to the sector. Other key donors are the International Fund for Agricultural Development (IFAD), Sweden, the African

Figure 9.11: Average county spending in agriculture, 2014-2017



Data Source: Controller of Budget (2018

Development Bank and Japan (all close to 10%). Despite its large agricultural development projects (Kenya Agricultural Value Chain Enterprises - KAVES; Partnership for Resilience and Economic Growth in Kenya - PREG; increasing Smallholder Farmer Productivity and Profitability - ISPP; Resilience and Economic Growth in Arid Lands - REGAL; United States Agency for International Development - USAID) spends mostly off-budget (0.04%). Therefore, the World Bank/IMF is the largest and most important donor for the sector.

The major development projects (over 52% of donor funding) 2013/14–2017/18 have been the Kenya Agricultural Productivity and Agribusiness Project (KAPAP), the Kenya Coastal Development project (KCDP), the Agricultural Sector Development Support Programme (ASDSP), the Mwea Irrigation project, the Regional Pastoral Livelihood Resilience project (RPLR), the East African Agriculture Productivity Project (EAAPP), Smallholder Horticulture Marketing Programme (ShoMaP), Smallholder Dairy Commercialization Project (SDCP), and Drought Resilience and Sustainable Livelihood Project (DRSLP) (Figure 9.13).

Private investments and private capital

There is growing consensus that the prime source of agricultural investment should be the private the sector. The proposed Agriculture Sector Growth and Transformation Strategy (ASGTS) 2018-2028 expects that 80 per cent of the financing will come from the private sector. This means that the sector will need to tap from the large and growing net assets of commercial banks, wealth funds, pension and insurance funds, and from direct foreign investments.

Various initiatives already exist. The Grow Africa initiative was founded jointly by the African Union (AU), the New Partnership for Africa's Development (NEPAD) and the World Economic Forum in 2011 and works to increase private sector investment in agriculture. The partnership reported in its May 2016 Investment Forum in Kigali, Rwanda, that over US$ 500 million in new private sector investments were

Figure 9.12: Development partners' public expenditures in support of agriculture sector by key projects, 2013/14 - 2017/18 (% of total development partners' funding)

Data Source: (World Bank (2018))

implemented in 2015 by different partners across Africa, bringing the total to US$ 2.3 billion implemented out of over US$ 10 billion committed by more than 200 African and global companies. In 2015, these investments reached around 10 million smallholder farmers and created 30,000 jobs, bringing the total number of jobs created to 88,000 since 2012. In the first quarter of 2016, almost US$ 500 million in additional investment commitments were made in rice and cassava production and processing in Nigeria, and sorghum production and processing in Kenya (Grow Africa, 2016). In Kenya, Grow Africa initiative is supporting a project on bi-fortification of sorghum, which is being carried out by Africa Harvest and her partners. There is need to encourage Kenyans to lobby the government to facilitate access to this Africa-wide fund that has been earmarked for the sector.

Other small scale initiatives include the Agri-wallet, which is a mobile phone-based platform used to connect the demand side to the supply side of agriculture. The platform uses block chain technology built by COIN22, a company in Amsterdam, and is being implemented among small scale farmers in Kenya. Agri-wallet enables financial inclusion for the actors in the agricultural value chains, with small scale farmers taking the centre stage. Agri-wallet separates farmers' personal account from agribusiness account by earmarking funds, such that a farmer can only cash out the coins at a registered input supplier, thereby instilling financial discipline and at the same time reduce diversion of funds meant for agricultural production to non-agricultural activities such as buying of household goods. Similarly, Agri-wallet ensures prompt payment to the farmers by significantly reducing the amount of time it takes from delivery of produce by farmers to the actual payment by the buyer.

Agri-wallet service for the farmer

1. Commitment savings (funds are automatically earmarked for reinvestment into the farming business.
2. Overdraft facility: Depending on the use and interaction with Agri-wallet, farmers can access overdraft facility that helps bridge any financial gaps in farming. Minimal prerequisite requirements are needed for a farmer to qualify for overdraft facility.

Agri-wallet services for the output buyer/market

1. Bulk payment service: Bulk payments to farmers are done on behalf of the buyer. Both small and big amounts are accommodated. Deposits are made to farmers through M-Pesa accounts, or the bank account of choice.
2. Overdraft facility: Buyers can also access overdraft facility through Agri-wallet, which enables them pay farmers promptly upon delivery of produce. This ensures loyalty from farmers and reduces side selling.

Agricultural insurance

Agricultural insurance in Kenya dates back to 1942 when the colonial government created the Guaranteed Minimum Return (GMR) scheme that was aimed at increasing food production and food security. The GMR programme was discontinued in 1978 following years of poor performance and unsustainable financial losses. In 2008, the International Livestock Research Institute (ILRI), in collaboration with insurance companies and partners, developed and piloted the Index Based Livestock Insurance (IBLI) in Marsabit as a pilot project.

The insurance market in Kenya is predominantly private sector-based, with eight (8) companies involved in agricultural insurance. Basically, there are two types of products: (i) Indemnity-based insurance products which determine claim payment based on the actual loss incurred by the policy holder; if an insured event occurs, an assessment of the loss and a determination of the indemnity are made at the individual or herder level; (ii) Index-based agricultural insurance products are non-indemnity and parametric, and they provide protection against correlated risks such as extreme weather events. Payout is based on the value of an "index", which is assumed to be proxy to actual losses (GIIF, 2013).

The Government of Kenya has embarked on Kenya Agriculture Insurance and Risk Management Programme (KAIRMP), which is a comprehensive agricultural and risk management programme covering the livestock and crop sub-sectors. The programmes currently operational are:

i. Kenya Livestock Insurance Programme (KLIP) – this is an innovative index insurance scheme which utilizes advanced technology and satellite data to assist agricultural workers in the face of flooding and drought condition. The scope of this insurance is the 14 counties in the ASALs, and covers animals (cows, goats, sheep, donkeys and camels). Its basis of cover is the 'Normalized Deviation Vegetation Index Insurance (NDVI)' and it uses the NDVI payout scale.

ii. Crop insurance, whose scope is 28 counties, covers crops (maize and wheat). Its basis of cover is the 'Index-Based Crop Insurance', and it uses the 'Area Yield Loss/Weather Index Payout Scale'.

There is need to promote agricultural insurance because, according to recent studies, less than one per cent of farmers consider agriculture insurance as a risk mitigation strategy (AKI, 2016).

Resource requirements for the sector

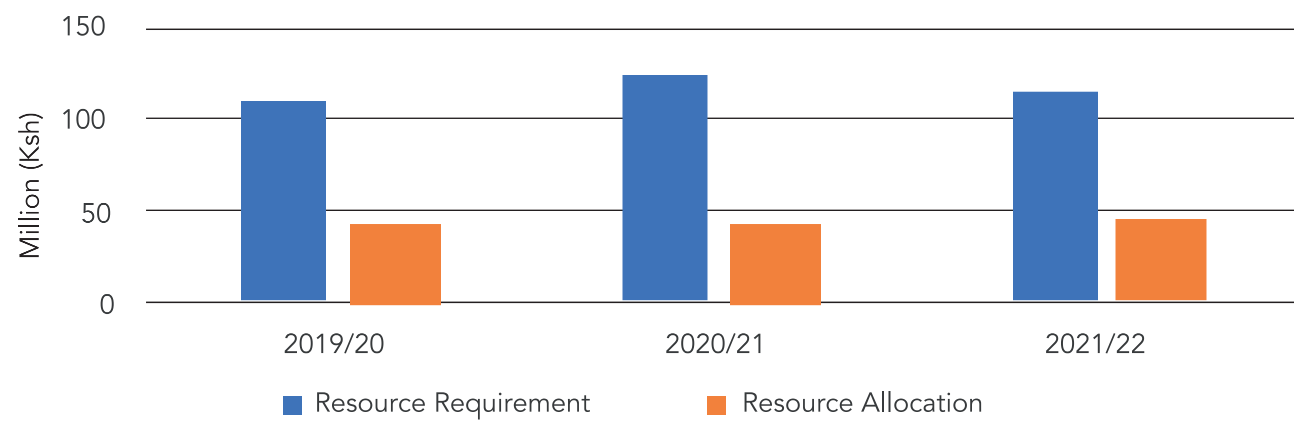
The "Big Four" agenda resource requirements and allocation for Agriculture, Rural and Urban Development (ARUD), according to the National Treasury, are shown in Figure 9.13. The allocation is only 40 per cent of the requirement, implying that alternative sources of funding will be required.

9.6 Challenges

1. Land availability and usage is perhaps the most important production input. Ownership affects land use, farming systems, institutional structures, ecological conditions, adoption and use of technology, food production and self- sufficiency.

2. Climate change agricultural productivity is sensitive to changes in rainfall and the length of seasons. Rural livelihoods are heavily dependent on agriculture as a source of income and sustenance, thus changes in weather patterns increase vulnerability.

Figure 9.13: Resource requirement for the ARUD, 2019/20-2021/22



Data source: National Treasury (2018)

3. Low productivity: This calls for strategies that entail sustainable increase and improved efficiency in the production systems. In addition, soil erosion and degradation continue to threaten the availability and productivity of land for crop and livestock production.

4. Low investments: The level of expenditure for the agricultural sector is below the agreements that the country is a signatory to - the Malabo Declaration 2014 where countries committed to spend 10 per cent of their total expenditure on agriculture. In Kenya, the spending is at an average of 4 per cent over the last three years.

9.7 Key Messages and Recommendations

9.7.1 Key messages

1. The agriculture sector contributes a third of the country's Gross Domestic Product (GDP). The contribution to GDP increased from 26.3 per cent in 2012 to 34.2 per cent in 2018, and the sector grew by 6.4 per cent in 2018. The second Medium Term Plan (MTP II) had targeted a growth of 7 per cent per annum, but this target has been difficult to achieve due to adverse weather conditions, post-election violence, the volatility of global food prices, high input costs, among other factors.

2. Over-arching policies: The sector was devolved in 2013, which brought with it unique challenges occasioned by lack of over-arching guiding policies, such as the Agriculture Policy and Veterinary Policy, which are still in the legislative process. In addition, several aspects that were expected to be championed by the counties have not been adequately realized, such as extension, and maintaining food and nutrition security reserves.

3. Conserve forests: The continued depletion of the country's forests will, in the medium to longer term, exacerbate the country's water insecurity, which will impact adversely on national agricultural productivity. Forest ecosystems are critical for enhancing resilience to climate change by providing environmental services that include water quality and quantity, reducing soil erosion, and creation of micro-climatic conditions that maintain and/or improve productivity.

4. Water use: In the 10-year period of 2000-2010, for example, deforestation in

the country's water towers was estimated at 50,000 hectares, translating to a depletion rate of about 5,000 hectares per annum. This translates to a reduction in water availability of approximately 62 million cubic metres per year, with a consequent yearly loss to the economy of over US$ 19 million (UN-Environment, 2012).

5. Land use management practices: The per capita arable land available in the country has declined steadly by more than 50 per cent from about 0.2 hectares in the 1990s to 0.12 hectares in 2015. There is need to embrace technology in order to increase the per unit output.

6. Investments in the livestock sector: Livestock products contribute more than food crops and cash crops in regard to backward linkages to the economy; the values are higher than average in output (1.2), value added (1.3), and especially in employment where they double the average (Causapé et al., 2018). Value-added agriculture is important for both agricultural entrepreneurship and rural development.

7. Financing agriculture: The Agriculture Sector Growth and Transformation Strategy (ASGTS) 2018-2028 expects that 80 per cent of the financing for the strategy will come from the private sector. Public spending for both levels of government is estimated at 3.8 per cent. The "Big Four" resource requirements and resource allocation for Agriculture Rural and Urban Development (ARUD) according to the National Treasury (2018) is at 40 per cent of the requirement, implying that alternative sources of funding will be required.

9.7.2 Recommendations

1. Policy and legislation: An over-arching policy direction for the sector is needed, especially to provide incentives for agricultural production systems that are efficient, and limit conversion of natural ecosystems during production process.

2. There is increasing competition for resources such as land, water and labour, thus the need to embrace resource use efficiency through technology adoption. Technologies that reduce the carbon foot print in food production, such as conservation agriculture, use of integrated soil health and pest management practices are highly needed in Kenya, in addition to embracing digital technology such as precision agriculture, drones and crop monitoring.

3. Transform farms to firms: Opportunities exist in activities that add value to raw bulky agricultural products to semi-processed or processed, thus providing the producers with more options on where to sell their produce.

4. There is need to provide incentives for private investment in agricultural development and facilitate such investment, for example through an enabling environment to attract private investment. This includes exploring innovative financing options to catalyze larger amounts of private investment, such as venture capital and risk loan guarantee.

CHAPTER 10

MOBILIZING POTENTIAL IN INNOVATIONS AND TECHNOLOGY FOR ECONOMIC TRANSFORMATION

The policy environment for mobilizing innovations and technology for Kenya's economic transformation is largely supportive as evident from the established institutional framework, and public and private investment incentives. Kenya's innovativeness ranks high, but technology uptake and patenting of innovations is still low. This can be enhanced by addressing planning and financing gaps, harmonizing overlapping functions, and entrenching integrated planning and collaboration among institutions. Further, limited specialization, collaboration and funding has hindered education and research institutions from contributing innovations and promoting technological change, besides low enrolment in science-oriented training. Limited investment and productivity in domestic manufacturing exposes the country to high importation of technology, machines and equipment. There is need to build capacity for potential innovators and promote local manufacturing and innovations.

10.1 Introduction

Innovations and technology play an important role in growth and development of modern economies in which knowledge boosts wealth creation, citizens' welfare and international competitiveness. The desired growth and development goals for Kenya can be achieved more effectively with decisive paradigm shift in technology to high-level technical skills and mechanization, and sectoral reorientation to high value addition through industrialization as a key ingredient for structural transformation and for delivery of the development agenda. Priority in science, technology and innovation is key in mobilizing sustainable, effective and efficient infrastructure, machinery and equipment for the country.

According to the Kenya Vision 2030, effective exploitation of knowledge and innovation requires an integrated framework among strategic institutions, manpower, communication mechanisms, researchers and the market. Specifically, the country requires: (a) an educated and skilled manpower that can create, share and use knowledge to innovate solutions to societal problems; (b) strategic institutional regimes that provide efficient use of existing knowledge, create new knowledge and diversify entrepreneurship; (c) dynamic communication, education and outreach

mechanisms that facilitate stakeholders' engagement; and (d) effective networks/ platforms of researchers, professional bodies, think tanks and community groups that can tap into the growing global stock of knowledge, and assimilate and adapt for local needs. To accelerate achievement of the status of high middle level industrialized nation, priority in science, technology and innovation is key, and so is mobilization of sustainable, effective and efficient human resource, infrastructure, machinery and equipment, and strategic partnerships, alliances and collaborations.

In the MTP III, the government seeks to transition the economy to be innovation-led and knowledge-based. To achieve this, the government under the Science, Technology and Innovation (ST&I) sector seeks to establish national science technology and innovation parks, increase research funding from 0.79 per cent of GDP to 2 per cent of GDP and attain a Global Competitiveness Index of 85 out of 137 countries by 2022 from 91 achieved in 2016. The key flagship programmes will be: Science, Technology, Engineering and Mathematics (STEM); Nano-Sciences, Material Science and New Production Technologies; Space Science Technology Development; Energy Technologies Development; Coordination of Technology and Innovation Commercialization; County Technology and Innovation Delivery Services; Biotechnology and Biosciences; and Natural Products. The government has identified various policy reforms that will provide an enabling environment for the sector to develop, some of these being: Science Technology and Innovations Policy; Biotechnology Development Policy; Biosciences Policy; Atomic Energy Policy; Kenya Institute of Nanotechnology Policy; Kenya Space Science and Technology Policy; Natural Products Policy; Intellectual Property Policy; Innovation Policy; National Research in Health Policy; and Indigenous Knowledge and Technology Policy.

10.2 Policy Environment for Technology and Innovation

Kenya has over time provided tax incentives to investors on capital expenditures, including wear and tear allowances, industrial building deduction, investment deduction and farm-works deductions, among others (Table 10.1). The main aim of these incentives is to promote investment and by extension innovation and technology. For instance, promotion of foreign direct investment comes along with technological transfer, which is encouraged through either co-tendering, sub-contracting or franchise. The beneficiaries of these incentives can claim reduction in tax amounting to the proportion of capital expenditure as provided for, having spent the threshold amount on capital development investments. There is evidence that with these tax incentives, the Exports Processing Zones (EPZs) in 2017 attracted capital investment by the private sector worth Ksh 95.3 billion, being Ksh 74.6 billion in private investment (mainly on equipment, machinery and enterprise funds) and Ksh 20.7 billion in infrastructure investments (EPZA, 2017).

The National Industrialization Policy Framework for Kenya (Government of Kenya, 2012) recognizes technology and innovation as a guiding principle which is central to meeting the rapidly changing consumer tastes and preferences while also boosting productivity and competitiveness of the industrial sector. One of the measures the policy has identified towards enhanced value addition is to promote the establishment of industrial, science, and technology parks. Further, the policy urges that the country keeps pace with technological changes and exploit the benefits of technology transfer, which come along with foreign direct investment. The industrialization policy recognizes that the value chain of manufacturing can be enhanced through deliberate efforts to

Table 10.1: Tax incentives promoting uptake of technology

Wear and tear allowances	The wear and tear allowances, which is depreciation rate, are charged on capital expenditure incurred in machinery and equipment where they are classified into four classes, all of which are offered allowances at different rates: • Class 1 - Includes heavy earth moving equipment and self-propelling vehicles such as lorries above 3 tonnes, forklifts and trucks. The rate is 37.5% per annum • Class 2 - Computers, photocopiers, scanners. The rate is 30% • Class 3 - Includes light self-propelling vehicles and other machines such as aircrafts, motorbikes, and lorries under 3 tonnes. The rate is 25% • Class 4 - Telephone sets, switch boards, bicycles. The rate is 12.5%
Industrial building deduction	This is an allowance granted to an investor who incurs capital expenditure on industrial building. It is allowed at 10% of the cost (net of investment deduction)
Investment deduction	This is provided at 100% investment in capital expenditure on building and/or machinery used for manufacture. For capital expenditures on building and/or machinery exceeding Ksh 200 million if the investment is outside Nairobi, the investor can claim 150% allowance
Farm works deductions	This deduction is a capital allowance granted to farmers incurring capital expenditure on the construction of farm works at the rate of 100% of the cost. A farm work is any structure constructed to enhance the operations of a farm
Telecommunication sector	This is an incentive to telecoms industry for incurring capital expenditure on telecommunications equipment purchased and used in own business. It is entitled to a straight line deduction at the rate of 20% of such cost
Computer software	An investor who incurs capital expenditure on the purchase of the right to use a computer software used by him in business is entitled to a straight line deduction at the rate of 20% of such cost
Special Economic Zone (SEZ)	Capital expenditure on buildings and machinery for use in a Special Economic Zone are entitled to investment deduction equal to 100% of the capital expenditure. The SEZ investments are also allowed tax regime, including corporate taxation at a rate of 10% for first 10 years and 15% for the next 10 years, 5% withholding tax rates on payments made to non-residents (royalties, interest, management fees), and tax exempt on dividends paid to non-residents by the SEZ entity
Export Processing Zones (EPZs)	A 10-year corporate income tax holiday is available to certain designated enterprises that undertake activities consisting of the manufacture of goods for exports only under the Export Processing Zones, and a 25% tax rate for a further 10 years. In addition, there is a 10-year withholding tax holiday on dividends and other remittances to non-resident parties (except for EPZ commercial licence enterprises) and 100% investment deduction on new investment in EPZ buildings and machinery

Data source: National Treasury (2018)

promote technological transfer, research and development, and establishment of industrial zones and parks together with requisite incentive mechanisms. Industrial parks are expected to support technological change, technology sharing, and uptake of innovations. This can be achieved through technological transfer and increasing the stock of modern technology by encouraging investments by technology frontier companies across all sectors.

Under the institutional framework, direct regulatory, supervisory and developmental roles for innovations and technology are spread across various institutions in Kenya. These include the Kenya Bureau of Standards (KEBS), Kenya Industrial Property Institute (KIPI), Kenya National Innovations Agency (KNIA), National Commission for Science, Technology and Innovation (NACOSTI) and National Research Fund (NRF). There are also sector-specific institutions mandated to promote innovations and research especially through skills development and research.

Though the core mandates of these institutions are distinct from one another, their operational functions manifest in overlaps, and therefore duplication and wastage of resources, which calls for more integrated approach to building synergy and policy coherence. The coordination framework among institutions and respective stakeholders is weak, and this hinders the spirit of integrated planning, resource pooling, information sharing and value addition in the value chain of innovations and technology.

The Kenya Bureau of Standards (KEBS) was established in 1974 under the Standards Act of the Laws of Kenya to promote standardization in industry and commerce, and to provide infrastructure for quality testing and assurance, and support productivity of manufacturing and service delivery. KEBS also seeks to strengthen the sustainability of production systems. The Kenya Industrial Property Institute (KIPI) was established under the Industrial Property Act 2001 to administer industrial property rights, provide technological information, and to provide training on industrial property and promote inventiveness and innovativeness in Kenya. The Kenya National Innovations Agency (KNIA) was also established under the Science, Technology and Innovations Act 2013 (Revised 2014) to promote scaling up and commercialization of innovations and oversee an incentive mechanism for innovations. The National Commission for Science, Technology and Innovation (NACOSTI) was established to regulate research and assure quality in the science, technology and innovation sector, and to ensure coordination and cooperation among various agencies and institutions in the science, technology and innovation (ST&I) sector. The National Research Fund (NRF) was also established under the Science, Technology and Innovations Act 2013 to facilitate research for the advancement of ST&I.

The public sector has continued to enhance uptake of modern technology in the country through various initiatives, programmes and projects implemented by the government. For instance, acquisition of modern health equipment, construction of the Standard Gauge Railway (SGR), migration to digital platform and instalment of wind power generation capacity are some projects the government has promoted. This necessitates additional consumption of either domestically manufactured products or imported products, in addition to what the private sector and citizens consume. Therefore, both the national and county governments play a key role in boosting adoption of various technologies across the sectors through development budgets that support human resource development; upgrading of infrastructure and equipment; research, science and technology activities; and commercialization of innovations to spur social welfare, economic prosperity and competitiveness. This demonstrates that the Government of Kenya is in the forefront in taking up technology to inspire technological

change, through development budget by both national and county governments.

Kenya recognizes the developmental role of educational and research institutions in enhancing technology development, uptake and transfer. In this regard, several institutions have been established across various sectors (Table 10.2) to spearhead research, technology, innovation and capacity development. These are expected to be centres of excellence in encouraging creative thinking and innovative solutions to sector challenges. However, the productivity of these institutions is sub-optimal due to weak domestic and international collaboration networks. Moreover, there is need for better planning and financing, and strong integrated data and information framework on innovations and technologies.

Research is critical in development of the stock of innovations for any country. The objective of the Vision 2030 is geared towards commercialization of innovations and inventions from research and development, attraction of strategic investors in strategic sectors such as in iron and steel industries, agro-processing, machine tools and machinery, motor vehicle assembly, and manufacture of spare parts. Innovation hubs are meant to feed the stock of technology with new ways of doing things. They are largely used for incubation. Technology centres are significant in industrial parks since they are strategic sources of required and appropriate technology for replication, scaling and commercialization. Technology centres are areas for demonstration of technology.

Table 10.2: Government institutions as centres for research, technology and innovation (apart from universities)

Host sector	Research Institution
Health	Kenya Medical Research Institute (KEMRI)
	East Africa Health Research Commission
Agriculture	Kenya Agriculture and Livestock Research Organization (KALRO)
	Kenya Veterinary Vaccine Production Centre
	Kenya Marine and Fisheries Research Institute
Industrialization	Kenya Industrial Research and Development Institute (KIRDI)
	Kenya Industrial Estate (KIE)
Education	Kenya National Innovation Agency (KNIA)
	National Research Fund (NRF)
	Kenya Institute for Curriculum Development (KICD)
Construction	Kenya Buildings Research Centre (KBRC)
Transport	Kenya Institute of Highways and Building Technology (KIHBT)
ICT	None
Water	Regional Centre on Groundwater Resources Education, Training and Research
Energy	Institute of Energy Studies and Research (IESR)
Security	National Crime Research Centre (NCRC)

Policy and Planning	Kenya Institute for Public Policy Research and Analysis (KIPPRA) Kenya National Bureau of Statistics (KNBS)
Labour	National Productivity and Competitiveness Centre
Tourism	Tourism Research Institute
Environment	Kenya Forestry Research Institute Directorate of Survey and Remote Sensing Kenya Meteorological Department

Source of Data: Government of Kenya (2018b), Executive Order No.1

Universities are expected to play a principal role in knowledge creation and research for enhanced development in technology and innovation, but the country is yet to exploit the full potential of the universities. Some of the missing links are the weak domestic and international collaboration networks for universities and their industry linkages both locally and internationally; limited incentive framework for creative thinking and innovative solutions; unconducive working and business environment for faculty; and inadequacy in planning, budgeting and financing. The other strategic challenge that universities face in research is lack of specialization, which tends to scatter resources and makes impactful research unrealizable. The early intention to establish public universities with focus in specific areas of specialization where they have comparative advantage has been overshadowed by universities venturing into what is perceived as commercial or marketable courses for sustainability. This has derailed and slowed down universities earmarked for science and technology from impactful training, research and innovation. For instance, Table 10.3 shows the areas where various universities were expected to have comparative advantage especially in

Table 10.3: Public universities as centres of research, technology and innovations

Some areas of special focus or comparative advantage	Universities
Medicine, Engineering Agriculture	University of Nairobi
Agriculture and Technology	Jomo Kenyatta University for Agriculture and Technology, Egerton University
Technology	Technical University of Kenya, Technical University of Mombasa, Murang'a University of Technology, Dedan Kimathi University of Technology
Science and Technology	Masinde Muliro University for Science and Technology, Jaramogi Oginga Odinga University of Science and Technology, Meru University of Science and Technology
Communication	Multi-Media University

Some areas of special focus or comparative advantage	Universities
General (Not Classified)	Kenyatta, Maseno University, Moi, Eldoret, Karatina, Taita Taveta, Kirinyaga, Pwani, Laikipia, Garissa, Machakos, Kisii, Rongo, Embu, Chuka, Cooperative, South East Kenya universities, University of Kabianga, Maasai Mara University, University of Kibabii, Kaimosi Friends University College, Alupe University College, Gatundu University College, Bomet University College, Tom Mboya University College, Koitalel Arap Samoei University College

Source of Data: Government of Kenya (2018)

science, innovation and technology. There is a skewed match between programmes and enrolment in science, technology, engineering and mathematics (STEM) in both public and private universities in Kenya. In 2015, the universities had proportionately more programmes in STEM than proportionate share in enrolment (Table 10.4). Most students were registered in business and administration, education arts and humanities and arts, while science, technology and innovation courses accounted for low enrolments of less than 30 per cent. Further mathematics, life science and physical sciences only had less than 10 per cent of enrolment. In terms of faculty, most faculty members were concentrated in business and administration, health and welfare, humanities and arts, and education (arts). High student-staff ratio was recorded in education science. The country needs to invest more in science, technology, engineering and mathematics to promote innovation and technology.

Table 10.4: Proportion of programmes, enrolment and staffing per cluster in chartered universities in Kenya

	Frequency (No.)				Cumulative Frequency (%)		
	Programmes	Enrolment	Staff	Student-staff ratio	Programmes	Enrolment	Staff
Mathematics and Statistics	140	14,834	515	29	4	3	3
Life Science and Physical Science	365	34,569	1,515	23	15	9	13
Computing	163	22,650	893	25	20	13	18
Engineering	145	21,872	762	29	24	17	23
Manufacturing	11	2,293	50	46	24	18	23
Architecture	26	5,057	231	22	25	19	25
Veterinary	32	1,148	202	6	26	19	26
Education (Science)	56	30,432	152	200	28	25	27

	Frequency (No.)				Cumulative Frequency (%)		
	Programmes	Enrolment	Staff	Student-staff ratio	Programmes	Enrolment	Staff
Agriculture, Forestry and Fisheries	363	26,916	903	30	38	30	33
Business and Administration	385	120,223	3,082	39	49	52	52
Education (Arts)	287	79,368	1,465	54	58	67	61
Environment	134	9,843	512	19	62	68	64
Health and Welfare	304	30,578	1,753	17	71	74	75
Humanities and Arts	475	46,139	1,635	28	85	83	85
Journalism and Information	85	14,623	360	41	87	85	88
Law	13	7,161	376	19	88	87	90
Security and Conflict resolution	50	5,890	128	46	89	88	91
Services	71	9,341	196	48	91	89	92
Social and Behavioural Science	177	38,373	1,002	38	96	97	98
Teacher Training	94	6,945	127	55	99	98	99
Other	32	11,494	142	81	100	100	100
Total	**3,408**	**539,749**	**16,001**	**34**			

Source of Data: Commission for University Education (2015)

In addition, public training institutions have been established by government across sectors with a purpose of focusing on technology and training (Table 10.5). These are expected to enhance the skills set the country needs to enhance innovations, technology uptake, service delivery and global competitiveness. There are also institutions by the private sector which give a range of trainings across the sectors. A central repository could be established to document the various skills being developed by these institutions to facilitate job-skill matching by potential employers and encourage online networking for placement and absorption and monitoring of skills set being developed over time.

The latest game changer in the advancement of innovations and technology in the country are innovation and incubation centres or hubs. Incubation hubs have been established in various universities across the country, including University of Nairobi (C4D Lab, Huawei Authorised Network Academy), Kenyatta University (Chandaria Business Innovation and Incubation Centre, and Science and Industrial Park), Jomo Kenyatta University for Agriculture and Technology (Nairobi Industrial and Technological Park), Maseno University (Maseno University Science, Technology and Innovation Park), Egerton University (Centre of Excellence in Livestock Innovation and Business, and Centre for Research on New and Renewable Energies) and

Table 10.5: Public training institutions by sector (apart from universities)

Sector	Training Institution
Health	Kenya Medical Training College
Agriculture	Kenya School of Agriculture
Industrialization	Kenya Industrial Training Institute
	Kenya Institute for Business Training
	Industrial, Commercial and Development Corporation (ICDC)
	Kenya Industrial Estate (KIE)
	Kenya Leather Development Council
Education	Kenya Education Management Institute
	Kenya Institute for Special Education
	Institute for Capacity Development for Teachers in Africa
	Centre for Mathematics, Science and Technology in Africa
Construction (Building)	None
Transport	Kenya Institute for Highways and Building Technology (KIHBT)
	Kenya Railway Training Institute
	Kenya Institute of Technology
	Bandari College
ICT	Kenya Institute of Mass Communication
Water	Kenya Water Institute
Energy	None
Security	National Defence College
	Kenya Police Training College
Public Policy and Legal Affairs	Kenya Institute for Public Policy Research and Analysis Kenya Law Reform Commission Kenya School of Law
Foreign Affairs	Kenya Foreign Service Institute
Sports	Kenya Academy of Sports
Labour	None
Tourism	Kenya Utalii College
Environment	Kenya Meteorological Training College
Public Service	Kenya School of Government
Human Resource	Institute for Human Resource Development

Note: The table excludes universities

Moi University (African Centres of Excellence). Other incubation and innovation centres include Strathmore University (iBiz Africa Lab), Catholic University (IBM Africa Lab), Mount Kenya University (Research Enterprise Development Centre), Kenya College of Accountancy University (Centre for Entrepreneurship), and Africa Nazarene University (Innovation Centre). The growth and development of innovation and incubation hubs needs to be encouraged through development of an enabling regulatory framework since, besides offering solutions in various sectors, they also create employment especially among the youth. However, several innovations developed at university level are lying idle due to weak market orientation in their plans and support framework to promote uptake, scaling up and commercialization.

Although the country has established research and education institutions to take lead in research and development, a few challenges have emerged over time. For instance, there are limited linkages between universities and research institutions. The market orientation of the research is also limited, especially where its focus does not respond to market needs. Other challenges that derail universities from exploiting their mandate and full potential in research and innovations are summarized in Box 1.

10.3 Status of Technologies and Innovations

10.3.1 Competitiveness in innovations

Kenya ranks 37 out of 137 countries, and second in Africa after South Africa in global competitiveness (2018) under the category of innovation and sophistication factors. However, the country has consistently performed poorly on patenting, under the innovation index. The

Box 10.1: Challenges facing university research in Kenya

- Low levels of funding by the universities and government
- Lack of research infrastructure - laboratories and equipment
- Lack of qualified human resources
- Universities spreading too thin; lack of geographical and thematic focus
- Rapidly expanding privately-sponsored teaching programmes that are pulling academic staff away from research into teaching only
- Poor university-industry linkages, hence undermining the relevance of teaching programmes, and low levels of university research funding by industry
- Poor implementation of policies on intellectual property rights, research ethics, plagiarism and open access to information
- Poor alignment of university research to national development goals and aspirations
- Poor management, supervision, monitoring and evaluation of university research programmes
- Low impact of university research and its utilization at the national level

Source: Commission for University Education (2019)

Table 10.6: Competitiveness of Kenya in innovation, 2014-2018

Indicator (Index)	2014		2015		2016		2017		2018	
	Score	Rank n=148	Score	Rank n=144	Score	Rank n=140	Score	Rank n=138	Score	Rank N=137
Overall index	3.85	96	3.9	90	3.85	99	3.9	96	3.98	91
Innovation index	3.6	46	3.7	38	3.65	41	3.8	36	3.85	37
Capacity for innovation	4.1	34	4.5	33	4.3	42	4.6	36	4.7	38
Quality of scientific research institutions	4.0	51	4.2	42	4.2	44	4.2	49	4.3	45
Company spending on R&D	3.8	28	3.8	28	3.8	33	4.1	31	3.9	35
University-industry collaboration in R&D	4.3	38	4.2	37	4.2	37	4.5	26	4.3	32
Government procurement of advanced technology products	3.4	79	3.7	49	3.8	37	4.0	19	4.0	21
Availability of scientists and engineers	4.3	57	4.4	44	4.2	55	4.4	40	4.5	41
PCT patent applications	0.1	96	0.2	95	0.2	90	0.2	93	0.2	90

Source of Data: World Economic Forum (Various), Global Competitiveness Reports

innovation indicator is a composite index of seven components: Capacity for innovation, Quality of scientific research institutions, Company spending on R&D, University-industry collaboration in R&D, Government procurement of advanced technology products, Availability of scientists and engineers, and Patent Cooperation Treaty - PCT patent applications (Table 10.6).

Kenya has maintained its pace setting and leadership in innovation in Africa, ranking second after South Africa (Table. 10.7). South Africa has maintained position 1 in Africa over the years. In East Africa, Rwanda and Uganda rank second and third, respectively, after Kenya. This shows that Kenya has potential that it can leverage on to remain competitive in the region.

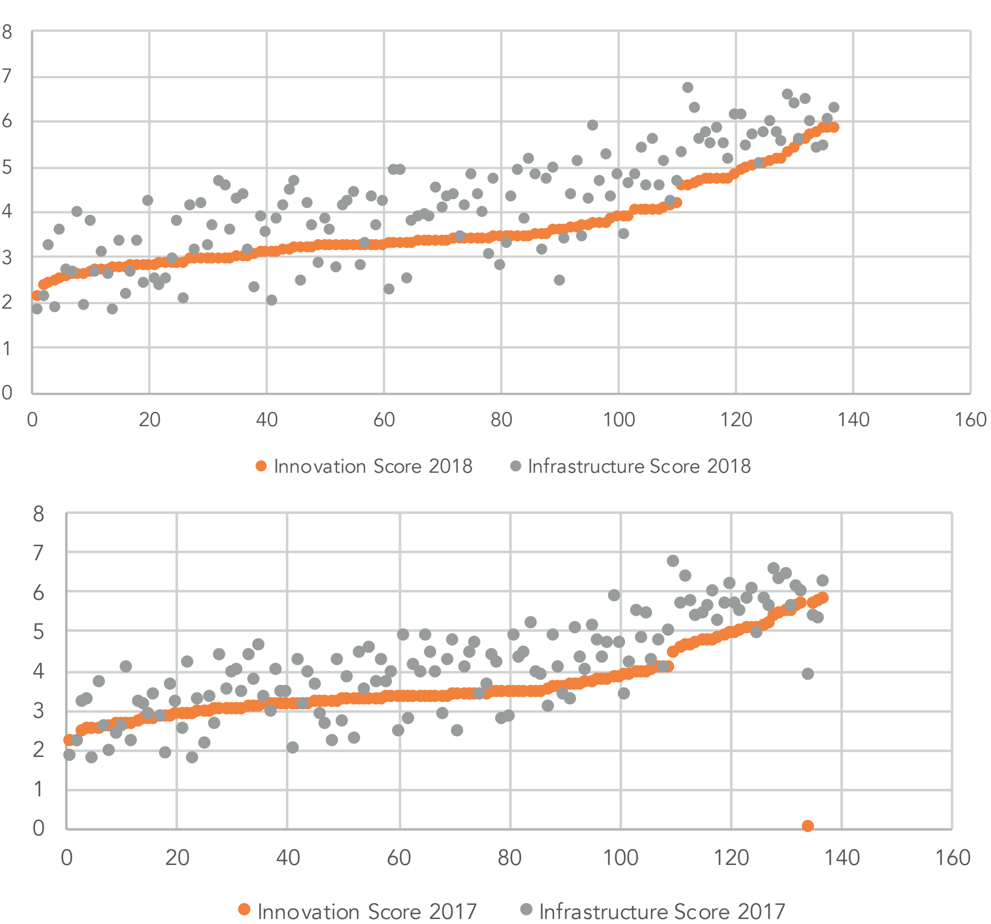
Kenya can enhance its competitiveness in innovation by investing in appropriate and quality infrastructure. Continuous improvement on quality of infrastructure is key in ensuring efficiency of operation and maintenance in industries. It can also enhance its competitiveness through promotion of protectionism in domestic manufactures and exports. There is a high positive correlation between infrastructure index and innovation index (Figure 10.1). For instance, innovations and technology require sufficient and affordable energy supply, ICT connectivity and transport services. This drives the cost of operations and maintenance low, thus improving the country's competitiveness. For example, power outages expose industry players to expensive alternatives such as the use of diesel-powered generators to run activities. The country's milestones in ICT infrastructure have improved Kenya's competitiveness in innovation and technology and, with improved transport services, the country can take on more investments for innovations and technology

Table 10.7: Benchmarking Kenya's competitiveness in innovation, 2012-2018

	2012	2013	2014	2015	2016	2017	2018
South Africa	41	42	39	43	38	35	36
Kenya	52	50	46	38	41	36	37
Rwanda	56	51	52	53	46	47	44
Senegal	53	62	72	57	47	50	51
Ethiopia	111	114	121	109	81	57	86
Côte d'Ivoire	120	115	101	69	53	61	-
Zambia	64	61	60	54	52	66	92
Mauritius	89	98	81	76	78	67	63
Ghana	98	95	64	63	65	69	57
Namibia	92	101	94	91	74	74	78
Uganda	90	82	92	96	85	77	74
Tanzania	73	75	89	98	105	88	82
Burundi	138	140	142	133	133	131	122

Source of Data: World Economic Forum (Various), Global Competitiveness Reports

Figure 10.1: Correlation between innovation and infrastructure



uptake. Kenya's appetite to develop world class infrastructure and adopt high impact technological solutions is growing fast across all sectors of the economy. For instance, in infrastructure, the creation of the Standard Gauge Railway; the establishment of ICT hubs; adoption of ICT in service delivery, billing, communication and management; and adoption of faster road tarmacking technology are a clear demonstration of the country's ambitions to scale up adoption of modern technology.

10.3.2 Patenting of innovations

Innovations and inventions can be traced through level of patenting, though not all innovations and inventions are registered especially in Kenya. According to the World Intellectual Property Organization (WIPO), a patent is "an exclusive right granted for an invention, which is a product or a process that provides, in general, a new way of doing something, or offers a new technical solution to a problem." A patent is one of the various forms of protection of intellectual property rights including trademarks, copyrights and industrial designs.

The number of Kenyans applying for patents globally has been on the rise, with registered number of applications increasing from about 50 in 2007 to over 200 in 2017 (Figure 10.2). Further, the rate of granted patents has remained relatively low, being less than 20 per cent for applications by Kenyans and less than 30 per cent for applications posted in Kenya, on average over the period 2007-2017. The applications for patenting in Kenya were largely in pharmaceuticals, chemistry, furniture, computer technology and civil engineering (Figure 10.3).

The patents by Kenyans are more than patents registered in Kenya, which implies that some inventions and innovations by Kenyans are registered outside Kenya and benefiting other countries more than Kenya. Most of the granted patents for Kenyans abroad are in the United States. This may be due to brain drain, or a poor investment climate for technology. It could also be due to better incentive mechanisms in other countries. This can also be associated with lack

Box 10.2: Kenyan context in understanding of innovation

Invention is a solution to a specific problem in the field of technology. It is a new and useful art, process, machine, manufacture or composition of matter which is not obvious, or any new and useful improvement thereof which is not obvious, capable of being used or applied in trade or industry and includes an alleged invention. Patents offer inventors monopolies on their creations for specific periods, and thus provide incentives for research and development. Without the possibility of patent protection, many people might not take the risks or invest the time and money involved in devising and perfecting new products. They are also a means of technological exchange. Each patent document describes a new aspect of a technology in clear and specific terms and is available for anyone to read. Patents are made public specifically to promote the sharing of knowledge. As such, they are vital resources for entrepreneurs, researchers, inventors, academics and others who need to keep up with developments in their fields.

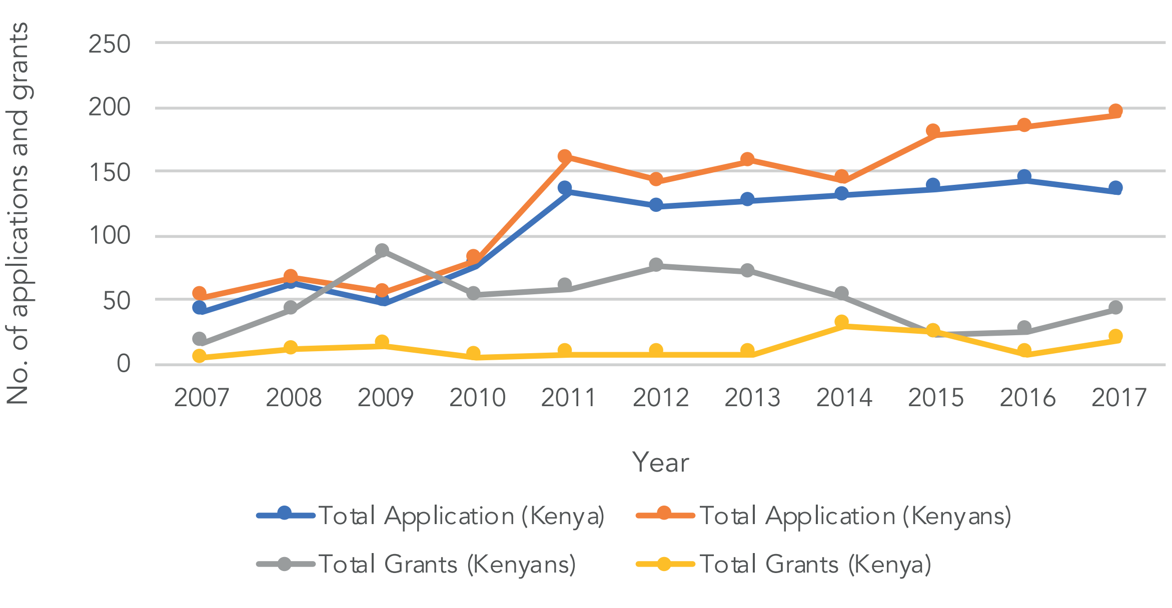
Kenya Industrial Property Institute

of initiative by innovators in Kenya to protect their intellectual property, or due to insufficient knowledge and awareness on the significance of protecting innovations. The linkage between innovators and the industry is weak, translating to relatively low impact of innovations to business compared to Kenya's potential. With universities setting up incubation hubs together with private sector and government institutions to create the required linkage, there is hope that this will promote uptake and scalability of innovations.

At continental level, Kenya ranks 10th in Africa on number of applications made for patenting over the period 2007-2016. The leading countries from Africa in patenting innovations are South Africa, Cameroon, Morocco, Sudan, Tunisia, Senegal, and Ivory Coast (Figure 10.4). South Africa and Egypt are way ahead of Kenya due to their industrialization strategies that include low cost of investment and protectionism tendencies. For instance, importation of second-hand vehicles into South Africa is restricted, and the importer must apply for a permit to import. This is to protect the local motor vehicle manufacturing industry. Permits are only issued under specifically defined circumstances. South Africa has competitive advantage in patenting over Kenya in all technical areas of application. For instance, the number of granted patents to South Africa registered with WIPO under civil engineering over the period 1980-2018 were over 7,000 while Kenya registered only 12. Kenya's largest number of granted patents over the period 1980-2016 were under pharmaceuticals and handling, which recorded 29 and 16 patents, respectively, far much lower than South Africa's 700 and 3,393, respectively. In a nutshell, Kenya has a lot to learn in all spheres of technology from South Africa as an aspirator country in terms of innovation and patenting.

Micro, small and medium enterprises engage in product innovation at different levels across sectors, with small enterprises demonstrating higher ability to engage in product innovation than micro and medium enterprises (Table 10.8). On the food security agenda, at least 14 per cent of the small enterprises in agriculture have product innovation, and 22 per cent of the

Figure 10.2: Patenting by Kenyans and by Kenya, 2007-2017



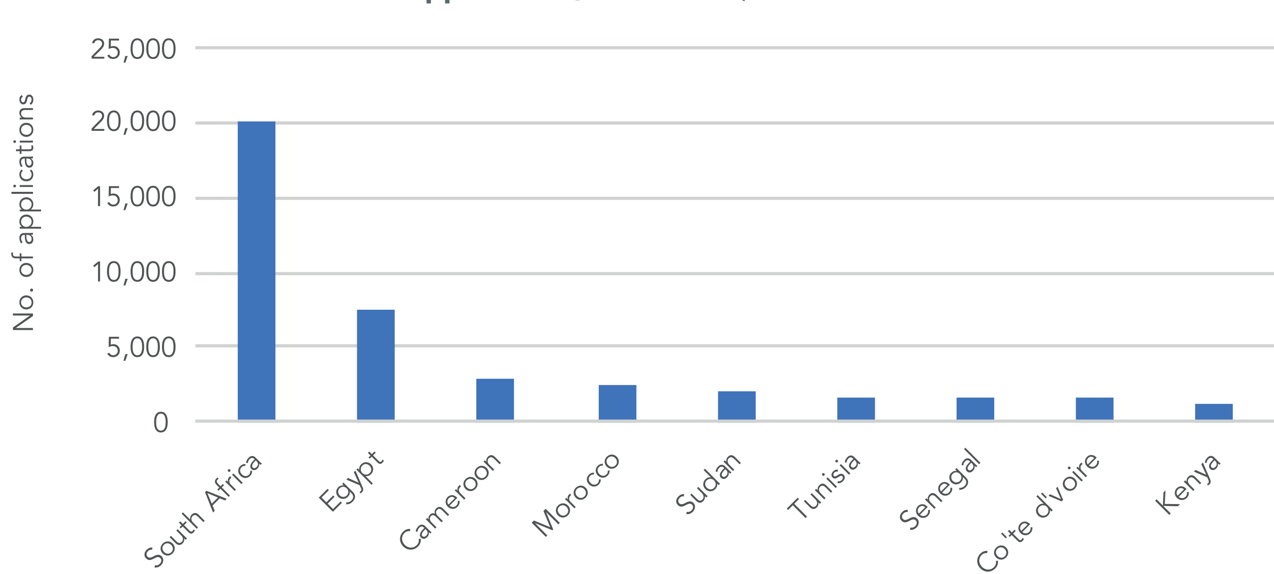
Source of Data: WIPO (2018)

Figure 10.3: Total applications by Kenyans, 2007-2016

Source of Data: WIPO (2018)

enterprises in accommodation and food services. Among the small enterprises in manufacturing, 31.6 per cent had product innovation. At least 20.6 per cent and 35.9 per cent of the enterprises in construction and real estate have product demonstration, respectively. A high sector proportion of enterprises with product innovation is reported in the health sector where over 42.5 per cent of the enterprises registered such innovation. This shows that the country has underlying potential among the MSMEs to leverage on innovation in realization of the "Big Four" agenda.

Figure 10.4: Continental comparison on Kenya's competitiveness in patenting (total applications, 2007-2016)



Source of Data: WIPO (2018)

Table 10.8: Product innovation by micro, small and medium enterprises

Agenda	Sector	Proportion of enterprises with product innovations		
		Micro	Small	Medium
Food Security	Agriculture, forestry and fishing	0.5	14	-
	Accommodation and food service activities	9.5	22.8	13
Manufacturing	Manufacturing	8.5	31.6	23.5
Affordable Housing	Construction	7	20.6	22.6
	Real estate activities	6.6	35.9	-
Universal Health Coverage	Human health and social work activities	19.8	42.5	74.7
Enabling Environment	Wholesale and retail trade	8.9	17.4	22.4
	Financial and insurance activities	6.5	44.4	41.1
	Education	15.5	11.8	48.7
	Transportation and Storage	12.8	11.4	1.4
	Information and Communication	20.7	33.3	-

Source of Data: Kenya National Bureau of Statistics (2016c)

10.3.3 Adoption of modern technology by sectors

The health, education and agriculture sectors have demonstrated concerted efforts in scaling up machinery, equipment and uptake of technology and innovations. In the health sector, the country has acquired modern medical equipment, which are distributed across the country. In education, the laptop programme is being scaled up, with digital content already put in place and plans to enhance coverage across all primary schools.

In agriculture, the country's initiatives in capacity building for farmers, and incentives and advocacy for modern technology in farming has led to improvement in adoption especially by large scale farmers, which include more mechanization, use of ICT in farm operations and management, not forgetting creation of market linkages. The use of innovation and technology in agriculture enhances crop and breed variety, and varieties resistant to climate-related risks.

In housing, regional centres for affordable housing technologies have been established, which are geared towards creation of awareness and capacity building on appropriate technology that can deliver decent and affordable housing for all. For instance, the National Housing Corporation (NHC) initiated the Expanded Polystyrene (EPS) technology in construction, a technology which is expected to reduce construction periods and direct and indirect building costs. NHC commissioned a factory in 2013 at Mlolongo area of Machakos County to produce building materials using the EPS technology. NHC seeks to establish EPS technology centres across the country.

In the business and financial sectors, the use of ICT for business operations, online transactions and payments is gaining momentum. The use of mobile telephony services in business transaction has reduced the cost of doing business. These phenomenal developments are motivated by a strong regulatory regime, high level business integrity and customer confidence in the systems.

In communication, the country successfully migrated from analog to digital in broadcasting and has reached 3G and 4G in mobile telephony and internet, and rolled out fibre optical cable for faster and efficient internet. All county headquarters have been connected with fibre optic cable.

In the energy sector, the country has installed wind power plant and laid 428km transmission line from Turkana (Loiyangalani) to Narok (Suswa). This is expected to boost electricity generation and contribute towards cheap and reliable electricity in the country, and boost business and manufacturing by reducing the cost of energy and enhance quality of power by ensuring reliability.

Acquisition of machinery and equipment

Kenya has made progress in mobilizing machinery and equipment for production. While acquisition of new machinery and equipment contributes to capital formation, depreciation reduces the stock value of the existing machinery and equipment and therefore points to the need for appropriate maintenance. Machines and equipment require effective maintenance and repair to reduce the rate of depreciation and guarantee longer service-life. Planners need to properly factor in the budget the requirement to maintain the machinery and equipment to avoid the burden of disposal of assets before their full productivity is exploited. The country will need a register of all public assets and a thorough inspection and audit of their status and maintenance plan. In addition, the country can invest in the manufacturing of spare parts to substitute the importation of spare parts. This will serve as a preparatory stage for manufacture of complete machinery and equipment. Production of parts of any machine or equipment is a critical stage in the value chain of manufacturing. This will lay a foundation for specialization in manufacturing.

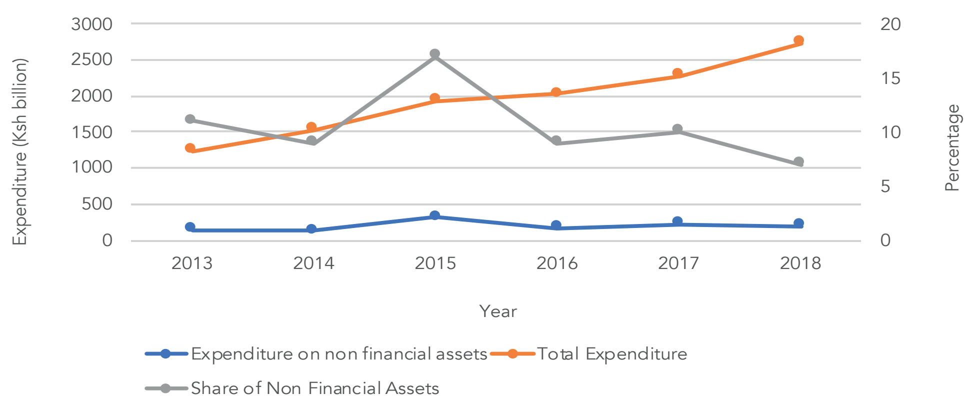
Acquisition of equipment and machinery through purchase

The country's strategy to encourage purchase of machinery and equipment through government expenditure framework will continue as one of the sources of demand in the market, especially if this is intended to support local industry. Also, importation of critical machinery and equipment linked with technological and skills transfer should be encouraged. However, measures against imports that compete with local industry are required to protect the industry. Whereas it is arguable that protectionism may make local industry less productive and innovative, it is also true that a country cannot sustain industrial growth when local manufacturers are exposed to competition from international players enjoying economies of scale. Protection also entails job protection and is a pathway to sustainable development of a country.

The national government uses less than 12 per cent of its expenditure to acquire non-financial assets, which include machinery and equipment (Figure 10.5). Whereas total expenditure has been rising over time, the amount of money committed to acquisition of non-financial assets is relatively low and constant. County governments are allocating more to non-financial assets, which amounts to over 30 per cent of the total expenditure (Figure 10.6).

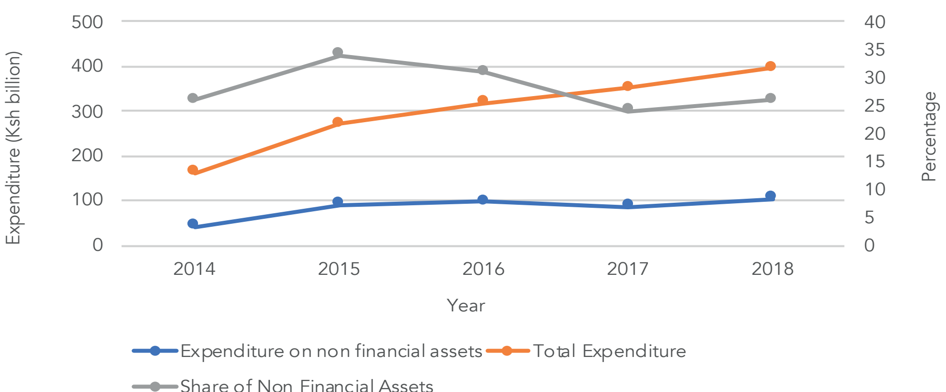
At national government level, plant, machinery, equipment and transport equipment is allocated less than 20 per cent of the non-financial assets' expenditure (Figure 10.7). Most of the allocation is on construction, works and buildings, which

Figure 10.5: Comparison of expenditure on non-financial assets and total expenditure – national government, 2013-2018



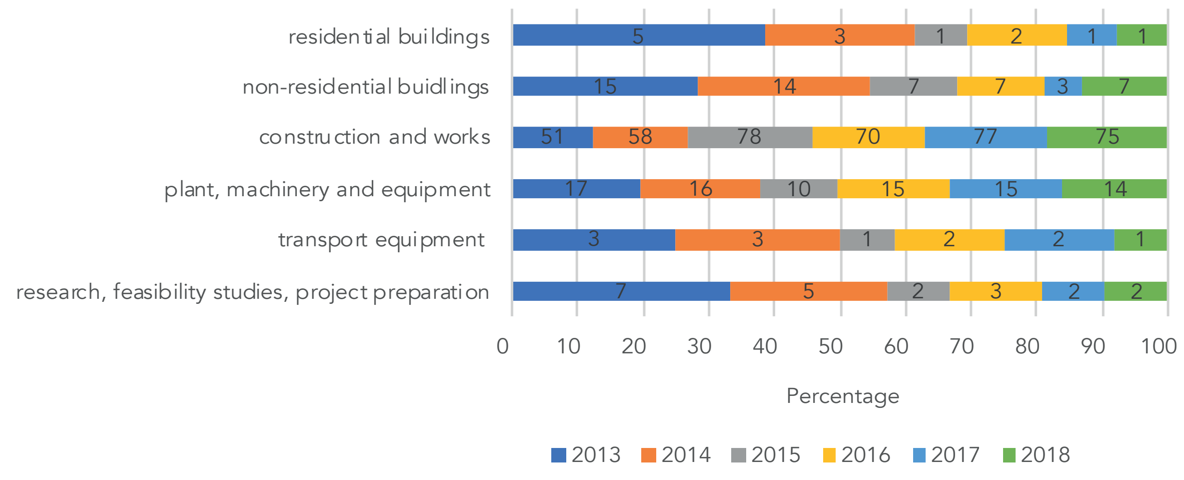
Source of Data: Kenya National Bureau of Statistics (2018), Statistical Abstract

Figure 10.6: Comparison of expenditure on non-financial assets and total expenditure – county governments, 2014-2018



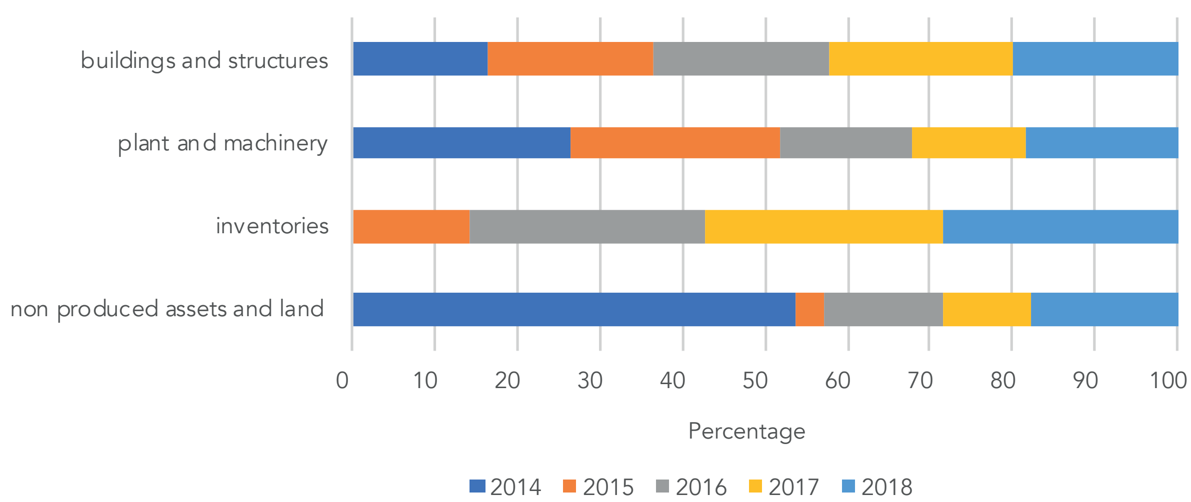
Source of Data: Kenya National Bureau of Statistics (2018), Statistical Abstract

Figure 10.7: Classification of non-financial assets by national government (%), 2013-2018



Source of Data: Kenya National Bureau of Statistics (2018), Statistical Abstract

Figure 10.8: Classification of non-financial assets by county governments (%), 2014-2018



Source of Data: Kenya National Bureau of Statistics (2018), Statistical Abstract

rose from 51 per cent to over 75 per cent of the total non-financial assets' expenditure over the period 2013-2018. For the county governments, most of the allocation in non-financial assets is committed in construction and building, whose share rose from 63 per cent to a high of 83 over the period 2013-2018, while allocation for plant and machinery declined from 23 per cent to a low of 12 per cent of the non-financial assets expenditure over the same period (Figure 10.8).

Acquisition of equipment and machinery through manufacturing

Most manufactured goods in Kenya are consumer goods, with very limited manufacture of machinery and equipment. This limits the country's potential to tap the gains from investments in heavy technology, which have high returns and increase the country's capital stock. Nevertheless, Kenya has made efforts to attract investments in manufacturing of machinery and equipment, and heavy technology. Some of the heavy technology manufacturing includes vehicle assembling, steel production, and production of electrical equipment. Previously, Kenya made attempts to manufacture vehicles locally, but the manufacturing of the Nyayo vehicle was not scaled up once the vehicle was launched.

Manufacture of machinery and equipment is largely on light manufacturing, which lacks the technological complexity the economy requires to increase its competitiveness. Investment in heavy manufacturing has potential for mass production using high mechanization, production of heavy machinery and equipment, and overall cost reduction by exploiting the economies of scale. However, this requires huge capital investments, thus the need for the policy environment to continue responding to the needs of investors to attract more investment and sustain the existing stock of investment. It also requires improvement in infrastructure services, including energy, transport and ICT as the demand patterns change.

Transport equipment, and repair and installation of machinery and equipment have the highest value addition (variance between value of output and value of inputs expressed as percentage of input to intermediate consumption in the manufacturing sector), amounting to above 200 per cent and 100 per cent, respectively (Table 10.9).

Table 10.9: Level of value addition in manufacturing of machinery and equipment in Kenya (%), 2013-2017

	2013	2014	2015	2016	2017
Basic metals	41	41	43	39	29
Fabricated metal products except machinery and equipment	41	41	43	39	29
Electrical equipment	11	4	0.32	8	4
Machinery and equipment	11	4	0.31	8	4
Transport equipment	221	213	263	256	205
Furniture	84	82	81	100	125
Other manufacturing	68	65	67	70	69
Repair and installation of machinery and equipment	172	172	172	172	172
Total	**41**	**42**	**42**	**45**	**42**

Source of Data: Kenya National Bureau of Statistics (2018), Statistical Abstract

The *Jua Kali* sector of micro, small and medium enterprises (MSMEs) has remained largely informal with about 80 per cent of the enterprises unlicensed, but the sector plays a key role in production of lower level technology machinery and equipment, and contributes about 80 per cent of the manufacturing sector.

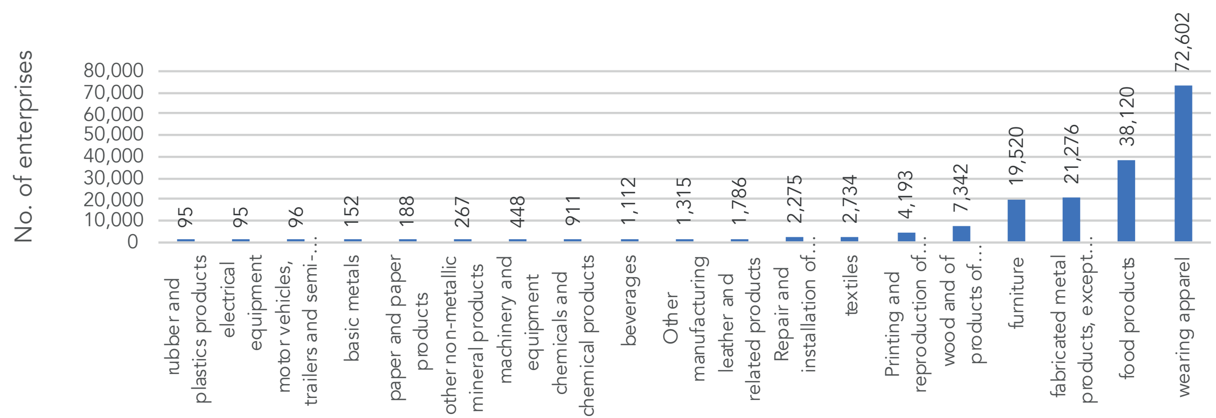
The informalities limit the sector from accessing formal channels of financing and capacity development, which can enhance their contribution to GDP from the current 33.8 per cent of value of national output. The *Jua Kali* MSMEs are largely characterized by low level of application of technology, limited standardization, and low quality of products.

The enactment of the MSEA Act 2012 established the Micro and Small Enterprises Authority (MSEA) to improve coordination of activities of MSMEs, among other things. Kenya has also provided an opportunity for SMEs to obtain capital under the Growth Enterprise Market Segment of the Nairobi Securities Exchange (NSE), with various enterprises already registered, including Home Afrika, Flame Tree and Kurwitu with market capitalization of about Ksh 385 million, Ksh 810 million and Ksh 153 million, respectively, by 2017 (NSE, Investors Handbook 2017-2018).

Manufacturing tops among the sector contributions among the MSMEs, as it contributes about 24.3 per cent of the output by MSMEs, followed by wholesale and retail, transport and storage, and education sectors. Thus, scaling up MSMEs under the *Jua Kali* sector is critical if the country's agenda on industrialization is to be achieved. Among the licensed MSMEs (174,526) as at 2015, most of them deal in wearing apparel (46%), food products (21%), fabricated metal works (12%), furniture (11%) and wood and wood products (Figure 10.8).

One of the challenges facing MSMEs is land availability and security, yet this is critical for establishment of technology and innovation centres, industrial parks and required infrastructure. A number of MSMEs are established on land they do not own especially in urban areas. To assure certainty in land, it would be strategic that land is made available, affordable and secured, and that

Figure 10.8: Manufacturing areas for licensed MSMEs (No. of enterprises)



Source of Data: Kenya National Bureau of Statistics (2016c), MSME Survey 2016

physical planning precedes development to avoid disruption of investments. However, land is emerging as an expensive factor of development especially in urban areas. Further, issues of security of land with respect to multiple ownership and environmental integrity need to be streamlined. Land speculation and exaggeration of compensation have rendered land expensive. Establishment of industrial parks for MSMEs can resolve this uncertainty.

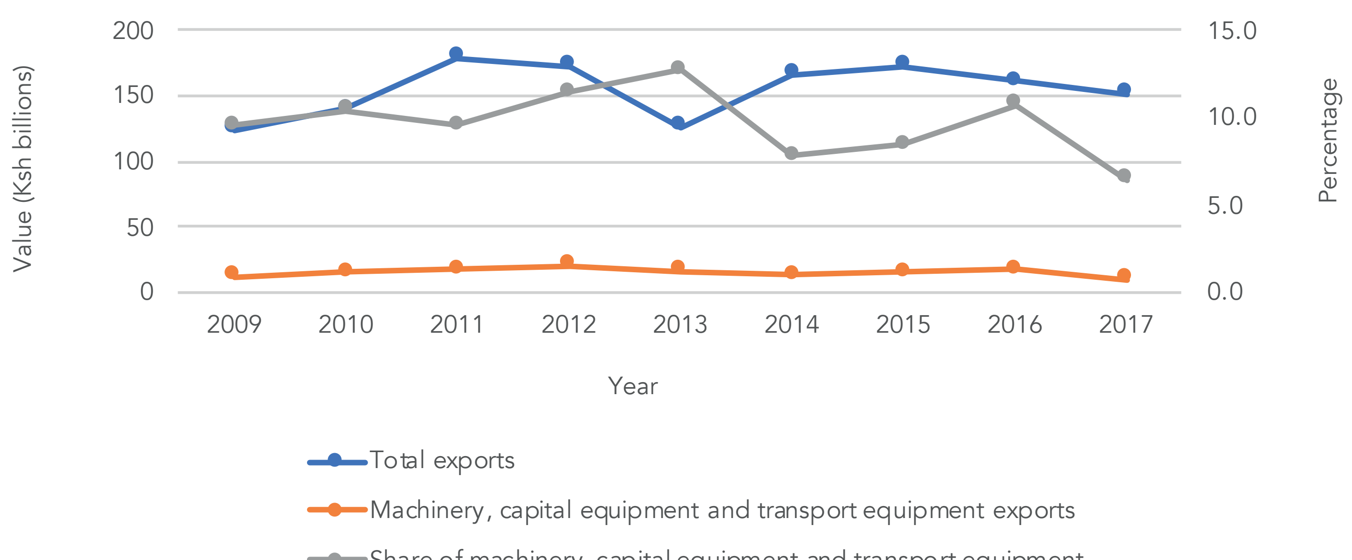
Secondly, it is of significance to address challenges related to financing of machinery, equipment, technology and innovations by manufacturers, especially the MSMEs. Some of these challenges relate to pressure of recurrent expenditure on government revenue, cost of credit, conditions and availability of credit. Some of the machines and equipment manufactured domestically are from the informal sector (*Jua Kali*). The growth and development of the *Jua Kali* sector, which is largely characterized by informalities and small scale enterprises, is hampered by limited financial facilities that are responsive to the preferences and tastes of MSMEs, and high cost of borrowing. As a result, expansion of such enterprises is limited, which affects the industrialization goals of the country. This calls for the financial sector to package financial facilities which accommodate the dynamics of the MSMEs, including flexible repayment plan and affordable interest rate. The government is also planning to roll out a credit guarantee scheme for SMEs as directed by the President in the State of the Nation Speech in April 2019.

Thirdly, manufacturing and maintenance of machinery and equipment, and enhancing innovations and technology stock require adequate and qualified personnel. For instance, audit reports have highlighted incidents in which government entities have undertaken projects to purchase equipment and machinery which have become unutilized or under-utilized due to inadequate skilled personnel trained in their operation, lack of supporting hardware, or lack of key infrastructure to support the installation of the equipment.

Acquisition of equipment and machinery through importation versus country capacity to export

Kenya exports machinery and equipment including iron and steel, office and telecom equipment, electronic data processing and office equipment, telecommunications equipment,

Figure 10.9: Share of manufactured machinery and equipment in manufactured goods domestic exports, 2009-2017



Source of Data: Kenya National Bureau of Statistics (2018), Statistical Abstract

integrated circuits and electronic components, transport equipment and automotive products. The value of exports on manufactured machinery and equipment has remained below 15 per cent of domestic manufactured exports over the period 2009-2017 (Figure 10.9). This shows that the country has potential that needs to be exploited by encouraging manufacturing in machinery and equipment to boost economic transformation.

Kenya also acquires machinery and equipment through importation. About 30 per cent of Kenya's total imports consist of machinery and equipment, and transport equipment (Figure 10.10). One fundamental economic gain that encourages importation is opportunity in technology transfer, which enhances the stock of technology and accelerates development. It is a resource which enables transfer of knowledge, technical skills and know-how from experts to local players. Some of the priority areas for the country on technology transfer include oil and gas, agriculture, mining, construction, health and industry (manufacturing and processing).

Various laws including the Public Procurement and Asset Disposal Act 2015, Public Private Partnerships Act 2013, the Energy Act 2006, the Petroleum (Exploration and Production) Act 2013, the National Construction Authority Act 2011, the Science, Technology and Innovation Act 2013, among others, emphasize the importance of technology and knowledge transfer.

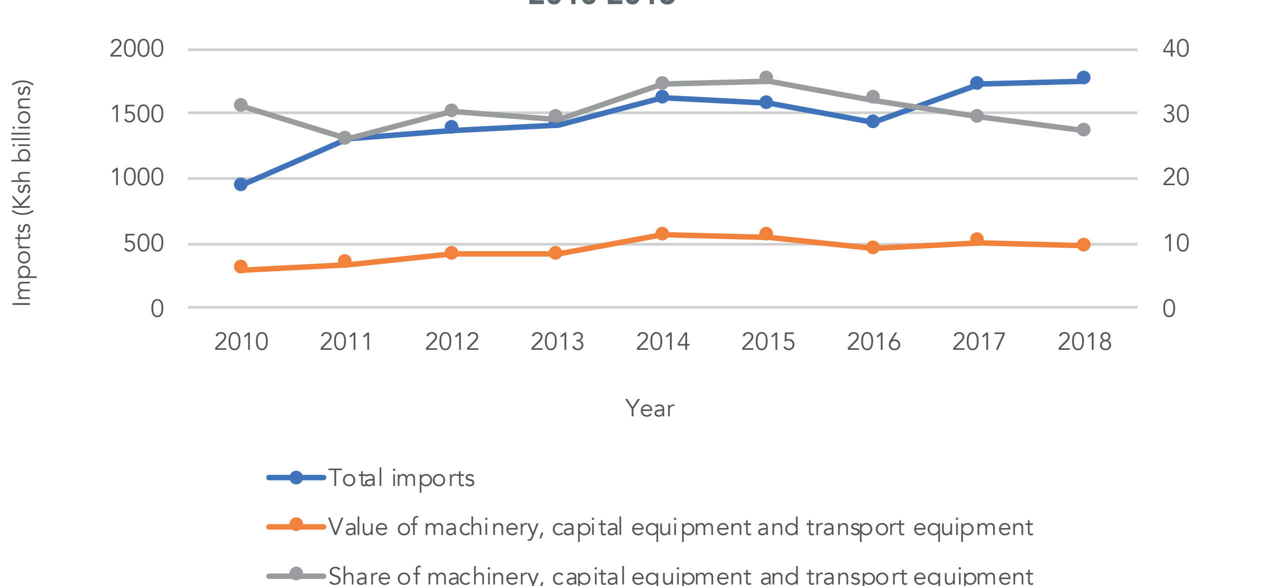
Although various government legislation such as the Public Procurement Act and other sector-specific policies encourage technology transfer, there are challenges in compliance, implementation and monitoring for effective delivery. One of the gaps is lack of clear monitoring and evaluation mechanisms on implementation and the reporting framework. The areas of engagement of locals by foreign contractors needs to be clearly outlined, otherwise the requirement that foreign contractors must share with local contractors at least 40 per cent of the contract value has been abused, with locals being allocated low skill assignments thus limiting skills and

technological transfer. The laws and incentives for sub-contracting seem to have little impact on technology transfer. One of the weak elements in the execution of the laws is lack of a structured monitoring process. The laws provide for the requirement of foreign investors to engage local resources and entities by sub-contracting or co-bidding, but there is no monitoring and evaluation to ensure compliance.

In comparison with exports, the value of imports in equipment and machinery is higher than the value of exports (Figures 10.9 and 10.10), where imports are over 20 times more than exports, on average. This adds to the imbalance in international trade. Furthermore, importation of technologies may expose the country to risk of dumping. Kenya needs to be wary of technologies that are obsolete in other jurisdictions and ban them in the country, otherwise the country will continue lagging because of adopting technologies that are less productive and costly in the long-run. The agencies established for this purpose need capacitation to scale up their initiatives to ensure that the country does not incur high costs of technology obsoleteness. There is also need to improve on research and surveillance on quality standards that are admissible for designs and importation of infrastructure, machinery and equipment.

Over the period 2012-2017, it is estimated that the country imported over 44,000 tractors, 12,000 marine combustion engines, 7.7 million metal working machinery, 7.7 million steam generating boilers, and 4.9 million pumps for liquids. The country also imported about 2,400 aircraft engines. Further, the country imported about 32,000 ships and boats; 384 aircrafts; 860,000 bicycles; 34,000 buses, trucks and lorries; 447,000 passenger motor cars; 3,681 railway rolling stock; and 73 railway locomotives (KNBS, 2017; 2018, Statistical Abstract). The country also acquired about 130,000 tonnes of electrical power machinery and switch gear, over 460 million electrical batteries not for motor vehicle, and almost 13,000 tonnes of

Figure 10.10: Share of machinery, capital equipment and transport equipment in imports, 2010-2018



Source of Data: Kenya National Bureau of Statistics (2019), Economic Survey

electrical batteries and wires for electricity. This demonstrates the demand that manufacturing can tap into if the country's industrialization agenda is fully realized. Imports such as metal works machinery can be manufactured locally by the *jua kali* sector if there is a clear strategy on how this is to be done. The technical challenges which impede competitiveness of products from the *jua kali* sector are standardization, quality, mechanization and capacity for mass production. If these issues are addressed, the sector could significantly contribute to industrialization.

The model of Numeric Machining Complex can be replicated across county economic regions since it has potential of filling capacity challenges in local manufacturing and MSMEs by offering mechanical and engineering services for machinery, equipment, tools, spare parts and metal-based engineering products. In addition, the country could scale up its incentive mechanism for investments, energy production and exploration for minerals, towards industrialization especially in production of machinery and equipment since this requires heavy-technology. It will also need to enhance capacity development among the labour-force to build the stock of know-how.

Kenya also acquires equipment and machinery through donations or leasing. Some technologies can be acquired through financing by development partners and grants for acquisition. Across various sectors, development partners have donated machinery and equipment to support some targeted programmes and projects. However, this is not a sustainable source of machinery and equipment of an economy compared to manufacturing and purchase. To promote small and medium enterprises, leasing of technology from large scale lease companies is critical. Leasing is one of the cheapest ways of obtaining machinery and equipment in the short run, especially in short term programmes and projects. It supports the SMEs in that they can acquire machinery and equipment through hiring to deliver on contracted work. In Kenya, this strategy is used in the construction industry. A leasing policy can be established to encourage this but also to protect both parties from exploitation. The policy could stipulate the threshold period to warrant leasing, otherwise long leases end up being expensive to private sector firms and government institutions.

10.4 Key Messages and Recommendations

10.4.1 Key messages

1. The coordination framework in operational functions of institutions entrusted with direct regulatory, supervisory and developmental roles in innovations and technology is weak, and with overlaps. This exposes the sector to duplications and wastage of resources. It calls for integrated planning, resource pooling, information sharing and review of policies for coherence and harmony.

2. Productivity from universities, technical and vocational education training institutions and research institutions in championing innovation and technology is low. This is due to weak domestic and international collaboration, inadequate planning and financing, and weak integrated data and information framework for innovations and technologies. Further, although Kenya has made strides in registration of programmes in science, technology, engineering and mathematics, enrolment is still low.

3. Although Kenya's global ranking in competitiveness of technology and innovation is favourable, there are weaknesses in patenting, scalability and commercialization of innovations. This potential can be leveraged on to boost technological transformation and open up opportunities in trade and services through exchange of patents.

4. Although micro, small and medium enterprises have potential in product and process innovation, this is curtailed by informalities, limited standardization and quality of products and low capacity for scaling up. This reduces the competitiveness of MSMEs and slows down their contribution to industrialization.

5. Allocations by the national government and county governments to acquire non-financial assets, which include machinery and equipment, are still low, being about 12 per cent and 30 per cent of their expenditure, respectively. The share of plant, machinery, equipment and transport equipment in non-financial assets was about 20 per cent for national government and between 23 per cent and 12 per cent for county governments.

6. Investment in the production of machinery, equipment and other intermediate products by the domestic manufacturing sector is low. This has led to increased importation of equipment and machinery, resulting in the value of imports on machinery and equipment being 20 times more than exports. Over-importation slows down the growth of local manufacturing. Furthermore, this may expose the country to risk of dumping of obsolete technologies. This calls for the need to promote and protect local manufacturing and innovations.

10.4.2 Recommendations

1. Integrated planning and policy coherence: The innovation and technology sector requires an integrated approach to planning, resource pooling, information sharing, monitoring and evaluation framework. The overlapping operational functions can be reduced through a review of respective policies with a view to creating policy coherence and harmony. For instance, instead of all institutions undertaking capacity building and development on innovations and technology, it would be necessary to entrust such a function to one institution. Another institution would host an integrated data and information system, which will encourage teamwork and integrated monitoring of indicators.

2. Promotion of research and clustering of innovations and incubation hubs: Planning and financing of research needs to be improved across all sectors. There is need for continued needs assessment and documentation of technology needs. Some institutions have established innovation hubs with incubation plans for growing and developing infant innovations. These are expected to encourage mentorship and create linkages with investors for scaling up and market penetration. The clustering of innovations and technology will enhance productivity and peer learning, thus there is potential of innovations when many minds share their experiences and skills. Clustering also attracts other investments of allied services, thus expanding the economies. There are clusters that have naturally grown in the urban areas, for example in areas of furniture, metal works, and mechanics.

3. Establishment and promotion of technology centres in industrial parks: The country needs to establish technology centres in industrial parks. This will encourage uptake of local innovations and skills. It will also link research and industry needs and encourage effective assessment of market needs.

4. Promoting training and specialization in science, technology, engineering and mathematics: Kenya stands to gain more if universities charged with mandates on science and technology concentrate their research and training activities in these mandates. This will ensure that resources are mobilized and pooled for such purposes and ensure that innovations are incubated

and scaled up effectively without resource challenges. The country also needs to invest more on science, technology, engineering and mathematics by enhancing training of teachers in science and mathematics at all schooling levels and encouraging more student enrolment in STEM and employing more members of faculty in such disciplines.

5. Boosting local manufacturing and local content: Kenya needs to attract domestic and foreign investment in production of critical machinery and equipment. This may require strengthening of policy and legal framework to attract and retain investment and prevent unethical business practices. The infrastructure sector needs to enhance use of indigenous technologies and innovations; these have proved to be effective and efficient over time. Supporting micro, small and medium enterprises (MSMEs) engaged in manufacturing can be done through purchase or financing of critical equipment and machines for hire/lease at subsidized rates to enhance industrialization, promote standardization and quality of products and increase capacity for mass production. The model of Numeric Machining Complex can be replicated across county economic regions since it has potential of filling capacity challenges in local manufacturing and MSMEs by offering mechanical and engineering services for machinery, equipment, tools, spare parts and metal-based engineering products. The country could also tap into global value chains in manufacturing industrial components such as those for mobile phones, ICT and electronic equipment, vehicles and aircraft parts. In addition, the Buy Kenya Build Kenya (BKBK) initiative has potential to boost MSMEs; what it requires is compliance and monitoring framework. An indicator on level of implementation of the BKBK policy should be included in performance contracts of public entities. Some categories for public procurement should be reserved for MSMEs, for example light manufacturing and furniture and fittings. Further, the campaign for promotion of local content in the production process should be encouraged through various incentives. Some categories of products could be targeted for tax and non-tax incentives when they source all their materials and skills locally.

6. Capacity development in entrepreneurship, commercialization and patenting of innovations: Kenya needs to establish a pool of stakeholders including financiers and marketers/distributors for uptake of innovations and technology, by creating a national innovation and technology network or platform. This will promote networking and encourage innovators to scale up and access markets locally, regionally and internationally. Often, innovators concentrate their attention on the technical areas of ideas but forget to plan for scaling up and market orientation of such innovations.

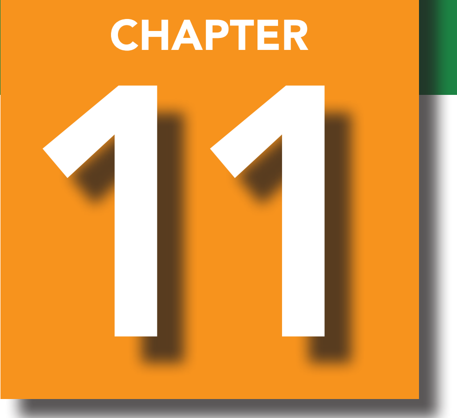
7. Monitoring of technology transfer: A clear monitoring framework should be established on compliance to technology transfer policies, especially those arising from foreign investments, foreign contractors and importation of technology, equipment and machinery. There is need to clearly stipulate the areas of technology transfer to ensure that foreign contractors do not circumvent the laws.

8. Protection of local industry against unfair trade practices: The government needs to scale up its fight against counterfeits (imitations) and contraband (illegal imports) and predatory business tendencies such as undercutting in pricing. Various agencies such as the Competition Authority and Anti-Counterfeits Agency should be capacitated in terms of resources (financial, workforce and technical expertise) and review their plans and policies with a view

to ensuring that the scope of coverage and operations are widened, and punitive measures are put in place to deter such vices.

9. Formulation of an industrial policy on local manufacturing and franchise: There is need to formulate industrial policy incentives that will, among other things, set targets and timelines for foreign-owned industries such as car assembly plants to manufacture a certain percentage of their products locally, including components and spares.

10. Fast-tracking policy development: The various policies proposed in the MTP III were priorities in the sector plan for the period 2013-2022. It is imperative for these policies to be finalized in the first two years of the MTP III for them to create an enabling environment for technology and innovations during the MTP III period. This can be done through taskforces and working groups with the support of KIPPRA and KLRC.



HUMAN RESOURCE MOBILIZATION FOR SUSTAINABLE DEVELOPMENT

A healthy, skilled, efficient, competitive and adaptive human resource is critical for effective implementation of the "Big Four" initiatives and sustainable development. Building a strong human resource base requires investments in health and education to have a healthy and productive population. The main challenges affecting human resources mobilization include low education attainment, and skills gaps. Interventions towards improving human resource development include sustainable investment in health and skills development; capacity development of quality human resources; higher investment in science, technology and technical-oriented subjects; ensuring a strong link between education and the labour market through re-engineering technical and higher education; deepening investments in child and maternal health; and targeting and coordination of social protection programmes.

11.1 Introduction

Human capital includes the people and skills inputs used to achieve national development goals and aspirations. Therefore, in the context of resource mobilization, human capital encompasses human resources and the variety of skills (at all levels that include professionals, technical, semi-skilled and basic skills) acquired. It also entails the capacities and capabilities of all individuals in an economy, their level of skills, education, creativity and innovativeness, health and well-being, capacity for service delivery and empowerment, availability of required skills, and effective participation in various economic activities. To this end, human resource development is a long and continuous process of increasing knowledge, skill, capacities, positive work attitudes and values of all people and it requires focusing on training and skills development, health and social welfare, among others. On the other hand, and as envisaged under the "Big Four" agenda, achievement of food security, affordable housing, high level manufacturing and universal health care requires adequate supply of critical human resource and skills, which in turn calls for a strong linkage between education and training, and industry.

Further, the Kenya Vision 2030 and the third Medium-Term Plan have emphasized human resource development as key to national transformation. The Vision's three pillars on economic, social and political development rely greatly on availability of a highly trained, adaptive and productive human resource base. The Sustainable Development Goals (SDGs) 2030 put emphasis on the fulfilment of human rights, individual dignity, equality and

non-discrimination. There is also emphasis on inter-sectoral action in promotion and prevention of ill health, the need to end poverty and boost shared prosperity including inclusive economic growth, all of which are anchored on investments in health, social protection, education, training and skills development for all citizens.

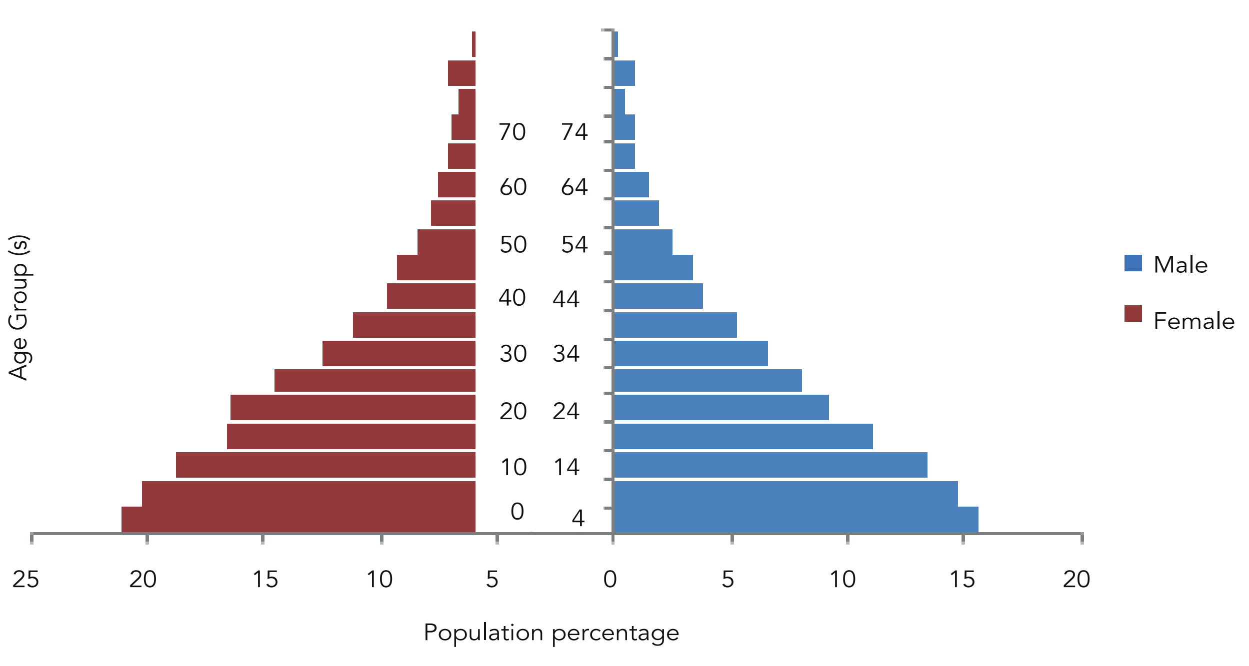
This chapter focuses on human capital mobilization as an enabler for the attainment of the "Big Four" agenda and the country's sustainable development with specific focus on population dynamics, health, education and skills development and quality of standard of living, which are key for sustainable development. It also presents Kenya's achievements in human resource mobilization; emerging challenges, including inequalities; and proposes policy interventions towards effective human resource mobilization for sustainable development.

11.2 Country's Population Dynamics

Kenya's population was estimated at 45.8 million in 2017, with a growth rate of 2.9 per cent, and is expected to reach 52 million in 2020 and about 65 million by 2030 (UNDESA, 2017). In 2019, the population was 47.6 million, with a growth rate of 2.2 per cent (KNBS 2019). The population is dominated by young people with approximately 70 per cent of the population aged below 24 years of age and 28 per cent aged 15-24. The elderly (age 60 and above) constitute 6 per cent of the total population (Figure 11.1).

Population dynamics, including changes in the size, structure and spatial distribution have direct and indirect implications for human resource mobilization and sustainable development. The size, growth rate, age-sex structure and location of the population have an impact on a variety of fundamental aggregates of economic

Figure 11.1: Kenya's population pyramid, 2017



Source: Kenya National Bureau of (2009), Population projections based on 2009 population census

parameters such as investments, savings, consumption and productivity. Therefore, up-to-date information on the relationships is required in guiding public policies and decisions (UNFPA, 2010). To improve the welfare of the people, trends in aggregate characteristics determine the evolution of the target age groups for the main social sectors such as education, health, social security, housing, sanitation, among others.

Life expectancy at birth for Kenya was 67.5 years in 2018 compared to 52 years in 2000 (World Bank, 2018). Life expectancy represents the average life span of a newborn and is an indicator of the overall health status of a country. Life expectancy can fall due to problems such as famine, war, disease and poor health. Improvements in health, education and welfare increase life expectancy. Life expectancy varies across males and females. The female population had a life expectancy of 69 years while their male counterparts had a life expectancy of 64 years in 2017, meaning that females have, on average, potential to live longer compared to the male counterparts.

A key contributing factor to improved life expectancy is access to health care and improved health indicators. For example, the Under-5 mortality rate per 1,000 live births reduced to 46 in 2017 from 105 in 2000 (Table 11.1). The national poverty headcount ratio declined from 46.8 per cent in 2005/06 to 36.1 per cent in 2017 (KNBS, 2018). This indicates that there was an improvement in socio-economic status and quality of life in the last decade. Other factors that led to an increase in life expectancy include increased investment in education, especially through free primary and secondary education, expansion in technical, tertiary and university education, and investment in health programmes.

Table: 11.1: Kenya's social development indicators, 2000-2017

Indicators	2000	2005	2010	2017
Poverty headcount ratio at national poverty lines (% of population)	..	46.8	..	36.1
Income share held by lowest 20% income group	5.6	..	..	6.2
Life expectancy at birth, total (years)	52	55	63	67
Life expectancy for male	50	54	61	64
Life expectancy for female	54	57	65	69
Fertility rate, total (births per woman)	5.2	4.6	4.4	3.9
Mortality rate, Under-5 (per 1,000 live births)	105	79.2	58	46
Prevalence of underweight, weight for age (% of children under 5)	17.5	18.4	16.4	11
Primary education completion rate (%)	..	88.5	80	83.6
School enrolment, primary (% gross)	94.9	101.5	106.3	104
School enrolment, secondary (% gross)	39	48	58	69
School enrolment, primary and secondary (gross), gender parity index (GPI)	1	1	1	1

Source: World Bank (2018)

The trajectory of population change in Kenya is largely driven by declining fertility levels with a growing peak age of child bearing age among women since 2000. Kenya has experienced substantial decline in fertility, reaching a Total Fertility Rate (TFR) of 3.9 in 2017 (Table 11.1) compared to 5.2 children per woman of reproductive age in 2000. Fertility decline is attributed to reduction in births and increase in years at first birth, but peak age at child bearing still occurs in the age group 20-24, which was estimated to be at 17.5 per cent of the population. These dynamics indicate considerable momentum in population growth rate. Another factor explaining the decline in fertility rate is that infant mortality rate, Under-5 mortality rate and the level of neonatal mortality have declined. The decline in Under-5 mortality rate is a major achievement attributed to improvements in access to quality health care service delivery.

One of the major consequences of demographic transition is the transformation of the age structure with fewer dependents relative to a large working population, leading to a demographic dividend. The youthful structure of the population aged less than 15 years has been declining while that of the working population aged 15-59 has been increasing. Between 1969 and 2017, the proportion of the population aged 15 years declined from 46.3 per cent to 41.0 per cent while that in the working age group 15-64 increased from 46.3 per cent to 53.0 per cent. The population aged less than 15 years is projected to decline further by 2050 to 27.5 per cent (Table 11.2). The factors attributed to this decline include education, especially among women of child bearing ages, increased contraceptive use and investments in the health sector. The population of those aged over 65 is 4 per cent of the population, which is expected to increase due to investments in the health sector.

Table 11.2: Population by broad age groups, 2009 and 2015/16

	2009	2015/16	% of total
Population by broad age groups			
Child population age 0-14	16,554.69	18,636.50	41
Child population 0-19	14,802.11	23,625.30	52
Working age population 15-64	20,683.71	24,135.70	53
Working age population 20-59	15,921.54	19,119.9	42
Adult population 65+	1,273.4	1,737.8	4
Adult population 60+	1,725.7	2,557.5	6
Total population	38,589.01	45,329.70	
Deprive measure of age structure			
Dependency ratio 1 (child pop< 15 and adult pop 65+)/pop 15-64	86.6	81.4	84
Dependency ratio 2 (child pop< 20 and adult pop 60+)/pop 20-59	80.4	74.7	77.5

Source: KNBS (2018b), Kenya Household and Budget Survey 2015/16

The dependency ratio in the country declined during the review period. The dependency ratio declined from 94 per 100 working persons in 2009 to below 78 in 2015 as shown in Figure 11.2. The ratio measures the proportion of the working-age population to the non-working-age population. The ratio indicates the effect of changes in age distribution and can be a proxy indicator of economic burden and responsibility borne by the working population. It should be noted that an age dependency ratio of 100 and above is undesirable. The traditional measure of dependency ratio type 1 considers child population to be under 15 and the elderly population to be age 65 and above. Dependency ratio type 2 considers child population to be 0-19 and the elderly to be age 60 and above.

Consideration of the dependency ratio shows that the burden to the working population is still very high. As the population growth rate has been increasing, so has life expectancy. This has mainly been attributed to heavy investments by the government in health and education. In the 1990s, life expectancy of the population was less than 60 years; today, life expectancy is over 60 years.

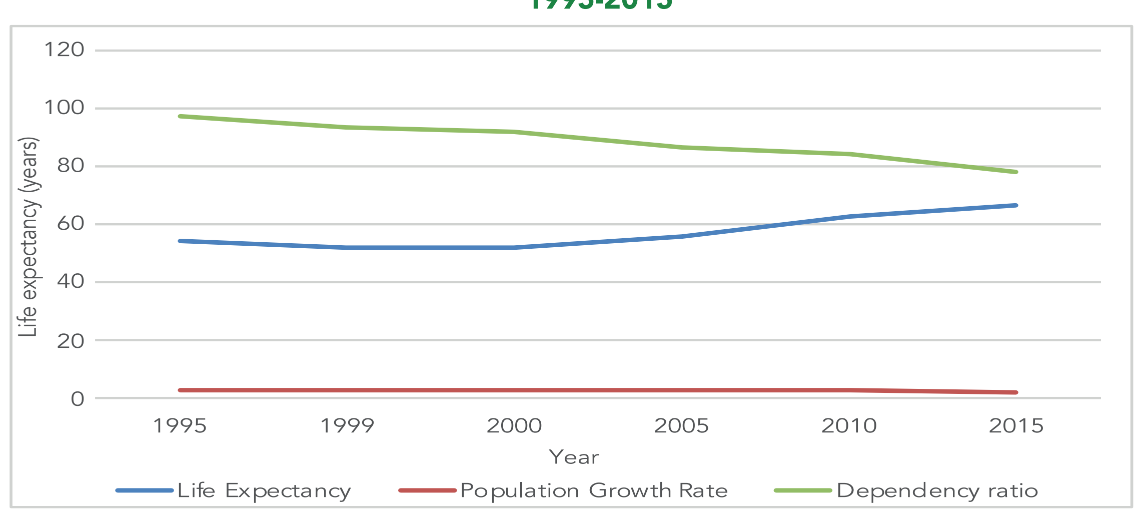
Available county level data shows that Nairobi County had the least dependancy ratio of 45.9 while Mandera County had the highest ratio at 125.1 (Figure 11.3). This high dependancy ratio is attributed to a higher proportion of the population below the age of 15, which was 53.7 per cent compared to those aged 15-64 years which was 44.4 per cent.

11.3 Global Competitiveness Index and Human Capital Index for Kenya

The Global Competitive Index (GCI) has twelve pillars: institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labour markets efficiency, financial market development, technology readiness, market size, business sophistication, and innovation. In regard to human capital, the analysis takes into account health, skills and innovations.

Sub-Saharan Africa with an average GCI score of 46.2 had the lowest GCI score in the last 10 years, which was the lowest performance on 10 of the 12 GCI indices. In only five pillars does the average GCI exceed 50, including labour markets (50.4) and business dynamics (51.1). On human capital, the region had the weakest

Figure 11.2: Life expectancy, population growth rate and dependency ratio in Kenya, 1995-2015



Source: World Bank (2018d), World Development Indicators

Figure 11.3: County demographic profile in Kenya, 2015

Source of Data: NAYS (2015)

health conditions in the world (46.4 on the health pillar) while the skills of the population (43.4 on the skills pillar) need to be transformed to a better trained workforce. Over the last 10 years, Sub-Saharan Africa has consistently increased participation in education. However, the challenges these countries face include the quality of teaching, and providing young people with digital and cognitive skills required by the economy in future.

Kenya outperforms countries in the EAC region and most SSA in the GCI (Table 11.3). Kenya ranked 93 globally with a score of 53.7 and was among the top 10 countries in Sub-Saharan Africa in 2018. The strengths include labour markets that ranked 60 with a score of 59.9, and innovation capability ranked 69 with a score of 36.5. Health pillar has a score of 58.1 and ranked 110 with only Rwanda outperforming Kenya with a score of 60.9 and ranked 106 in the EAC region. The ranking results indicate major challenges to economic and human development in Kenya, with rising incidences of

Table 11.3: Health, skills, labour markets, innovation capability and GCI for select countries, 2018

	Health		Skills		Labour Market		Innovation Capability		Global Competitive Index (GCI)	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
SSA		46.4		43.4		50.4		28.4		
Kenya	**110**	**58.1**	**95**	**55.4**	**60**	**59.9**	**69**	**36.5**	**93**	**53.7**
Rwanda	106	60.9	123	40.9	49	62.1	118	27.3	108	50.9
Ghana	112	56	104	51.3	89	55.9	83	32.7	106	51.3
Uganda	124	44.8	122	40.9	63	59.8	107	29.8	117	46.8
Burundi	127	42.2	134	32.9	133	44.5	131	23.8	136	37.5
Tanzania	116	51.7	120	41.5	95	54.8	119	27.2	116	47.2
South Africa	125	43.2	84	58.4	55	61	46	44.3	67	60.8

Source of Data: World Economic Forum (2018), Global Competitiveness Report

non-communicable diseases, and low access to health care especially in rural areas.

Kenya has more ground to cover in development of future skills and know-how, according to assessment on human capital by the World Economic Forum (WEF) Human Capital Report 2017 with an average score of 59.48 as indicated in Table 11.4. The country is not sufficiently developing the right skills for the future, and for realization of the Kenya Vision 2030. Employers and educational institutions need to address the challenge of developing relevant skills to meet future demands. The key areas of human capital development include capacity, largely determined by past investment in formal education where deployment is defined as the application and accumulation of skills through work. Development in the formal education of the next generation workforce requires continued up-skilling and re-skilling of existing work force and know-how as the breadth and depth of specialized skills-use at work.

An analysis of the Human Capital Index sub-indices for 2017 also shows that Kenya was doing relatively well in deployment of human resources, and is ranked 25 out of 130 countries in the deployment sub-index but ranks poorly in development of future skills and know-how at position 101 and 74 out of 130 countries, respectively. The country was at position 74 in use of specialized skills at work, and benefits from the stock of know-how embodied in large medium-skilled employment sectors and comparatively strong education quality and staff training, laying the foundation for building future human capital potential.

The two top-ranked countries in the region were Rwanda in position 71 and Ghana in position 72 in 2017, which owed their comparatively strong performance to, respectively, capacity development and employment gender gaps and significantly improved educational attainment of the country's youth. Uganda ranked at position 81 and scored higher in capacity and deployment (Figure 11.4).

The score, however, declined for most countries in 2018. Kenya ranked 94 out of 157 countries with a human capital index (HCI) score of 0.52 against the global HCI score of 0.57 (Table 11.5). This implies that the expected productivity of a child born in Kenya today will be 52 per cent compared to what they could be if they enjoyed

Table 11.4: Human capital index (%) and ranking, 2017

	Overall Index 2017		Capacity Sub-Index		Deployment Sub-Index		Development Sub-Index		Knowhow Sub-Index	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Rwanda	61.06	71	47.92	112	90.06	2	55.69	93	50.57	77
Ghana	61.01	72	64.83	79	77.35	11	55.04	96	46.82	95
Kenya	**59.48**	**78**	**60.8**	**90**	**73.18**	**25**	**53.17**	**101**	**50.77**	**74**
Uganda	59.73	81	57.38	98	84.26	3	47.88	112	45.42	102
South Africa	58.09	87	69.65	65	56.39	109	57.64	90	48.7	86
Burundi	55.45	102	36	121	90.21	1	47.75	114	47.84	91
Tanzania	53.58	106	48.17	108	73.07	26	48.88	110	44.21	109
South Africa	125	43.2	84	58.4	55	61	46	44.3	67	60.8

Source: World Economic Forum (2017; 2018), Global Human Capital Report

Figure 11.4: Regional Human Capital Index, 2017

Source: World Economic Forum (2017), Global Human Capital Report

Table 11.5: Human capital index and components, 2018

Country	Probability of survival of age 5	Expected years of school	Harmonized test scores	Learning-adjusted years of school	Fraction of kids under 5 not stunted	Adult survival rate	Human Capital Index
Average global	0.97	11.17	430.58	7.9	0.77	0.85	0.57
Average Sub-Saharan Africa	0.93	8.12	374.18	4.92	0.69	0.73	0.40
Kenya	**0.95**	**10.7**	**455**	**7.8**	**0.74**	**0.79**	**0.52**
Rwanda	0.96	6.6	358	3.8	0.63	0.81	0.37
Ghana	0.95	11.6	307	5.7	0.81	0.76	0.44
Uganda	0.95	7.0	397	4.4	0.71	0.7	0.38
South Africa	0.96	9.3	343	5.1	0.73	0.68	0.41
Burundi	0.94	7.5	423	5.1	0.44	0.71	0.38
Tanzania	0.95	7.8	388	4.8	0.66	0.79	0.40

Source: World Bank (20183), World Development Report

full health and completed education. The level of performance calls for strong educational foundation. Key interventions towards improvement of education enrolment include implementation of free primary and free day secondary education, and promotion of a policy to attain 100 per cent transition from primary to secondary school education. Pre-primary enrolment increased from 1.6 million in 2003 to 2.9 million in 2013 to 3.3 million in 2017, partly

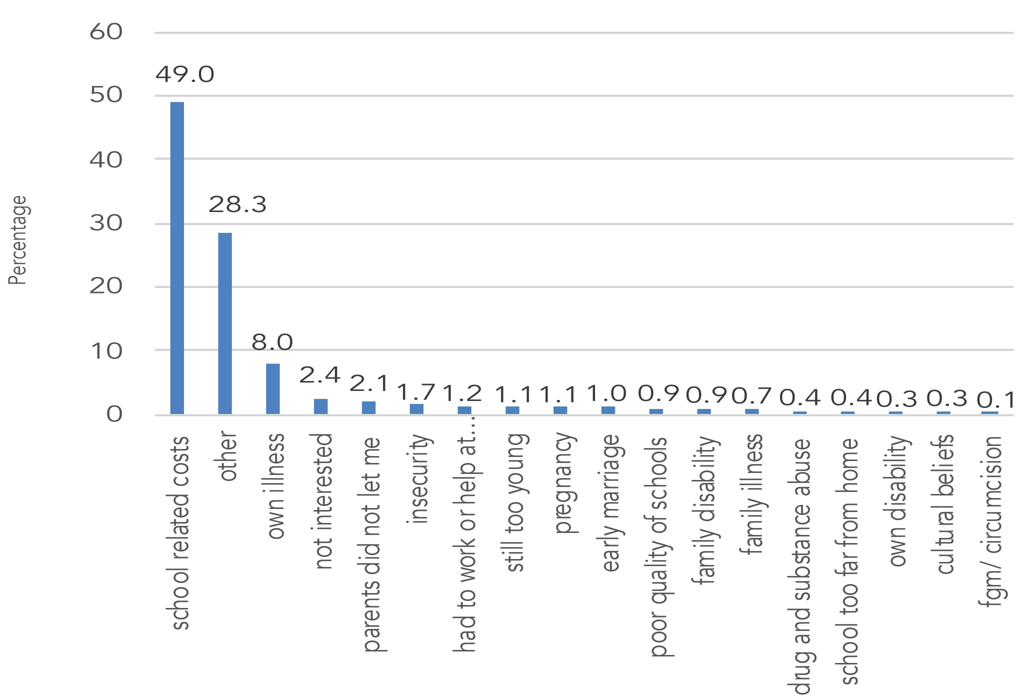
due to accelerated investment in new Early Childhood Development Education (ECDE) centres by county governments following devolution of pre-primary education functions. Similar trends were observed at primary school level where enrolments increased from 7.2 million in 2003 to 9.8 million pupils in 2013 and 10.4 million pupils in 2017. Secondary school enrolment increased from 0.88 million to 1.9 million students and 2.7 million students during the respective years. Overall, primary school completion rate was estimated at 83 per cent in 2017. Primary and secondary school education gross enrolment rates were 104 per cent and 69 per cent, respectively, in 2017. The transition rate from primary to secondary school was 93 per cent in 2019 because of government commitment to 100 per cent transition rate policy.

School-related costs is one of the reasons why school-going children in both primary and secondary schools reported not to have attended school, accounting for 49 per cent of school absenteeism in the country (KNBS, 2018 KIHBS 2015/16 data). Students who reported not to attend school due to health-related issues accounted for 11.6 per cent, with own illness reporting the highest reason for absenteeism at 8.0 per cent (Figure 11.5).

11.4 Outturns by Categories of Training Institutions in Kenya

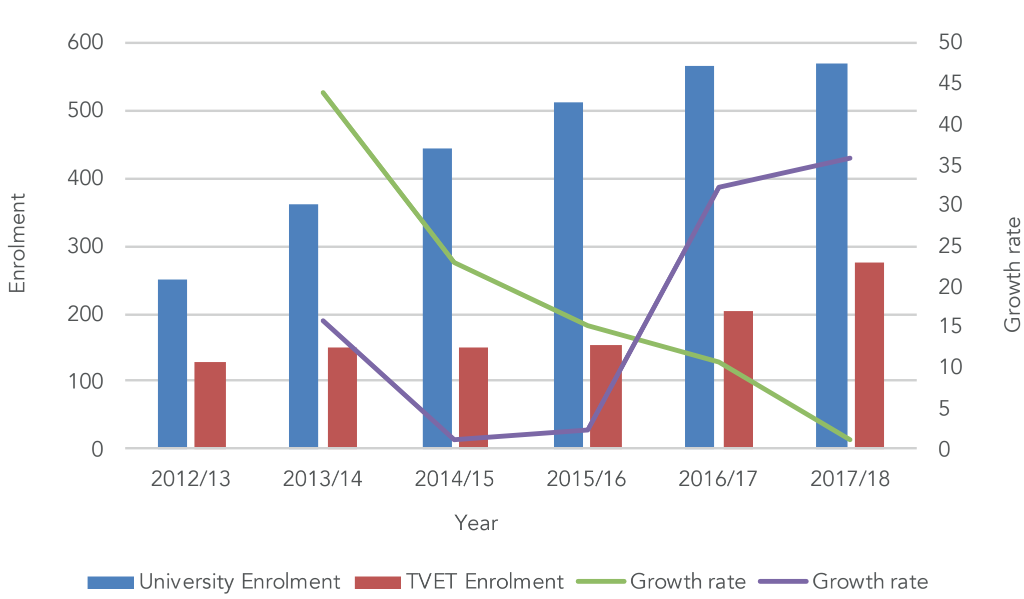
Provision of relevant and adequate skills development and training is fundamental to Kenya's overall development strategy. The realization of a highly skilled workforce will require investments to sustain free primary education, free day secondary education, university education and vocational and technical training. The policy reforms that have taken place towards attaining education for all include free primary education, free day secondary education, and increased capitation grants for TVET and university education.

Figure 11.5: Reasons for not attending school, 2015/16



Source: Own computations based on KNBS (2018), KIHBS 2015/16

Figure 11.6: University and TVET enrolment, 2012/13-2017/18

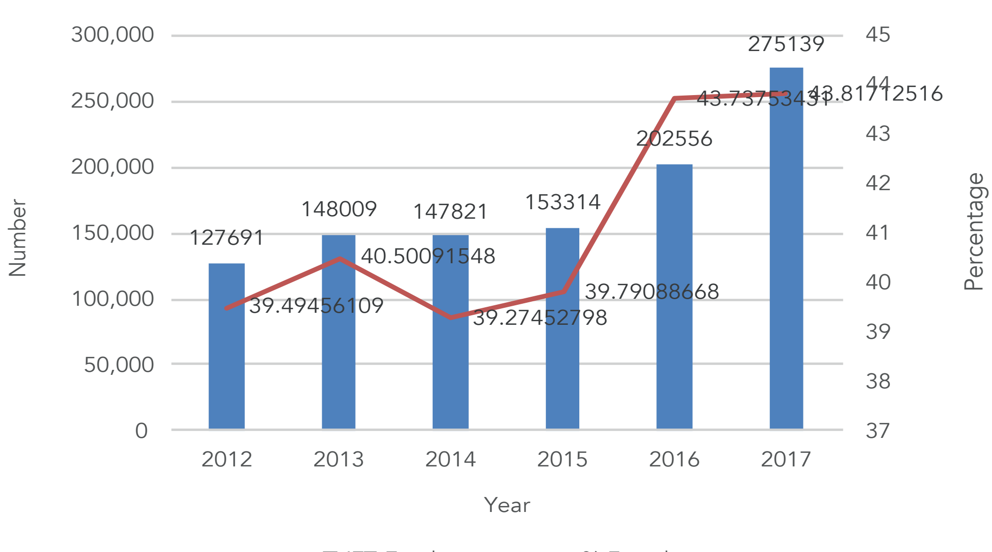


Source: Kenya National Bureau of Statistics (2018), Economic Survey

Kenya has over 70 public and private universities. University enrolment recorded growth over the years before declining by 7.7 per cent in 2017/18 compared to 2016/17 while TVET enrolment increased by 35.8 per cent in the same period (Figure 11.6). The decline in university enrolment from 564,507 students in the academic year 2016/17 to 520,893 in 2017/18 was mainly caused by reduction in number of candidates who met the minimum university entry requirement of C plus and above.

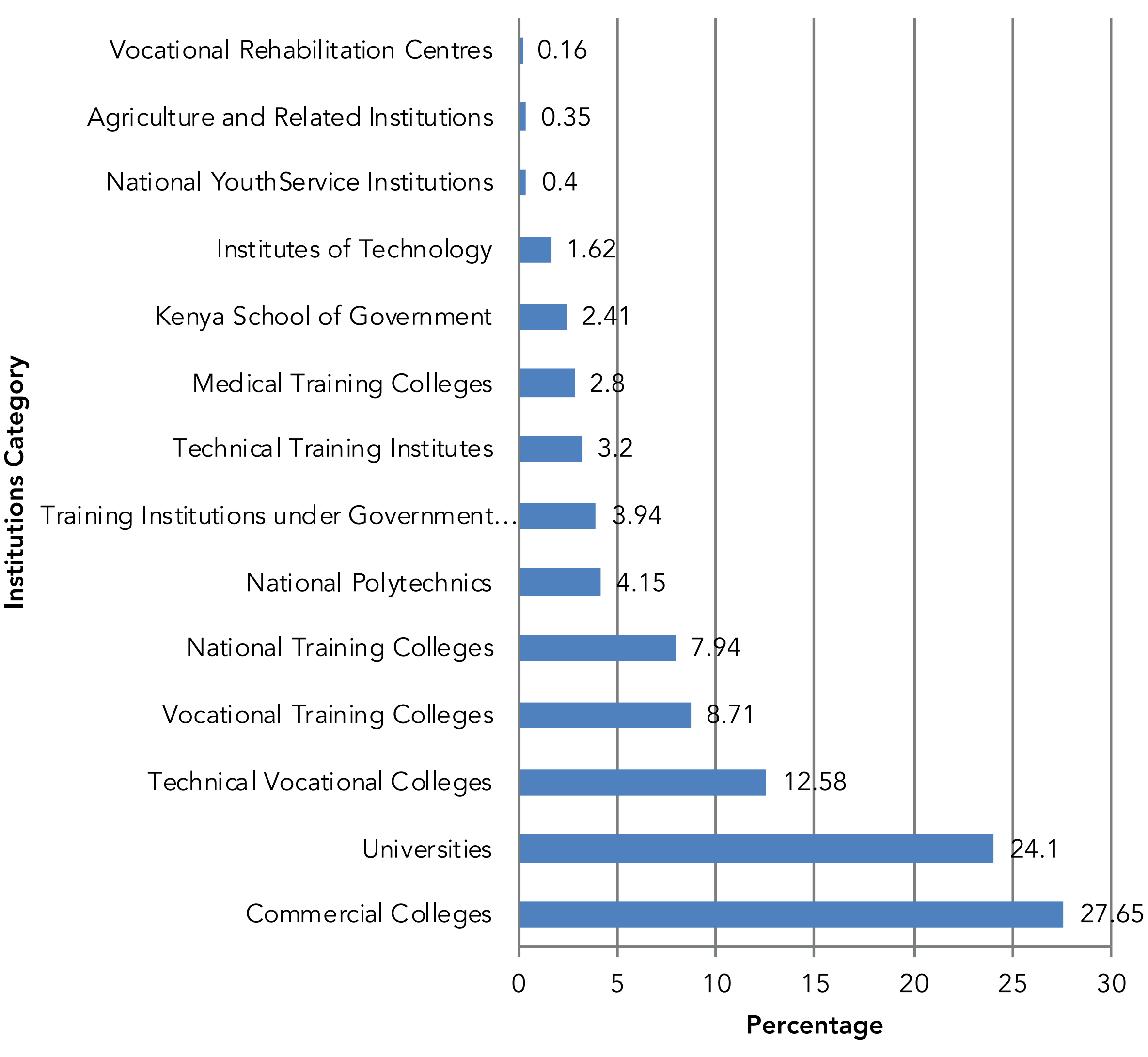
To address gaps in technical skills in the country, the government has adopted a deliberate policy to grow TVET, leading to an increase in enrolment and number of TVET institutions. Provision of bursaries to learners in

Figure 11.7: Student enrolment in TVET institutions, 2012-2017



Source: Kenya National Bureau of Statistics (2018), Economic Survey

Figure 11.8: Total outturns by categories of training institutions, 2014-2016



Source of Data: Ministry of Labour and Social Protection (2018)

TVET institutions has also led to an increase in student enrolment. Student enrolment in TVET institutions increased from 202,556 in 2016 to 275,139 in 2017 (Figure 11.7), coinciding with a 50.9 per cent rise in registration of more TVET institutions from 1,300 in 2016 to 1,962 in 2017.

Commercial colleges have the highest outturns accounting for 27.65 per cent, followed by universities with 24.10 per cent, technical and vocational colleges with 12.58 per cent, vocational training centres with 8.71 per cent and teacher training colleges with 7.94 per cent, respectively (Figure 11.8). Outturns from the rest of the categories of training institutions accounted for 19.03 per cent. Agriculture and related institutions reported the least total outturns in the period 2014-2016, and this could impact on the achievement of food security in the country. Vocational rehabilitation centres and agriculture and related institutions outturn were 0.16 per cent and 0.35 per cent, respectively.

This means that training institutions that offer rehabilitation services and institutions offering agricultural training have the least outturn.

11.5 Total Outturns by Programmes for all Categories of Training Institutions

Primary school education performance

Performance in the Kenya Certificate for Primary Education (KCPE) averaged 52 per cent during the review period, with languages recording lowest performance (Table 11.6). Performance in social sciences steadily improved in the last three years compared to pure sciences, which have declined over the same period. Furthermore, performance in mathematics improved in 2017 after a decline in 2016. This can be attributed to enhanced focus on Science, Technology, Engineering and Mathematics (STEM) across schools.

Secondary school education performance

The number of KCSE candidates has been increasing over the years, with more females than males sitting for the final secondary school exams. In 2018, 660,204 candidates sat for KCSE exams, of which 321,576 were females, representing 48.7 per cent of the population. From this percentage, it can be concluded that Kenya is close to attaining gender parity in KCSE enrolment.

However, the proportion of secondary education learners attaining C+ and above declined substantially between 2013 and 2017 academic years. The proportion was estimated at 31 per cent and 10 per cent in 2013 and 2017, respectively, representing a decline of 67.7 per cent. This means that about 7 and 9 out of 10 secondary education finalists were not able to attain the minimum qualification for direct admission into university education. Thus, out of the 660,204 Form 4 finalists, 90 per cent of them did not

Table 11.6: Candidates by gender and mean subject score in KCPE, 2013-2017

	2013	2014	2015	2016	2017
Number of candidates (%)					
Male	51%	50%	50%	50%	52%
Female	49%	50%	50%	50%	48%
Total	**839,759**	**880,486**	**927,789**	**952,390**	**963,718**
Subject					Mean Score (%)
English Language	53.06	47.64	49.98	50.52	47.63
English Composition	41.90	41.47	41.38	40.26	39.60
Kiswahili Lugha	45.78	45.04	44.68	49.20	48.38
Kiswahili Insha	52.43	58.00	54.34	48.27	47.88
Mathematics	52.86	52.04	56.16	45.39	51.14
Science	61.82	66.00	55.48	61.82	55.61
Social Studies	54.75	55.26	49.98	57.38	57.22
Religious Education	70.43	68.67	70.20	70.99	69.79
National Mean Score	**54.13**	**54.30**	**52.78**	**52.98**	**52.16**

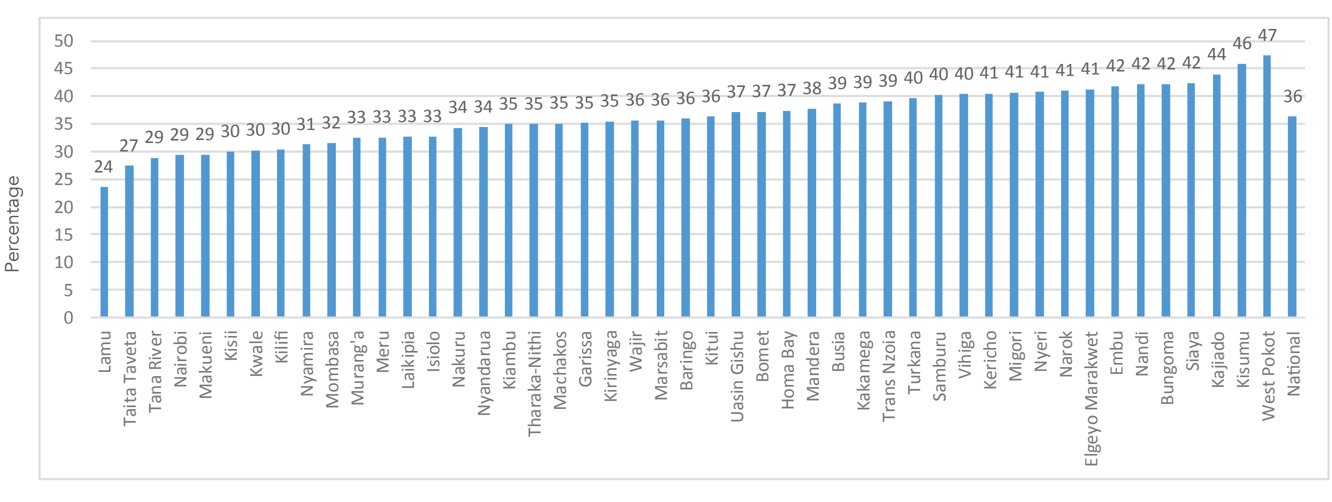
Source: World Bank (2018)

Figure 11.9: National trends in KCSE candidates mean grade by gender, 2013-2017

2017 Female: 4.1% 6.4% 10.1% 14.5% 22.7% 30.9% 5.8%
2017 Male: 3.7% 5.0% 6.8% 9.9% 14.5% 21.8% 28.0% 5.8%
2016 Total: 4.2% 5.6% 7.8% 10.7% 14.2% 19.6% 26.2% 5.8%
2016 Female: 3.7% 5.5% 8.0% 11.1% 14.5% 20.1% 26.6% 5.6%
2016 Male: 2.2% 4.6% 5.8% 7.7% 10.4% 13.9% 19.2% 26.0% 6.0%
2015 Total: 4.2% 8.6% 10.5% 12.5% 14.2% 15.2% 15.3% 9.3% 1.0%
2015 Female: 3.5% 7.9% 10.4% 13.0% 15.1% 16.0% 16.1% 9.5% 0.9%
2015 Male: 4.9% 9.1% 10.6% 12.0% 13.5% 14.4% 14.5% 9.2% 1.1%
2014 Total: 4.1% 7.9% 9.8% 12.2% 14.7% 15.8% 15.2% 9.9% 1.2%
2014 Female: 3.2% 7.3% 9.6% 12.5% 15.5% 16.8% 16.2% 10.4% 1.1%
2014 Male: 4.9% 8.5% 10.0% 11.9% 13.9% 15.0% 14.4% 9.5% 1.2%
2013 Total: 3.8% 5.5% 6.9% 8.6% 10.9% 13.6% 16.1% 17.5% 12.5% 1.6%
2013 Female: 3.1% 6.2% 8.2% 10.9% 14.0% 16.8% 19.0% 13.5% 1.5%
2013 Male: 4.4% 7.5% 9.0% 10.9% 13.3% 15.5% 16.3% 11.7% 1.6%
0.0% 20.0% 40.0% 60.0% 80.0% 100.0% 120.0%
A A- B+ B+ B- C+ C C- D+ D

Source of Data: Kenya National Bureau of Statistics (2018), Economic Survey

Figure 11.10: KCSE performance by county, 2017



Source of Data: Kenya National Bureau of Statistics (2018), Economic Survey

attain minimum grade for direct entry into Kenyan public or private universities, pointing to the need for investment in technical training institutions for skills development targeting majority of the youth in the country. There were variations in KCSE performance across counties. West Pokot and Kisumu counties recorded a high of 47 per cent while Lamu and Taita Taveta counties recorded a low of 24 per cent and 27 per cent, respectively (Figure 11.10). It will therefore be important to address human capital inequalities across counties through reduction of teacher shortage, by improving the quality of classroom instruction, and enhancing the availability of instructional materials and school infrastructure.

Performance in higher education and training institutions

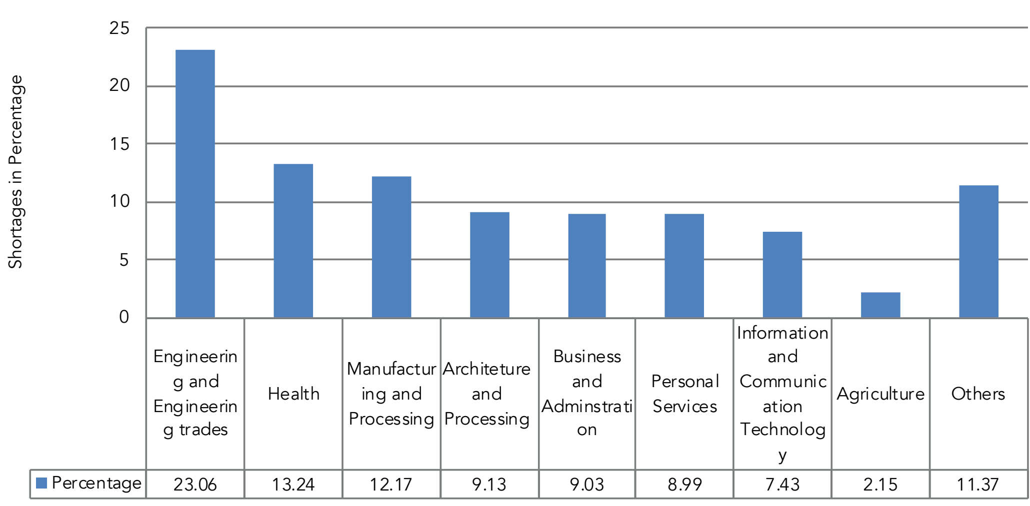
Education and technical training in training institutions is expected to boost the realization of the "Big Four" agenda in providing the required human capital (Appendix Table 11.1 – 11.4). Business administration, engineering and computing programmes recorded the highest outturns in the country at higher education and training. Enrolment in business administration increased by 1.1 per cent and 1.3 per cent between 2014 and 2015, and 2015 and 2016, respectively. Outturns in engineering and engineering trades dropped by the same margin at 0.6 per cent from 2014 to 2015 and 2015 to 2016, respectively, while outturns in computing programme increased by 2.1 and 1.4 per cent from 2014 to 2015 and 2015 to 2016, respectively. Literacy and numeracy programmes reported the lowest outturn at 0.002 per cent in 2014 and recorded no outturns in 2015 and 2016, followed by veterinary programmes that remained constant at 0.1 per cent. This seems to imply that higher education and technical training is driven by social demand for schooling as opposed to labour market needs, resulting in excess supply of certain skills amidst critical shortages in some areas.

Business and administration programmes are more popular with females than males, while engineering and engineering trades and computing are more popular with males than females, implying that females are more inclined to study arts-related studies compared to males who are inclined to science-related studies. Males registered 14.1 per cent of total outturns compared to females at 14.9 per cent in business and administration programmes. The lowest outturn for males was in literacy and numeracy, and personal development while for females it was in generic programmes and qualifications, veterinary and personal development.

Polytechnics are expected to accelerate development by providing practical technical and entrepreneurial skills to the youth especially in rural areas in realization of the "Big Four" agenda. Technical and entrepreneurship skills have the potential of enabling the youth to engage in self-employment that can assure them of reasonable income and facilitate the provision of basic goods and or services to their local communities. However, business administration and engineering and engineering trade had the highest outturns for all the 13 programmes offered at national polytechnics. This shows that national polytechnics need to improve in delivery of technical skills. With the unemployment rate at 7.4 per cent, 85 per cent of the unemployed constitute people aged below 35 years (KNBS, 2018). As a result, failure of national polytechnics to equip students with necessary practical skills to venture into entrepreneurship has the potential of inflating the unemployment rate further. There is therefore need to strengthen delivery of technical and entrepreneurship skills in technical institutions. On the other hand, those graduating with engineering and engineering trade courses had the potential of initiating service/merchandise business that may require financial capital in addition to human capital. Furthermore, the affected youth require more apprenticeship to gain experience.

In recognition of the importance of science and technology to national development, the government established institutes of technology to offer technology-related programmes mainly in health, agriculture, science, energy, education, telecommunication, computing, engineering and production sectors. A need to emphasize on health and agricultural studies at institutes of technology is imperative. Moreover, marketing the courses and offering incentives such as arrangement for internships would attract more students. Furthermore, a situational analysis of the institutions could be conducted to understand why they are not attracting substantial numbers of students despite their

Figure 11.11: Shortages by skill area in all training institutions, 2016



Source of Data: Ministry of Labour and Social Protection (2018)

importance in deepening technology uptake in various sectors of the economy.

Technical training institutes are responsible for offering programmes that equip graduates with relevant skills and competencies to meet the needs of the labour market. Further, provision of skills and competencies is critical for the development of hands-on workers with skilled human resources base for national development. However, unlike their counterparts in institutes of technology, engineering and engineering trades have a slightly higher level of outturn in technical training institutes in the country, implying they can attract a higher number of learners. Moreover, this implies that employability of graduates from such institutions is possible as they possess the skills in demand in the labour market and for the "Big Four" agenda.

Realization of the "Big Four" agenda requires sufficient manpower in health, food security, manufacturing and housing. Engineering and engineering trade, health and manufacturing and processing are the top three in terms of skill shortages in all training institutions in the country (Figure 11.12). Other skill areas that registered shortages include architecture and construction, business and administration, personal services and information and communication technology. This means that the government needs to address shortages in skills if it is to achieve the "Big Four" agenda. All the others skill areas including mathematics and statistics, physical sciences, veterinary, biological and related sciences, environment, hygiene and occupational health services, law and transport services combined registered 11.37 per cent outturn.

11.6 Health Performance in Kenya

Human capital can also be accumulated through improvements in health status of the citizens. Health contributes highly to increased productivity and is interrelated to education. Health is a key driver of poverty reduction and vice versa and the systems put in place to deal with illnesses determine health outcomes. Good health in turn is a complex state, and achieving it requires an integrated range of preventive strategies. Universal Health Coverage (UHC) is one of the "Big Four" agenda whose aim is to provide health care and financial protection to all people. The goal of UHC makes it a critical component of the SDGs.

The Sustainable Development Goal (SDG) 3.2 targets to end preventable deaths of newborns and children below 5 years of age, with all the countries aiming to reduce neonatal mortality to 12 per 1,000 live births and Under-5-mortality to 25 per 1,000 live births. By 2016/17, neonatal mortality rate was 22 per 1,000 live births, Under-5-mortality rate for Kenya was 49 per 1,000 live births while infant mortality rate was 39 per 1,000 live births. Immunization has been a key intervention in reducing deaths of children. Immunization coverage in Kenya reduced from 69 per cent in 2016 to 63 per cent in 2017, with counties such as Mandera, Tana River, Isiolo, West Pokot, Samburu and Trans Nzoia having the lowest coverage. This calls for rapid intervention especially in the areas with low coverage to reduce the complications that emerge from lack of immunization.

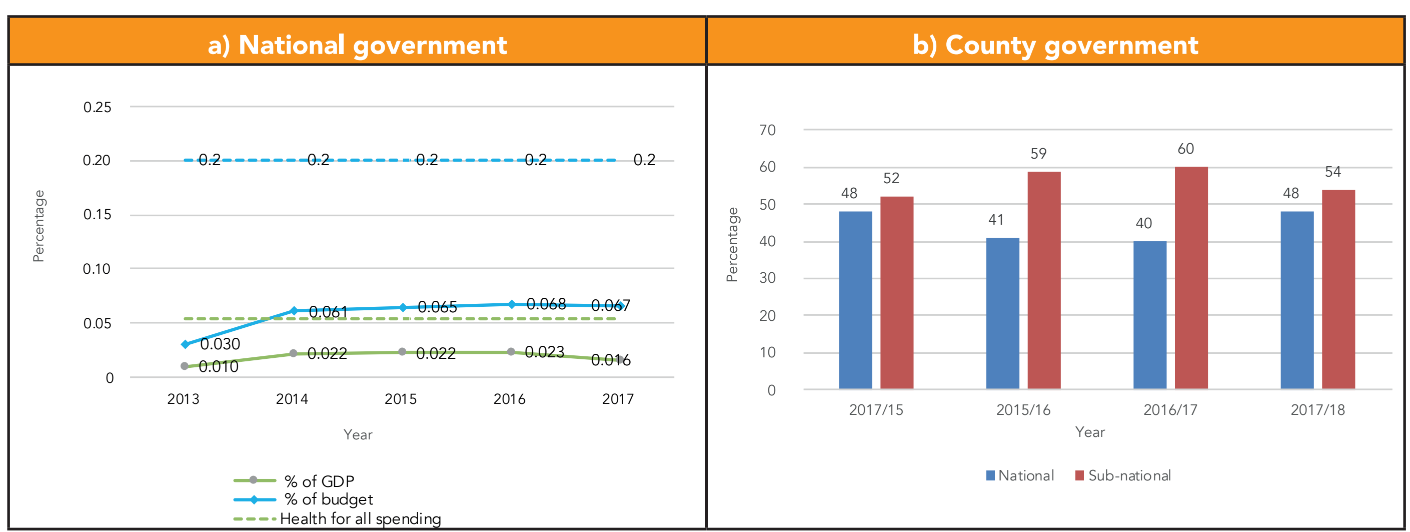
There are improvements in child health but a lot more is required. For example, the percentage of children who were stunted reduced from 35 per cent in 2008/09 to 26 per cent in 2014. The underweight reduced from 16 per cent in 2008/09 to 11 per cent in 2014. This means that children are at risk of diminished physical and cognitive development that affects a child for a lifetime, and result to poor health, reduced productivity and increased risk of non-communicable diseases. Stunting and wasting are because of malnutrition during the first 1,000 days of a child's life. The SDG 2.2 targets to end all forms of malnutrition and achieve the stunting and wasting targets by 2025. Coverage with childhood vaccinations stagnated, with the proportion of fully immunized children being 68 per cent in 2009 and remaining the same in 2014. Services targeted at key diseases causing the most morbidity and mortality, notably HIV, TB and Malaria, were scaled up.

The initiatives to improve survival rate include increased government spending on health care, increased antenatal and postnatal care, increased skilled attendance at birth, focusing on special programmes such as the *Linda Mama* and improving social indicators such as water, sanitation and education.

The leading causes of premature deaths in Kenya are communicable diseases. HIV/AIDS causes most of the premature deaths and disability, closely followed by diarrheal disease, lower respiratory infections, neonatal disorders, tuberculosis and malaria (combined). The key intervention to address key non-communicable diseases (specifically heart diseases, cancers, mental health conditions, violence/injuries, stroke) is more support from both public and non-public sectors. In addition, the major risk factors such as levels of smoking, physical inactivity, alcohol and drug abuse, violence (including gender-based violence) are still major causes of concern. The coverage with interventions addressing key health-related sectors such as nutrition (maternal and child), safe water, sanitation, education are still not at a level needed to assure the health of the population.

Further, there are gaps in human resources for health, despite being one of the core building blocks of a health system. Global evidence points to a direct correlation between the size of a country's health workforce and its health outcomes. Kenya had 14 doctors per 100,000 population and only 42 nurses per 100,000, respectively, in 2016, excluding the private sector (Universal Health Care Road Map, 2018). The health worker density target was 7 per 10,000 people, and the achievement at mid term was 6 per 10,000. Kenya has not been able to fill the approved positions in all the health facilities; the gap is worse in primary health facilities than tertiary care. Overall, only 15 per cent of approved positions are filled; 40 per cent of approved positions in tertiary care facilities are filled while only 13 per cent are filled at levels 2 and 3 facilities. Moreover, specialized medical care is mostly available in urban areas, with inequity in distribution of workforce.

Figure 11.12: Proportion of national and county government allocation to health, 2014-2017



Source: (Ministry of Health, 2017), National Health Accounts

Health spending in the country has been increasing since 2014. However, the country is yet to meet the Abuja Declaration of 15 per cent budgetary allocation. Health services in Kenya are financed by government (public), the national and private health insurances, employer schemes, Community Based Health Financing (CBHF) schemes, households (out of pocket expenses) development partners and non-governmental organizations (NGOs). The national government budget to health has been increasing and now stands at 7 per cent, which is low compared with the 15 per cent Abuja Declaration as reported in Figure 11.12. On the other hand, county health budget has increased from 21.5 per cent to 25.2 per cent of total county budget. This is evident from the devolved function of the government structure that has enabled county governments to be more effective in terms of health as per the Constitution of Kenya 2010. The national government has transferred the primary health care functions to county governments, and therefore receives lower allocation than counties.

Kenya spends about US$ 78 per capita on health as per the National Health Accounts in 2015. This falls short of the World Health Organization (WHO) recommended rate of US$ 86 per capita, which is the estimated minimum requirement to provide basic health services to a population. Health expenditure has been increasing at the same rate as GDP, leading to stagnation of health expenditure as a per cent of GDP. In real terms, therefore, health expenditure has not changed significantly. Currently, health expenditure is driving total expenditure at the expense of capital formation. The health sector is therefore primarily focused on recurrent spending while the wider government is shifting towards development spending and capital formation.

11.7 Social Protection and Well-Being

Social protection is an important component in delivering the "Big Four" agenda given its focus on improving welfare of vulnerable groups in the society. It focuses on poverty reduction; addressing equity concerns in

society; and promoting inclusion and social cohesion to ensure that all Kenyans live in dignity and exploit social assistance, social security and social health. It includes cash transfers, food distribution, school-based feeding programmes, and retirement benefits.

Social assistance programmes in Kenya are mainly non-contributory interventions targeting the poor and vulnerable populations for realization of an inclusive society and building on human capital development. These interventions are aimed at protecting individuals and households from shocks that can push them deeper into poverty. Non-contributory interventions (including cash transfers, food subsidies, and waivers, among others) act as protective measures, which provide immediate relief from deprivation of basic needs. These interventions focus on distributing resources either in cash or in-kind transfers to the poor and vulnerable groups.

Whereas the level of poverty in Kenya reduced by almost 10 per cent between 2005/06 and 2015/16, the number of individuals living in poverty has not changed substantially and was about 16 million during the two time periods as indicated in Figure 11.13. Further, a large proportion of the population is insecure and exposed to risks without adequate safety net, which is a major impediment to building a more productive workforce and economy. For example, approximately 3.6 million Kenyan children are orphans or otherwise classified as vulnerable. Of these, 646,887 children are double orphans (have lost both parents). An estimated 110,000 children of 0-14 years are living with HIV. Women and girls are disproportionately affected by the epidemic, with 21 per cent of new HIV infections among females aged 15 to 24 years. Also of concern is the high level of AIDS-related deaths among adolescents, totalling 7,893 girls aged 10 to 19 in 2018.

Cash transfers aid in human capital development for poor households. The impact of these transfers on individuals and households show that they have positive effects on education,

Figure 11.13: Overall headcount and population living in poverty, 2005/6 and 2015/16

Source: Kenya National Bureau of Statistics (2016a), Basic Report on Well-Being.

Note: *The 2015/16 basic basket was revalued using the 2005/06 prices*

Figure 11.14: Public spending on social assistance (% GDP), 2016

Source: World Bank (2018a), Aspire database

Table 11.7: Overview of core social assistance schemes in Kenya, 2018/19

Scheme	Responsible Agency	Target Group	No. of registered beneficiary households	Transfer value per month (Ksh)	Transfer value (% of GDP per capita)	Actual spend (Ksh billion)	Actual spend (% of GDP)
CT-OVC	ML&SP (SAU, DCS)	Household with OVC	353,000	2,000	16.6	8.34	0.13
OPCT	ML&SP (SAU, DSD)	Household with 65+	310,000	2,000	16.6	6.62	0.11
InuaJamii 70 Pension	ML&SP (SAU, DSD)	Individual aged 70 years and above	523,129	2,000	10.0	21.93	0.23
PWSD-CT	ML&SP (SAU, DSD, NCP-WD)	Household with PWSD including adults and children	47,000	2,000	16.6	1.12	0.02

Source: Ministry of Labour and Social Protection

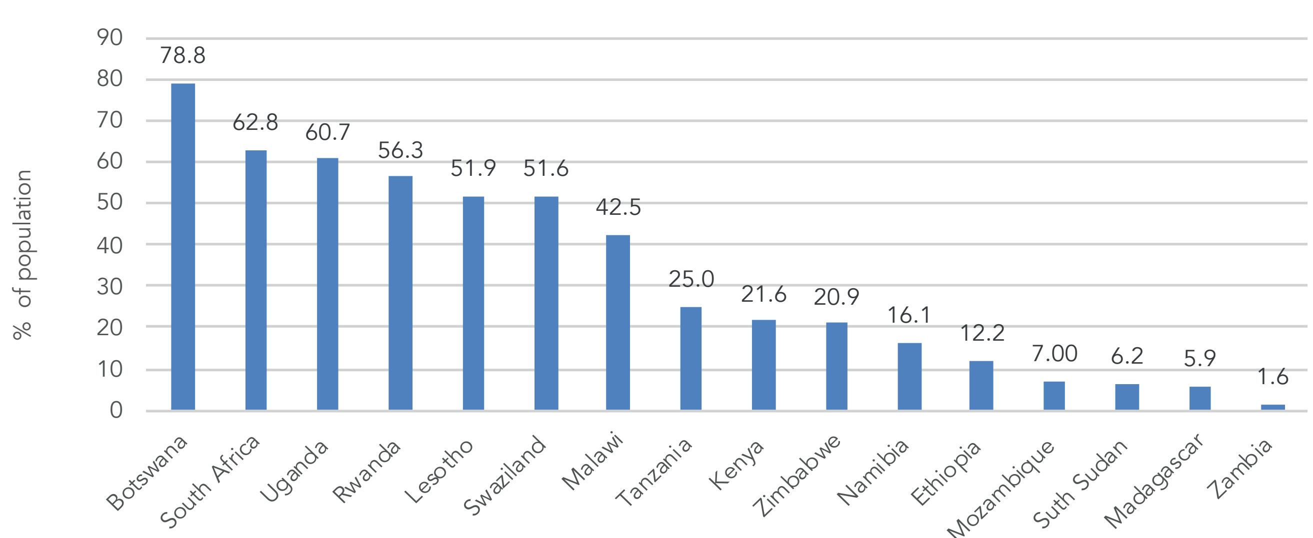
health and general welfare. Cash transfers reduce monetary poverty but also raise school attendance, but do not always lead to improved learning. They also stimulate use of health services and improve dietary diversity, are associated with reduction in child labour, and empower women and the youth in decision making and making choices.

The National Safety Net Programme (NSNP) in Kenya covers a total of 1.2 million households in three cash transfer programmes: cash transfer for orphans and vulnerable children (CT-OVC), persons with severe disability cash transfer (OPCT) and persons with severe disability cash transfer (PWSD-CT). As at 2018/19, the cash transfer for orphans and vulnerable children (CT-OVC) had enrolled 353,000 households, representing 29 per cent coverage. The older persons cash transfer (OPCT) (targeting households with individual(s) aged over 65 years) and the *Inua Jamii* programme (targeting individuals aged 70 years and above) had 833,129 beneficiaries, representing a coverage of 78 per cent. The persons with severe disability cash transfer (PWSD-CT) had 47,000 beneficiaries, representing 3 per cent coverage. The amount provided by the government under the social protection programmes has been constant over time at Ksh 2,000 and, therefore, real value has been eroded in addressing the intended intervention. Table 11.7 summarizes the nominal values of the CT-OVC. Although only the CT-OVC is represented, the evolution of cash transfers shows similar trend in decline of value of allocation in real terms, attributable to increase in cost of living or inflation.

Social protection coverage in Kenya is still relatively low compared to countries in Africa such as South Africa and Uganda (Figure 11.15). Although poverty rates declined in the last decade, it is relatively high with about 4 out of every 10 children living in poor households. This implies that it is essential to expand the coverage of ongoing social protection programmes.

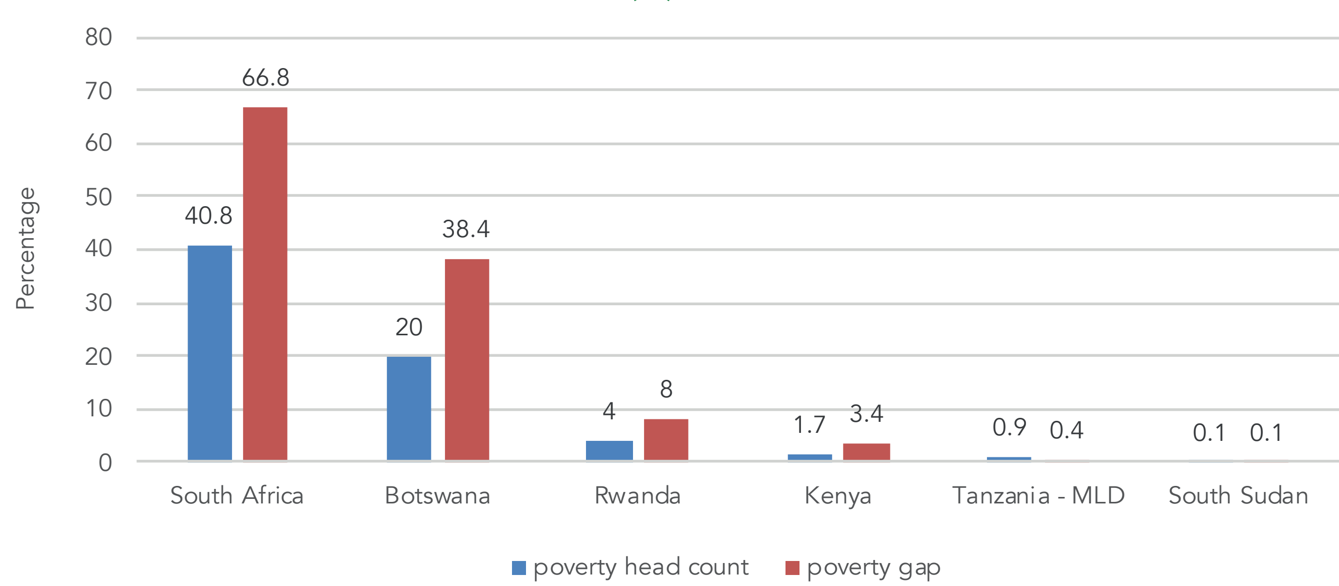
In addition, expanding programme coverage would be important in enhancing the impact of the programmes for which available evidence indicates poverty headcount reduction rates (in

Figure 11.15: Coverage of social protection and labour programmes in select countries, latest available (% of population)



Source: World Bank (2018), Aspire database

Figure 11.16: Poverty reduction rates in selected countries bottom 20%, latest available data (%)



Source: World Bank (2018), Aspire database

the bottom 20% of the population) are much lower for Kenya (at 1.7%) relative to Botswana and South Africa which had larger coverage and reduced poverty headcount by 20 per cent and 41 per cent, respectively (Figure 11.16). It is also important to enhance synergistic investments in other related sectors or programmes. A good example is the free access or waiver of the National Hospital Insurance Fund (NHIF) registration fees for households eligible for National Safety Net Programme (NSNP).

11.8 Key Messages and Recommendations

11.8.1 Key messages

1. The age structure of Kenya's population is youthful with high dependency ratio. This population is highly dependent on the working population who bear the burden of supporting rapid economic growth and provision of social needs of the growing population, including health education and gainful employment. Thus, the working population spends more on the dependents, with little left to save or invest for growth in Kenya.

2. Kenya outperforms countries in the EAC region and most Sub-Saharan Africa countries in the GCI. The key area of strength is in labour markets and innovation capability while the main weaknesses are in low performance of the health sector due to the threat of non-communicable diseases, low access to health care especially in the rural areas, and poor child health indicators.

3. The country's training is currently not driven by labour market demands. This results in excess supply of certain skills amidst critical shortages in others, for example in agriculture and excess supply in business-related courses.

4. The country has recorded improvements in health indicators over time, leading to an increase in life expectancy. Health outcomes show that there has been a decrease in Under-5 child mortality rates, and national headcount poverty ratio has declined in the last decade. However, full immunization coverage in the country has been decreasing.

5. The allocation by the national and county governments to the health sector has improved over time. Increase in health financing has seen a reduction in out-of pocket expenditure from 50.2 per cent in 2010 to 26.1 per cent in 2016. However, this is still above the recommended 12-15 per cent required to achieve universal health coverage (UHC).

6. Compared to other countries that offer social assistance programmes, cash transfers in Kenya are largely fragmented and are yet to have significant impact on poverty.

11.8.2 Recommendations

To address the emerging issues, various interventions are recommended:

1. Manage the population growth rate to reduce the dependency ratio. A rapid growth in the population size is a constraint to national development. Slowing down population growth rate by investing in health, education and skills among young people and creating income opportunities for those in the labour force will enable the country reap a demographic dividend.

2. Sustainable investment in health and skills development: Human capital development is strategic to socio-economic development of a nation. Investing in health and education is therefore critical as it ensures that the nation's human resource is knowledgeable, skilled, productive and healthy to enable the optimal exploitation and utilization of other resources to ensure sustainable growth and development. Kenya should continue making massive investments in education and health for it to realize the Vision 2030.

3. Capacity development of quality human resources: To equip all the sectors that drive the "Big Four" agenda, there is need to invest more in promoting TVET programmes notable entrepreneurship, technical trades, engineering and construction which drive the country as envisioned in the Kenya Vision 2030 and the "Big Four" agenda. The trainings provide a skilled labour capital required to achieve the country's development agenda and an entrepreneurial population that seeks to create more employment opportunities.

4. Higher investment in Science, Technology, Engineering and Mathematics (STEM) and technical subjects: More efforts need to be made by both national and county governments, and private sector to invest in institutions that promote STEM, and training of teachers through STEM teachers training institutions. This is in recognition that the subjects prepare students to excel in science and technology courses at tertiary level. The development agenda for Kenya is fully anchored on science, technology and innovation, thus the need to invest more in the STEM sector. However, for the county governments to buy in, the government has to link training to the labour market.

5. Aligning TVET institutions and other institutions of higher learning to their core mandates: The TVET Authority and the Commission for University Education should regularly monitor TVETs to ensure that they comply with their mandates by aligning them to technical subjects. Currently, business administration attracts most of the TVET students. Given the curriculum structure of the course, therefore, graduates tend to be more prepared to seek employment rather than initiating self-employment.

6. Investments in child and maternal health: There is need to focus on improving life expectancy in the country, through maternal and child health services especially among the disadvantaged groups. This includes focus on reduction of mortality from communicable diseases, and better

prevention of non-communicable diseases to reduce adult mortality rates, and investment in child health while curbing stunting and malnutrition, which seem to have permanent effects on human capital of any economy.

7. Increase health spending to match the Abuja Declaration. For the country to achieve the UHC agenda, both county and national governments must ensure that health budget allocation meets the Abuja Declaration of above 15 per cent allocation to health. This will reduce the high out-of-pocket spending for households, especially the low-income earners.

8. Strengthen reporting and coordination of social protection programmes: Domiciling social protection programmes under one coordination body could significantly improve the effectiveness of interventions. The mandate of the Social Protection Secretariat needs to be enhanced to be able to coordinate the various programmes under one body to improve effectiveness of interventions. An integrated sector-wide approach to data and information systems for social protection will need to be established.

9. Take deliberate measures to redress imbalances in human resources development among different regions in the country: The data analysis in this chapter has highlighted regional disparities in attainment of several social and human resources development indicators. It is important therefore that national and county government policies and investments are targeted to redress such disparities in human resource development. Moreover, the government can explore more options in bridging the gap by engaging the private sector and other interested parties.

CHAPTER 12

GOVERNANCE IN RESOURCE MOBILIZATION

Proper management of public resources (including public funds and public property) results in efficient use, realization of value for money, and use of resources for intended purposes. However, poor public finance management and breach of public finance management laws have led to misuse, misappropriation and loss of public funds, revenue and property as reported by the Auditor General, year in year out. Incidents of corruption manifest in misappropriation of public revenue, public funds, public property and taxes. There is need for continuous and periodic monitoring of compliance with relevant PFM laws. Illicit financial flows (IFFs), leakages in tax system, money laundering and concealment of proceeds of crime are key challenges in resource mobilization and therefore surveillance of IFFs should be enhanced. The financial services sector and other non-financial institutions (including professionals), and the gaming and betting industry are susceptible to money laundering. Stringent regulation should be imposed on these institutions, and the current scope of reporting institutions expanded.

12.1 Introduction

The Constitution of Kenya 2010 envisions good governance, transparency and accountability as some of the tenets of national values and principles of governance. The Constitution requires efficient, effective and economic use of public resources and prudent public finance management, and accountability in the use of public resources and delivery of public services. Corruption, fraud and misappropriation of public resources hinder resource mobilization and erode investor confidence. Other risks to resource mobilization are illicit financial flows through tax evasion, money laundering and corruption. Illicit financial flows and proceeds of crime and corruption are facilitated through various channels and institutions with the aid of professionals. This poses high risks and undermines the potential of domestic resource mobilization.

12.2 Public Finance Management

Article 201 of the Constitution of Kenya 2010 outlines the principles of public finance, with accountability as the hallmark for prudent financial management. The Constitution requires that revenue raised nationally is shared equitably among the national and county

governments; the burdens and benefits of the use of resources and public borrowing are shared equitably between present and future generations; public money is used in a prudent and responsible way; and financial management is responsible, and fiscal reporting is clear. Further, the Public Finance Management Act 2012 ("the PFM Act") provides for effective management of public finances, the oversight responsibility of Parliament and county assemblies, and the different responsibilities of government entities and other bodies. The Public Finance Management (County Government) Regulations 2015 and the Public Finance Management (National Government) Regulations 2015 ("the PFM Regulations") were published in support of the Public Finance Management Act 2012, which provides that the National Treasury is responsible for mobilizing domestic and external resources for financing national and county government budgetary requirements. It also provides that the County Treasury is responsible for mobilizing resources for funding the budgetary requirements of the county government and putting in place mechanisms to raise revenue and resources.

Further, the Constitution of Kenya 2010 provides for establishment of various institutions with a key role in public finance management. This has seen establishment of independent offices such as the Office of the Auditor General (Article 229), the Office of the Controller of Budget (Article 228), the Salaries and Remuneration Commission (Article 230), the Commission on Revenue Allocation (Article 216), the National Treasury (Article 225(1)), Central Bank of Kenya (Article 231), Parliament (Article 93) and County Assemblies (Article 176 (1)). The Kenya Revenue Authority also has a key role in tax revenue mobilization. The Public-Sector Accounting Standards Board which is established under Section 192 of the PFM Act sets generally accepted accounting and financial standards; prescribes the minimum standards of maintenance of proper books of account for all levels of government; prescribes internal audit procedures which comply with this Act; prescribes formats for financial statements and reporting by all State organs and public entities; publishes and publicises the accounting and financial standards and any directives and guidelines prescribed by the Board; and performs any other functions related to advancing financial and accounting systems management and reporting in the public sector.

The Cabinet Secretary National Treasury appoints receivers and collectors of revenue for the national government. At county level, the County Executive Committee member for finance appoints receivers and collectors of county government revenue who are responsible for collecting, receiving and accounting for county government revenue. The Debt Management Office at National Treasury handles issues of sustainability of public debt and provides regular updates of medium-term debt strategy. The Public Finance Management Secretariat deals with implementation of the Public Finance Management Act and its regulations. The Inter-Governmental Fiscal Relations Office at the National Treasury handles fiscal policy of both levels of government, and the Public Investment Management Department evaluates projects before implementation.

Despite the existence of these legislative and institutional structures, non-compliance with public finance management and breach of public finance management laws and regulations persist at various levels of government. For example, on the expenditure side, various Auditor General reports cite unlawful and unauthorized expenditure by public entities in excess of budget estimates; failure to document or account for expenditure, thus calling into question the authenticity of the claims of expenditure; and payment to contractors for goods not delivered, services not rendered or projects not commenced or completed, and accumulated and excessive outstanding unpaid

bills. In addition are expenditures, purchases, expenses and payments made by public entities without any or adequate supporting documentation to verify, authenticate and corroborate the payments, making it difficult to confirm the propriety, validity and existence of projects, supply of goods and/or services for which payments were made and casts doubt on the authenticity of the claim of expenditure. Consequently, value for money is not realized in expenditure of public funds. It also results in non-delivery of services or delivery of poor quality and substandard services to residents. Poor accounting practices enable financial impropriety, fraud and unethical practices. Further, is non-adherence to and flouting of procurement procedures as prescribed under the Public Procurement and Asset Disposal Act 2015 and the Public Procurement and Disposal Regulations 2006.

The Auditor General reports have also highlighted incidences of mismanagement in revenue collection. This includes inaccuracies and variances in the figures of revenue reported and revenue collected in form of overstating the amount of revenue collected. Other instances of fraud by officers are failure to bank revenue collections or under-banking of revenue collected. In addition to this is non-recovery of unbanked revenue from the responsible officers. Weakness in revenue collection systems is also reflected in lack of monitoring of field officers' activities for collection of fees, and inefficiency in collection of land rates and fees. Several county governments have been adversely mentioned for accumulation of arrears and penalties on properties, house rent, land rent and land rates and failing to collect revenue arrears or recover the owed amounts, thus denying the county revenue sources. There are issues touching on up to date records on arrears and supporting schedules for revenue, making it difficult to recover arrears. This impacts on the ability to maximize revenue collection potential and exposes counties to losses. Weaknesses in revenue collection systems, incidents of misappropriation, collusion, impropriety and fraud by revenue collection officers impact on resource mobilization as they lead to loss of revenue. It is important therefore for counties to maximize on revenue collection and implement efficient and transparent revenue collection systems.

The Auditor General reports have highlighted incidences of poor management of land assets. The Constitution under Article 60(1) (c) requires sustainable and productive management of land resources. However, audit reports on county governments have documented lack of records of ownership details, charge-out rates, land titles or ownership documents of the parcels of county government land and their value. Lack of transparency and documentation in allocation and transfer of public land to private developers and misappropriation of public land have also been raised as audit queries. The Auditor General has identified construction of government projects on contested land, leading to wastage of public funds and no value for money, and queried construction by government institutions on private or non-government owned land. The reports have also highlighted illegal and irregular allocation of public land, unprocedural allocation of land reserved for public purposes, unprocedural change of use of land reserved for public purposes, land grabbing of private, community and public land and failure by revenue collection officers to collect land rates and rent from defaulting parties. Issues of lack of integrity and poor governance in land management creates uncertainties and erodes investor confidence and diminishes investment opportunities and prospects.

Cases of corruption have also been profiled. For example, the Corruption and Ethics Survey in Devolved Services 2015 conducted by the Ethics and Anti-Corruption Commission found that the most prevalent forms of corruption include bribery, theft of revenue collected, procurement irregularities (bid rigging, inflation of prices, splitting of tenders to meet threshold,

tampering with clients' documents), favouritism and nepotism during recruitment, shoddy roads/bridges construction and conflict of interest in awarding of county tenders. The 2018 National Corruption Perception Survey reported that the Kenya Police, the Traffic Police, Judiciary, Ministry of Lands, Ministry of Health, Ministry of Interior and Coordination of Government functions were perceived as the most corrupt public institutions. Recent scandals surrounding the National Youth Service have seen significant amount of public funds lost. A few banks were found liable for violating financial transaction regulations in handling the finances associated with the scandals by failing to report large cash transactions, failing to undertake adequate customer due diligence, and failing to report to the Financial Reporting Centre on suspicious transactions and dealings.

Although the Auditor General's reports have flagged incidents of non-compliance of procurement and public finance management laws, the audit process and publication of audit reports are not timely, with audit reports produced up to two years after the financial year, which hinders effective interventions. Further, the audit exercise which is conducted at the end of a financial year, is largely reactionary and explanatory; it is not preventive, as it flags issues that have already occurred.

12.3 Illicit Financial Flows

Illicit financial flows are a key challenge in resource mobilization. Financial flows are said to be illicit if their origin, purpose or transfer is unlawful. This includes revenues from organized crime, tax evasion, fraud in international trade, money laundering and corruption. In 2017, the Global Financial Integrity estimated that Kenya had lost over Ksh 1.06 trillion (US$ 10.6 billion) in accumulated illicit financial flows since 1970. It also reported that in Africa, corruption related to outward-bound Illicit Financial Flows (IFFs) costs the continent 25 per cent of its collective gross domestic product. This translates to estimated losses of between US$ 50 billion and US$ 148 billion per annum.

The extractives sector is also affected by illicit financial flows. The landmark report of the High-Level Panel on Illicit Financial Flows from Africa commissioned by the African Union and UNECA notes that the leak of the Panama Papers has galvanized global attention on the impact of illicit financial outflows on domestic resource mobilization especially in the extractives sector (UNECA, 2017). As noted in Chapter 7 of this report, Kenya's mineral endowments represent some of the best resources available for mobilizing revenues for Kenya's economic growth and structural transformation. However, translating this abundant resource into sustained wealth for citizens remains a challenge. One of the challenges is the illicit financial flows affecting the sector through misappropriation or illicit transfer of revenue generated from natural resources. Africa, and Kenya in particular, is facing challenges of ensuring fairness in receiving revenue from the extractives. Of importance to note is that domestic resource mobilization and illicit financial outflows are at opposite ends of the goal to transform the extractives sector for the benefit of the country's economic development. This may result from policy, legislation and compliance gaps in regulatory regimes along the extractives value chain, which creates loopholes for illicit financial outflows, thus undermining the country's potential to mobilize domestic resources for development.

Leakage in tax system also undermines the potential of revenue collection and domestic resource mobilization. This is particularly evidenced by rampant tax avoidance and evasion by multinational corporations, which is known as 'base erosion and profit shifting'. Ultimately, this causes revenue loss and deprives the country of revenue such as income from taxes or customs duties. Collusion by taxpayers with revenue and tax officers also perpetuates fraud and undermines enforcement of collection

of taxes due and payable from taxpayers. The techniques employed in money laundering have become sophisticated and complex in recent years, for example by moving away from the use of shell companies in secrecy jurisdictions to the purchase of insurance products that can be turned into cash quickly. Kenya is a member of the Global Forum on Transparency and Exchange of Information for Tax Purposes which means that it is committed to the fight against harmful and unlawful tax practices.

Money laundering and concealment of proceeds of crime and illicit acquisition of wealth, assets and property has implications on revenue collection. Profits from organized crime or corruption require money laundering structures to conceal the illegal source of one's income and earnings. The Proceeds of Crime and Anti-Money Laundering Act 2009 and the Proceeds of Crime and Anti-Money Laundering (Amendment) Act 2017 focus on the offence of money laundering and prescribes measures for combating the offence, to provide for the identification, tracing, freezing, seizure and confiscation of the proceeds of crime. It also establishes an Asset Recovery Agency and Financial Reporting Centre which assist in the identification and tracing of proceeds of crime, combating money laundering, and the financing of terrorism. The Financial Reporting Centre disseminates reports to and shares intelligence with the Ethics and Anti-Corruption Commission, particularly on crimes relating to corruption.

12.4 Other Channels of Potential Risks to Resource Mobilization

Illicit financial flows, proceeds of crime and corruption are facilitated through various channels and institutions. These institutions require strict regulation to ensure that they are not used to facilitate or conceal illicit financial flows and proceeds of crime.

12.4.1 Financial services

To regulate money laundering as a predicate offence and pointer to offences such as corruption, the Proceeds of Crime and Anti-Money Laundering Act 2009 places reporting obligations on certain "reporting institutions" which means "financial institutions and designated non-financial businesses and professions". Financial institutions and some specified professions are identified as key duty-bearers in anti-money laundering. This is an effort to combat money laundering and terrorist financing, and abuse of services in financial institutions whose financial systems are used to transfer, transmit or maintain illicit proceeds. The nature of money laundering makes financial institutions one of the first point of contact for money launderers due to the nature of the services they offer, including deposits, transfers, withdrawals, loans, investments and foreign exchange.

Financial institutions and designated non-financial businesses and professions are conferred with reporting obligations. Part IV (Sections 44, 45, 46, 47 and 48) of the Act stipulates anti-money laundering obligations of a reporting institution, including monitoring on an ongoing basis all complex, unusual, suspicious, large or such other transactions; taking reasonable measures to satisfy itself as to the identity of potential and existing customers seeking to carry out transactions with it, and undertaking customer due diligence on its existing customers ("know your client"); establishing and maintaining client records, records of all transactions and records of a person's identity; and to establish and maintain internal controls,internal reporting procedures and to register with the Financial Reporting Centre.

The Central Bank of Kenya has noted that Kenya is susceptible to money laundering due to its location and cash-based economy. Anti-money

laundering efforts often face challenges in cash-based societies (Passass, 2015). Cash-based societies are commonly considered a high risk for money laundering because "the dominance of cash transactions, coupled with the narrowness of the financial sector (low levels of penetration), makes it easier for the proceeds of crime to be integrated into the rest of the economy without the involvement of the financial system in the initial stages" (Passass, 2015). However, the challenge is not necessarily experienced with the number or frequency of the cash-based transactions, but with the anonymity associated with cash-based transactions. Anonymity hampers traceability of the transactions. Traceability is poor when checks, controls and governance systems in a country are weak.

Thus, the Proceeds of Crime and Anti-Money Laundering Act requires the reporting of all cash transactions above a certain threshold to the Financial Reporting Centre. The Proceeds of Crime and Anti-Money Laundering Regulations 2013 require that for large, frequent or unusual cash deposits or withdrawals, the customer must provide written confirmation that the nature of his business activities normally and reasonably generates substantial amounts of cash. Further, all reporting institutions are required to report all cash transactions amounting to or exceeding US$ 10,000 (Ksh 1 million) whether or not the transaction is suspicious. Monitoring and reporting of cash transactions is an essential pillar of an effective anti-money laundering framework. The law therefore imposes limits on daily cash transfers and mandatory reporting of transactions that exceed the limit. The law requires that any bank withdrawal that exceeds Ksh 1 million must be documented and the transacting party must declare the source, purpose and beneficiaries of the cash. This seeks to cure the risks associated with cash transactions. However, there is need to pay attention to regular patterns of frequent withdrawals and deposits of suspicious transactions that may fall below Ksh 1 million and thus evading the reporting requirements. That said, the Banking Act was amended by Section 65 of the Finance Act 2018 to include a new Section 33C requiring the Central Bank of Kenya to develop regulations prescribing conditions on deposits and withdrawals (which in essence relate directly to cash transactions). Section 33C of the Banking Act also provides that all existing guidelines or regulations on deposits or withdrawals would become null and void within 14 days of the coming into force of the new regulations to be developed by the Central Bank of Kenya. This amendment may be difficult to implement and seems inconsistent with the Proceeds of Crime and Anti-Money Laundering Act and its regulations and is likely to have a negative effect on the enforcement of these laws. There are also risks associated with weak regulation of bank safety deposit boxes which can be used to deposit and maintain illicitly acquired funds.

Further, some financial platforms are not adequately regulated, and their reporting obligations are not adequately covered by the Proceeds of Crime and Anti-Money Laundering Act. Mobile money allows customers to access basic financial services easier than ever before. The development of this digital class of financial products and subsequent increase in mobile transactions is potentially driving innovations in money laundering schemes. However, M-Pesa/ Airtel Money and other mobile money providers are not adequately covered by the reporting obligations, and the reporting obligations of mobile money dealers and agents are not in line with those contemplated in the law for terrorism financing, money laundering and proceeds of crime. Other financial platforms such as Western Union are also not adequately regulated or monitored, and the requirements put in place for these platforms are weaker than those imposed on other financial institutions. These systems are vulnerable to money laundering and other illicit activities to facilitate cash transactions which remain unreported. With more people transacting digitally and

more funds flowing through mobile channels, the importance of customer verification for mobile money transactions must be increased by regulators to make mobile transactions as transparent and secure as possible.

Through bilateral agreements, Kenya has sought to establish mechanisms for recovery of foreign assets and return of foreign wealth acquired through corruption or fraud and deposited in foreign countries. Diplomatic channels also facilitate signing and conclusion of extradition treaties with foreign jurisdictions. In 2018, the Government of Kenya signed the Framework for the Return of Assets from Corruption and Crime in Kenya (FRACCK) with the Swiss Federal Council. This, coupled with Mutual Legal Assistance, enables authorities to obtain assistance from foreign countries to trace proceeds of crime and gather evidence to assist in criminal investigation or proceedings in another country.

The Nairobi International Financial Centre has been established under the Nairobi International Financial Centre Act 2017 with the National Treasury assigned as the implementing department to drive the process of creating the Centre. The Tax Justice Network defines International Financial Centres ("IFCs") as the commercial communities hosted by tax havens, which exploit the legislation and corporate secrecy offered by the tax haven to the benefit of foreign residents (TJN UK 2008, 3–4). In an IFC, the clustering of financial intermediaries and professional service providers – bankers, lawyers, accountants – in one location allows for easier coordination of financial transactions. This reduces transactional costs and creates economies of scale, benefitting investors and other financial sector stakeholders (Kaminsky, 2009).

IFCs typically have foreign investment opportunities, low or no foreign corporate taxes, connection with other financial centres, offer a high concentration and diversification of banking activities such as credit for import, currency and foreign exchange trading, cross-border funds transfer, foreign borrowing and lending, and foreign investment and wealth management (Warris, 2014). Typically, countries that establish IFCs are driven by a desire to attract capital.

However, while a foreign investor may have legitimate reasons for using an IFC, the IFCs are susceptible to attracting criminals who are seeking to use the Centre as a vehicle for money laundering and concealment of funds acquired through illicit or illegitimate means. This includes concealment of finances generated from tax evasion, corruption, and other criminal activities. The secrecy and confidentiality offered by IFCs grants such individuals the opportunity of having their identity concealed and the source of their income untraceable. The tax incentives and exemptions granted by the governments that host IFCs can also be used to avoid payment of taxes.

Some features of IFCs can therefore undermine the achievement of crucial goals, particularly tax collection, domestic revenue generation, and financial integrity and transparency (Warris, 2014). IFCs increase the risk of capital outflows and tax evasion in other countries. There is need for a country that establishes an IFC to balance between the need to attract foreign investment and ensure that the IFC is not used as a vehicle for money laundering or concealing the identity and financial dealings of criminals.

12.4.2 Professionals

Money laundering activities are largely facilitated and aided by professionals, including lawyers, bankers, accountants and estate agents. The Proceeds of Crime and Anti-Money Laundering Act 2009 and its attendant regulations place reporting obligations on designated non-financial businesses and professions. The Act contemplates such "Designated non-financial businesses or professions" as comprising

casinos (including internet casinos); real estate agencies; dealing in precious metals; dealing in precious stones; accountants, who are sole practitioners or are partners in their professional firms; non-governmental organizations; and such other business or profession in which the risk of money laundering exists as the Cabinet Secretary National Treasury may, on the advice of the Financial Reporting Centre, declare.

Advocates, practicing lawyers and their practicing establishments are not designated as reporting institutions or persons under the Proceeds of Crime and Anti-Money Laundering Act, though the Act empowers the Minister (now known and referred to as Cabinet Secretary), for the time being responsible for matters relating to finance, to declare any business or profession where the risk of money laundering exists as a designated non-financial business or profession. The provision of legal services is based on good faith by advocates when serving their clients. However, because of the nature of services they provide, advocates are exposed to facilitating money laundering and financing of terrorism activities while representing their clients, for example in the provision of client account and legal advisory services to clients, drafting of legal documents and acting as proxies for their clients. As a result, an advocate or legal firm can be involved knowingly or unknowingly in money laundering and/or financing of terrorism activities, thus exposing them to legal, operational and reputational risks.

Legal professionals are therefore designated as reporting entities under the Financial Action Task Force recommendations and in several international jurisdictions. However, this is not the case under the Proceeds of Crime and Anti-Money Laundering Act and its regulations. In 1999, Kenya committed to complying with international Anti-Money Laundering/ Countering the Financing of Terrorism (AML/ CFT) standards, which are set by the Financial Action Taskforce and is committed to continuous compliance with its standards.

The legal professions are involved in structuring various commercial agreements such as establishment of companies and acting for buyers and purchasers of property. While these are activities undertaken in the ordinary course of legal business, they are subject to abuse where a client intends to register a shelf or shell company or purchase property for money laundering or to conceal criminal activity. Further, a shell or shelf company may be incorporated to conceal the true beneficial owners of a company and its assets. There are also cases where law firms hold money in client accounts on behalf of their clients pending further instructions. Law firms can receive money on behalf of clients and thereafter remit the funds as instructed. The danger arises where client accounts are used to execute corrupt transactions or to deposit and conceal proceeds of crime. It may be difficult for an unsuspecting advocate to know or confirm the identity of their client, whether they are involved in any criminal activity, or the source of the funds (whether they are proceeds of crime, corruption or money laundering). Further, not all finances and money pass through financial institutions or banks, and thus do not leave an audit trail. For example, proceeds can be used to make cash purchases of real estate or cars with no trace, whereby such sectors are not regulated. There is need to regulate purchase of property and cars in cash.

The obligations imposed on reporting institutions (which means a financial institution and designated non-financial business and profession) do not apply to certain professions outside this bracket. Some key institutions that are susceptible to money laundering may be left out from exercising anti-money laundering efforts and may be exempt from prohibitions, requirements or obligations intended to prevent, report or penalize money laundering. The designated non-financial businesses and professions are narrowly defined, and no clear duties/obligations placed. Some professions may continue advising or assisting in money

laundering because there is no explicit prohibition for them not to do so, for example financial analysts, tax specialists, dealers in automobiles and boats and horse races. Sectors which deal in high value items where the use of cash is common and are susceptible to money laundering such as dealers in automobiles and boats and horse racing, art and antique dealers, auction houses, and sellers of other luxury goods are not adequately regulated.

12.4.3 Gaming and betting industry

In Kenya, the Betting, Lotteries and Gaming Act and the Proceeds of Crime and Anti-Money Laundering Act regulate the risk of money laundering in the betting, gaming and lotteries industry. Casinos are one of the designated non-financial reporting institutions contemplated under the Proceeds of Crime and Anti-Money Laundering Act.

The gambling industry is susceptible to money laundering by criminals due to the unregulated and common use of cash, which does not leave an audit trail. Customers may attempt to use proceeds of crime to obtain legitimate money in return or using proceeds of crime to fund their gambling activities. Customers spend the proceeds of crime in casinos which offer individuals the ability to remain anonymous. There are also cases where individuals in the casinos and betting premises act on behalf of a third party to conceal the identity of the funds. Criminals may also acquire arcade operators and shops in the gaming sector to launder funds. Collusion with employees in betting shops to launder criminal funds is also a risk area. Betting and gaming arcades are attractive because they allow the customer to remain anonymous.

12.4.4 Unlicensed deposit-taking entities and pyramid schemes

Unlicensed deposit-taking entities and pyramid schemes lure members of the public to incentivize them to deposit their money with them and promise high returns on their money or acquisition of properties which are fraudulent schemes intended to defraud the public.

12.5 Key Messages and Recommendations

12.5.1 Key Messages

1. Appropriate management of public resources (including public funds and public property) results in efficient use, realization of value for money, and use of resources for intended purposes. In spite of the existence of various legislative and institutional structures, non-compliance with public finance management laws and regulations persists at various levels of government due to weak monitoring of expenditure throughout the financial year. This includes mismanagement of public finances, public revenue, tax collection and land assets. The Public Finance Management laws in Kenya in some instances fall short of the internationally accepted standards of Public Expenditure Finance Assessment (PEFA) methodology.

2. Further, corruption manifests in the misuse of public resources such as public revenue, public funds, public property and taxes. These are areas susceptible to corruption, and which lead to loss of public funds and diminution of revenue collected resulting in revenue shortfalls.

3. Illicit financial flows, leakages in tax system, money laundering and concealment of proceeds of crime undermine the potential of revenue collection and domestic resource mobilization.

4. Money laundering activities and illicit financial flows are facilitated through various channels including financial institutions and certain businesses and professions. The financial services industry is highly susceptible to the

risks associated with money laundering due to the nature of services and products they provide, including deposits, transfer, foreign exchange and investment savings. Efforts to regulate cash-based transactions in the banking sector have been undermined by an amendment to the Banking Act, which requires the Central Bank of Kenya to develop regulations prescribing conditions on deposits and withdrawals with the effect that all existing guidelines or regulations on deposits or withdrawals will become null and void within 14 days of the coming into force of the new regulations. Some financial platforms including mobile money platforms are not sufficiently regulated, and their reporting obligations are also not adequately covered by the Proceeds of Crime and Anti-Money Laundering Act.

5. Money laundering activities are largely facilitated and aided (knowingly or unknowingly) by professionals including lawyers, bankers, accountants and estate agents which pose risk areas in money laundering. However, the Proceeds of Crime and Anti-Money Laundering Act only capture casinos (including internet casinos); real estate agencies; dealings in precious metals; dealings in precious stones; accountants, who are sole practitioners or are partners in their professional firms; and non-governmental organizations as designated non-financial businesses and professions which are also reporting institutions. Thus, the obligations imposed on these reporting institutions do not apply to certain professions outside the businesses and professions stipulated in the Proceeds of Crime and Anti-Money Laundering Act and its regulations. This includes advocates, tax specialists and financial advisers.

6. Further, although the gambling industry is susceptible to money laundering by criminals, it is not adequately regulated to mitigate the risks associated with the industry in money laundering.

7. The above are the high-risk areas that provide channels for money laundering, illicit financial flows and tax evasion which undermine domestic resource mobilization.

12.5.2 Recommendations

1. There is need for periodic monitoring of public entities and their compliance with the public finance management laws. Monitoring and evaluation of projects until completion should be conducted for all projects to ensure value for money and accountability. Prudent and efficient fiscal management should be entrenched at all levels of government.

2. Accounting officers should comply with financial reporting standards as recommended by the PFM Act and International Public Sector Accounting Standards developed by the Public Sector Accounting Standards Board. Professionals implicated in audit queries should be sanctioned and subjected to a disciplinary process. Section 65 of the Public Audit Act 2015 provides for various sanctions including debarment of accounting officers from their professional societies to prevent them from practicing; reduction in rank; reimbursement and surcharge which should be used to recover monies lost and to prevent accounting officers who have been involved in dubious or fraudulent practices from continuing to practice or continue their employment positions.

3. Revenue collection systems could be harmonized across counties and training of revenue officials undertaken to reduce leakages in revenue collection. As custodians of public property and public funds, public institutions must ensure prudent, efficient, effective, economic and lawful public finance management.

4. There is need to scale up surveillance of illicit financial flows through collaboration among other institutions including the Kenya Revenue Authority, Financial Reporting Centre and Asset Recovery Agency. There is need for increased coordination, collaboration and information exchange between anti-corruption and tax enforcement agencies. Their activities, operations and efforts should be synchronized. International tax evasion and avoidance can be combated by conclusion of bilateral tax treaties providing for mutual assistance and the exchange of information.

5. There is need to expand the list of non-designated businesses and professions to capture tax specialists and tax advisors. Further, in collaboration with the Law Society of Kenya, Advocates should be sensitized on the parameters of Attorney-Client privilege and their implications on corruption.

6. Transmission, reporting and sharing of information and suspicious transactions and dealings should be strictly regulated between mobile money dealers, their headquarters and should be relayed to the Financial Reporting Centre and investigative and enforcement authorities. Monitoring of senders and recipients, and locations of such persons should be enhanced.

7. Regulation of betting, gaming and lotteries should be enhanced and money laundering risk assessments carried out. Employees of casinos should be well trained on the risk of money laundering in casinos and betting premises. Adequate supervision of table gaming and gaming machines should be enforced to minimize the risk of money laundering, criminal lifestyle spend, cheating and collusion. Customer due diligence checks, including the verification of customer identities and source of funds, should be exercised to limit the risk of exposure to money laundering.

8. Good governance remains key in mobilizing adequate domestic resources and sealing loopholes that facilitate illicit financial outflows. This entails the ability to formulate and implement effective strategies, policies, laws and regulations for mobilizing optimal revenues from the extractives sector. At the very basic, it should minimize illicit financial flows and at the very best, entirely eliminate resource mobilization-inhibiting practices along the extractives value chain. Imposing stringent data disclosure obligations on investors to disclose geological data in their possession to the government is critical in bridging information asymmetry to ensure effective implementation of enforcement and compliance measures by the government. This, in addition to creating a balanced mix of tax instruments, will enable optimal resource mobilization.

CHAPTER

13

CONCLUSION AND RECOMMENDATIONS

13.1 Conclusion

This report has discussed strategies for mobilizing resources necessary for effective implementation of the Kenya Vision 2030 in driving the economy towards realization of Kenya's sustainable development. From a broad perspective, the resources under consideration include finance, land, human capital, technology and innovations. Several conclusions are drawn from the foregoing discussions and analysis.

Macroeconomic Performance

Kenya's economy rebounded in 2018 after a slow growth experienced in 2017, which was occasioned by prolonged electioneering period and adverse weather conditions. The economic recovery is attributed to sustained macroeconomic stability, favourable weather conditions, political stability and improved security. Inflation remained within the government target range, exchange rate was stable, while interest rates remained at lower levels.

Fiscal stability was maintained with improved fiscal deficit as the government maintained its commitment to the fiscal consolidation path. This notwithstanding, revenue grew at a slower pace than that of GDP despite various tax reforms and subsequent increase in revenue performance. As such, external financial resources, including external loans, grants, FDI and remittances, continued to play a significant role in filling the financing gap.

Total public debt to GDP in nominal terms fell marginally during the period, with external debt to GDP declining to 29 per cent of GDP in 2017/18 from 30 per cent in 2016/17. In addition, debt remained at sustainable levels. Similarly, marginal improvements in the current account were registered following increased earnings from exports of tea, horticulture, freight transport, and tourism. Further, strong diaspora remittances eased the financing of the current account.

The existing level of investments falls short of the desirable 30 per cent of GDP, while savings-investment gap remained wide. This emphasizes the need to strengthen mobilization of domestic financial resources. It requires doubling of gross national savings to reach at least 25 per cent of GDP by maintaining fiscal prudence, which is critical in closing the financing gaps.

Financial Sector Performance and Developments

The contribution of the financial sector to GDP has been relatively stable despite its slowed growth during the review period. This is largely attributed to the various reforms undertaken by the government with the aim of developing Kenya as an internationally competitive financial centre by improving access, efficiency and stability.

Domestic credit to government grew faster than bank credit to the private sector. In addition,

private sector credit to GDP ratio was low at 44 per cent compared to above 100 per cent for most aspirator countries. With the interest rate cap, the share of loans in small banks increased compared to that of the medium and the large banks which adopted a more risk averse strategy in lending especially with persistent non-performing loans. Furthermore, lending to smallscale borrowers was subdued largely due to tightening of loan guarantees against risks.

There exists enormous opportunities to raise long term capital in Kenya through equities and fixed income securities. However, performance in primary equity market and corporate bonds was dismal despite the various reforms to increase efficiency, investors' confidence, products and liquidity. There is a waning investor confidence in the corporate bonds market with recent experience of collapse of firms after issuing bonds.

The general insurance business dominates the insurance industry at about 68 per cent compared to long term insurance business at 32 per cent. To be able to facilitate mobilization of long term capital from the insurance industry, there is need to increase penetration especially on long term insurance business.

There exists potential to increase savings in the pension sector especially for the informal sector, which employs over 12 million people. Further, a review of the investment policy for pension scheme is necessary to provide investment of funds in other sectors of the economy to avoid just investing in government securities.

Diaspora Resources

The contribution of the diaspora in national development cannot be over-emphasized. The diaspora community plays a significant role in economic development through financial remittances, skills, expertise and knowledge.

Remittances into Kenya have been on an increasing trend in recent times, boosting fiscal sustainability, current account financing, savings, investments and household income generating activities. However, sustained growth of the sector is constrained by high cost of transactions, restrictive regulatory practices, poor working conditions, limited data and information management, among others.

There is room to improve mobilization of remittances through use of innovative instruments, including diaspora bond, enabling financial regulations and targeted incentive packages and promotion of use of formal channels for sending remittances. Moreover, there is need to strengthen the regulatory framework in the wake of emerging risks including cybercrime and money laundering following developments in technology.

Extractives

The mineral and hydrocarbon sector has the potential to contribute 10 per cent to GDP, up from the 1.3 per cent in 2018, if fully exploited. The key challenges derailing development of the sector include: weak regulatory and institutional framework, high capital requirements, low local capacity, transfer pricing, lack of transparency in information disclosure, limited value addition, low sustainability, unclear benefit sharing framework and adverse environmental impact. The other challenge relates to conflict and insecurity in exploiting transboundary resources.

Land Resources

Land is an important factor of production which is needed in supporting affordable housing, infrastructural development, manufacturing, food security and agriculture. The agriculture sector contributes about 30 per cent of GDP and provides livelihoods to over 80 per cent of the population. However, uncontrolled subdivision of agricultural land into fragmented uneconomical use, poor farming methods, urban sprawl into prime agricultural land and unsustainable agricultural practices hinders

its potential to support the key sectors of the economy.

Further, while use of public land may be the desired first option while undertaking infrastructure development, the public land portfolio in Kenya has diminished. In the absence of available public land, the government may acquire land through compulsory acquisition or transfer to the State. In spite of the frequent use of compulsory acquisition by the government to acquire land for infrastructural projects, the process is yet to be standardized.

Accessibility of land, ownership and administration, security of tenure, land use and development, sustainable use of agricultural land and environmental conservation are key issues at the core of reform measures in the land sector. Besides, harmonization of multiple land laws and improved coordination among national government, county governments and other institutions has potential to enable full exploitation of land for sustainable development.

Agriculture

The agriculture sector contributes a third of the country's GDP and is important for employment and ensuring sustainable livelihoods. Despite this, public spending on the sector by both levels of government in the last three years was estimated at 8.5 per cent of total expenditure which is 1.5 per cent below the Malabo commitments (2014). There is need to increase investment in the sector by providing incentives for private sector investment in agriculture.

Agriculture as a devolved function has brought unique challenges which are occasioned by lack of overarching guiding policies, such as the Agriculture Policy and Veterinary Policy which are still in the legislative process. In addition, several functions that were expected to be championed by the counties have not been adequately realized, such as extension, maintaining food and nutrition security reserves, etc due to systemic challenges.

To attain 100 per cent food and nutrition security, there is need to increase productivity by adopting technology and enhancing access to markets to spur growth of the sector. Ensuring that land, water and forest resources are used sustainably is critical in enhancing the resilience of the sector to climate change.

Technology and Innovation

Kenya is on the path to technological transformation as witnessed through uptake of technology across all sectors. Higher productivity can be achieved through uptake of innovations and modern technology, integrated planning, resource pooling, information sharing and sustained capacity development. Education and research institutions have a key role to play in this sector.

The most sustainable way of technological transformation is through domestic manufacturing, which is a long-term strategy that can be built through concerted effort in technological transfer, promotion of innovations and local content, capacity development, upscaling of micro, small and medium industries, and deliberate protection of priority industries against unfair industrial and business practices. In the short-term, purchase of technology, equipment and machinery both locally and by importation are a viable strategy, but the country needs to be on the look-out for alternative sources of technological change such as donations, leases, and foreign direct investment.

The micro, small and medium enterprises are facing various challenges which hinder their contribution in innovation and technology especially through manufacturing. For sustainable uptake of innovations and modern technology, the country needs to revamp its manufacturing, develop critical skills and establish incubation hubs and industrial parks across the country.

Human Capital Development

The role of productive human capital cannot be underrated. Improvement can be seen through investments in health, training, education and quality of living. Mixed-skill-approach is key in ensuring that the required human capital is available in development activities. To achieve the Vision 2030, the country requires a pool of human resource that is creative, innovative, entrepreneurial and of appropriate ethical standards and competence. This requires strengthening of education institutions including universities, TVET and basic education institutions.

Effective implementation of the newly adopted competence-based curriculum will be instrumental in the realization of the required human resource capital. In addition, universal health and social protection programmes are integral parts of human capital development and are expected to improve the quality of human capital.

Governance in Resource Mobilization

Despite the strong legislative framework supporting enhanced public finance management, incidences of poor public finance management and breach of public finance management laws persists. Further, illicit financial flows, leakages in the tax system and money laundering and concealment of proceeds of crime continue to be a challenge in mobilization of domestic resources.

13.2 Recommendations

The following recommendations are suggested in view of the above discussions:

Macroeconomic Stability and Domestic Savings

Maintaining a stable macroeconomic environment is critical for sustainable economic growth and development. The ingredients of a stable macroeconomic environment include price stability, sustainable fiscal policy including public debt, and external sector balance. To achieve this, it is important to adopt an appropriate monetary policy, deepening tax policy and tax administration reforms, strengthen debt management, and sustain diversification of the country's export base and markets to improve the balance of payments. In addition, there is need to improve the business environment to reduce the costs of production particularly energy costs, provide incentives to support value addition and enhance marketing in regional and international markets. Greater focus on business environment for the micro and small enterprises is critical in supporting growth and development of the sector.

The increase in domestic savings requires aggressive sensitization and awareness creation to improve the savings culture among the populace, having in place a savings policy that addresses bottlenecks on both supply and demand side, maintaining fiscal prudence, attracting foreign direct investment, supporting growth and development of private sector so that they can make profits, and improving on education of the people to enable them engage in productive activities.

Financial Resource Mobilization

There is need to review the Banking Act and Regulations with a view to stimulating expansion of the deposit base to facilitate growth in bank credit to the private sector. Deepening and improving the quality of data on credit is critical in mitigating the existing high-risk premium on loans and eventual reduction of interest rates to boost lending and investments. To exploit opportunities provided by introduction of Islamic finance, insurance, capital markets, and pensions schemes, sensitization, awareness creation and coordination among key industry players should be intensified to enhance coverage and penetration. Innovative, user-friendly and

affordable products will promote uptake of long-term insurance business. There is need to remain vigilant with the increased use of advanced technology in financial services to ensure monitoring of risks and appropriate and prompt response should risk materialize. Further is targeting the informal sector and small-scale enterprises with appropriate products given its potential to mobilize savings. Reforms targeting the merger of DFIs should facilitate provision of equity and mobilization of long-term finance as well as support industrial capacity development.

Diaspora Resources – Financial and Skills Remittances

There is need to review regulations and incentives for diaspora remittances, which may include savings and investment facilities, tax discounts, reduce transaction costs, and encourage use of formal channels for remittances. Furthermore, the government may consider issuance of a diaspora bond to raise financing for the realization of the "Big Four" agenda. This strategy has worked in the Philippines, China, India and Israel for long-term investments. Improved coordination and collaboration can enhance transfer of skills and expertise of Kenyans living abroad. Further, appropriate systems should be established to enhance information gathering and data management, to enable establishment of diaspora networks to facilitate the sharing of knowledge, ideas and technology for capacity building and investment opportunities. This would also help in facilitating documentation, safety and protection of Kenyan immigrants and coordination and support systems including financial literacy for remittance senders and recipients.

Harnessing Extractives

Fast-tracking the establishment of institutional and administrative structures envisaged in both the Mining Act 2016 and the Petroleum Act 2019 will ensure proper management of the extractives sector. Specifically, these will strengthen resource mapping, licensing for exploration and mining, local content, artisanal and small-scale miners, revenue collection and management and benefit sharing. Further, an effective coordination framework among institutions is required to harness the synergies and delivery of their respective mandates. This will also enhance resource-flow linkages with other sectors of the economy.

Land Resources

Improvement of access and utilization of land resources requires harmonization of guidelines, frameworks and processes among all land agencies and county governments to enhance administrative efficiency in land processes and transactions. In addition, a clear monitoring framework should be established for alienation, allocation, disposal or acquisition of public land, including ownership, location and changes in ownership to enhance management and preservation of public land. Further, fast-tracking of the enactment of the Land Value Index Laws (Amendment) Bill 2018 will facilitate regulation of land planning, prices and acquisition. Governments can use land banking strategy to access unutilized land for future development. Full digitalization of the land register should also be hastened to minimize irregular and illegal allocation.

Agriculture, Forestry and Environment

The national government needs to fast track the enactment of the agriculture policy and the veterinary policy which will provide the over-arching policy direction for the sector, in addition to providing incentives for agricultural production systems that are efficient in the use and limit conversion of natural ecosystems (land and water) during the production process. There

is increasing competition for resources such as capital and labour, thus the need to embrace technology and embrace mechanization of the production process. Opportunities exist in activities that add value to raw bulky agricultural products to semi-processed or processed thus providing the producers with more options on where to sell their produce, this implying that farms need to be commercialized.

Technology and Innovations

The government needs to institute an integrated approach to planning, resource pooling, information sharing and a monitoring and evaluation framework with a view to enhancing management of innovations and technology. There is need to strengthen planning and financing of research and promote incubation hubs and industrial parks across the country. Education and training for innovation and technology can be enhanced through increased investment and enrolment in science, technology, engineering and mathematics, and promotion of specialization by earmarked education institutions. The country should continue promoting and protecting local manufacturing, micro, small and medium industries, and technological transfer. A robust monitoring framework on technology transfer should be established to track the progress of knowledge and skills passed to the locals by international development partners, especially those who receive incentive mechanism on the understanding that they will aid technological transformation of the country. Besides, innovators need to be sensitized and trained on entrepreneurship, commercialization and patenting of innovations.

Human Capital – Resources and Skills

It is important to improve on quality of education and training to match the changing needs of the market. In addition, the economy requires diversity of skills and knowledge, which the education and training institutions should be able to channel. The country should activate monitoring and evaluation mechanisms for quality assurance. All stakeholders in the education value chain should be well sensitized on the implementation of the competence-based curriculum, which is instrumental in realization of the required human resource capital. Quality basic education requires proper management, production and provision of basic facilities, recruitment of sufficient staff and retraining of teaching staff.

Up-scaling of resources in the health sector is critical in ensuring universal health coverage. These include requisite physical facilities and equipment, drugs and health personnel. Greater emphasis should be placed on preventive and public health care to reduce prevalence and burden of communicable and lifestyle diseases. Focus should be on improving maternal and child health services especially in poor areas and among the disadvantaged groups. This will include focus on reduction of mortality from communicable diseases and better prevention of non-communicable diseases to reduce adult mortality rates. Also, investment in child health while curbing stunting and malnutrition is necessary, since malnutrition appears to have permanent effects on the human capital of any economy.

Regarding social protection, strengthening of coordination of programmes can significantly improve effectiveness of various interventions. In addition, there is need to expand the mandate of the Social Protection Secretariat and establish an integrated sector-wide approach, in planning, financing and information and data management.

Governance in Resource Mobilization

Enhance monitoring of compliance with

public finance management laws, harmonize revenue collection systems across counties, scale up surveillance on illicit financial flows, expand the list of non-designated business and professionals, regulate the transmission, reporting and sharing of information and suspicious transactions, regulate betting gaming and lotteries, and promote good governance.

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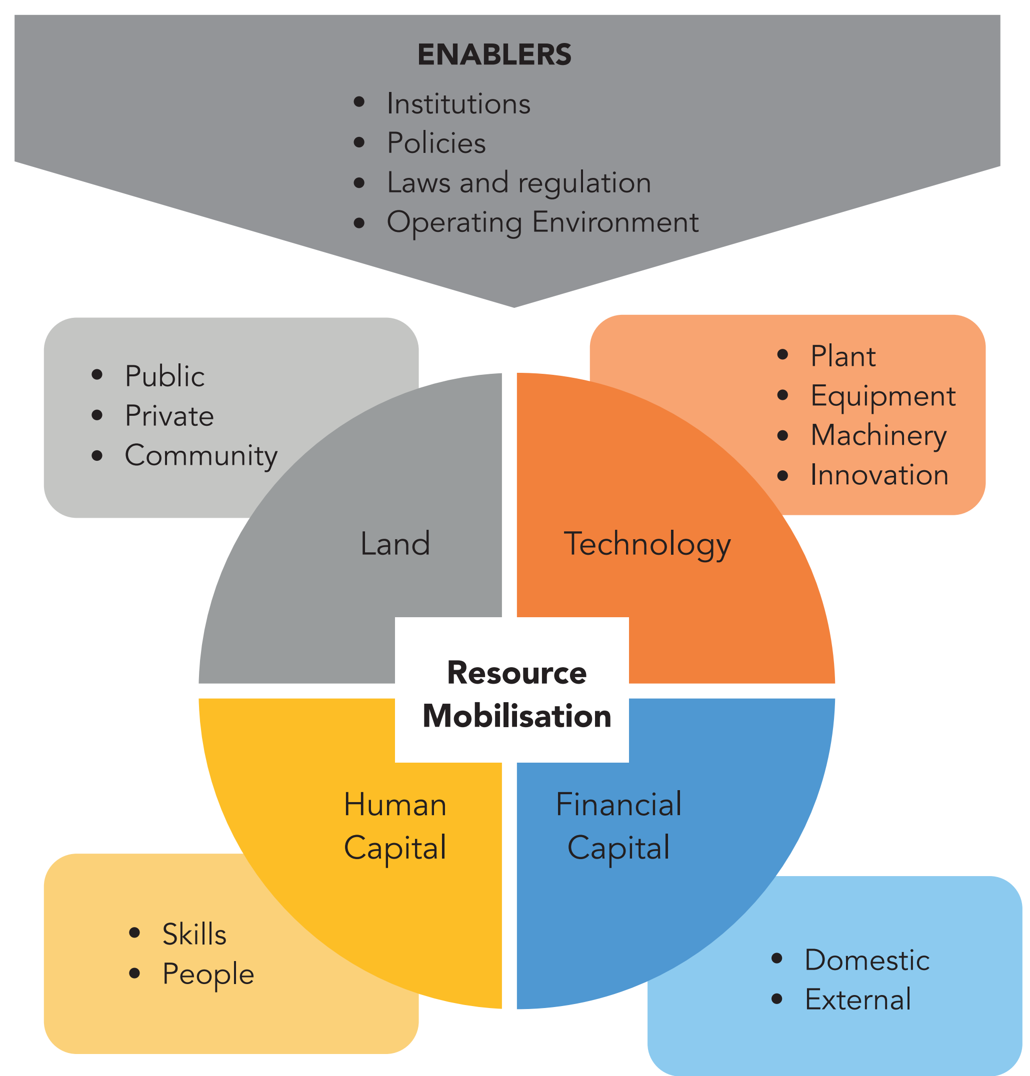
A | ANNEXES

Annex 1.1: Conceptual framework for resource mobilization



Annex 4.1: Public private partnership projects under construction, impending financial close or financially closed

No.	Project Name	Project Description	Project Value ($ millions)
1	Africa Geothermal International 140 MW	25-year Power Purchase Agreement on a Build, Own, Operate (BOO) basis at Longonot geothermal power project adjacent to Olkaria, Kenya	760
2	Lake Turkana Wind Power – 300 MW	The wind turbine farm is being developed on BOO basis in Loyangalani, Marsabit West, on a 20-year Power Purchase Agreement (PPA) with Kenya Power and Lighting Company (KPLC)	847
3	Gulf Power – 80.32 MW	The Heavy Fuel Oil (HFO) power plant is being developed on a BOO basis in the Athi River region, on a 20-year PPA with KPLC	108
4	Triumph Power – 82 MW	The Heavy Fuel Oil (HFO) power plant is being developed on a BOO basis at Kitengela near the Athi River area of Mavoko on a 20- year PPA with KPLC	156.5
5	Kinangop Power – 60.8MW	The wind power plant is being developed on a BOO basis in South Kinangop, Nyandarua County, on a 20-year PPA with KPLC	150
6	1050 MW Lamu Power Project	Located in Manda Bay, the Lamu Coal Power Plant is on a BOO basis over a 20-year period	2,000
7	100 MW Kipeto Wind Power	Feed in Tariff Power Plant on a BOO basis	323
8	Akiira Geothermal Power Project	Feed in Tariff Power Plant on a BOO basis	
9	35MW Geothermal Quantum Power Project	Located in Nakuru County, the Quantum Power project is based on BOO arrangement over 20 years	90
10	35 MW Geothermal Sosian Power Project	Located in Nakuru County, the Sosian Power project is based on BOO arrangement over 20 years	79
11	40 MW Cedate Solar Power	Feed in Tariff Power Plant on a BOO basis	77
12	40 MW Selenkei Solar Power	Feed in Tariff Power Plant on a BOO basis	84
13	40 MW Malindi Solar Power Project	Feed in Tariff Power Plant on a BOO basis	82
14	40 MW Alten Solar Power Project	Feed in Tariff Power Plant on BOO basis	105

Source: National Treasury (2019), Budget Policy Statement

Annex 5.1: Mobile money transfers, 2013/14-2017/18

	2013/14	2014/15	2015/16	2016/17	2017/18
Total number of agents	120,781	131,761	162,465	165,109	197,286
Total mobile money transfer accounts (millions)	25.93	26.5	31.39	34.18	42.58
Total number of transactions (millions)	824.26	1,002.25	1,304.52	1,577.68	1619.97
Total value of transactions (Ksh billions)	2,148.14	2,575.44	3,094.92	3,574.43	3,747.33

Source: Central Bank of Kenya (2018)

Annex 5.2: Selected banking sector and capital markets indicators for emerging economies, 2010 and 2016

	Bank deposits to GDP (%)		Domestic credit to private sector (% of GDP)		Stock market capitalization to GDP (%)		Insurance company assets to GDP (%)		Pension fund assets to GDP (%)	
Year	**2010**	**2016**	**2010**	**2016**	**2010**	**2017**	**2010**	**2016**	**2010**	**2016**
Brazil	47.3	59.3	52.8	62.3	69.6	43.4	8.9	13.34	14.45	12.68
Chile	37.3	54.1	98.9	101.3	136.5	93.3	19.55	22.3	62.4	69.6
China			126.3	156.8	62.3	34.9	12.29	20.26	0.68	1.48
Colombia	18.3	23.6	43.7	47.5	64.4	62.3	5.6	6.8	20.2	22.1
Czech Republic	60.3	67.6	46.7	51.3	23.3		10	10.3	5.87	8.42
Hungary	50.1	49.1	60.8	58.8	22	19.7	8.9	7.5	14.6	4.3
Indonesia	29.9	34.4	27.5	28.4	39.9	46.6	3.4	3.9	1.9	1.9
Malaysia	115.6	119.5	107.1	123.9	141.8	128.2	20.2	20.3	54.2	59.9
Kenya	**32.6**	**34.3**	**27.2**	**32.7**	**31.4**		**6.4**		**13.6**	**12.8**
Mexico	24.7	29.5	23.3	34	39.2	33.3	4.9	6.8	10.4	14.1
Morocco	82.8	88.6	66.9	70.5	74.1	57.1			18.1	
Namibia	59.1	51.1	48	65	0.16		33	33.1	77.4	85.4
Peru	28.8	36.8	25.4		61.1	43.6	4.2	6.4	20.6	20.7
Philippines	51.1	64.1	29.6	44.7	62.1	82.1	6.5	8.5	3.3	3.5
Poland	45.6	55.8	48.7	54.6	36.2	32.9	10	10	15.3	8.4
Singapore	113.89	122.6	96.2	127.4	246.1	220.3	42.2	44.6	17.8	31.2
South Africa	57.4	59.5	148.9	144.3	247.3	328.1	58.5	65.8	80	
South Korea	62.8	130.3	135.9	142.9	92.3	100.4	39.7	63.2	14.2	26.9
Thailand	87.9	114.5	115.8	145.6	69	109.6	13.3		5.3	6.8
Turkey	46	46.3	44.7	69.9	35.4	21.7	3	4.6	1.01	2.11
Zambia	14.4	19.1	9.2	15.4	14.4		1.1			

Source: World Bank (2019)

Annex 5.3: Rights issues at the NSE, 2010-2017

Year	Shares on Issue (Ksh millions)	Sum Raised (Ksh millions)	Subscription level (%)
2010	24.7	1,185.69	135
2010	488.63	9,830.34	103
2012	1,477.17	14,487.95	70
2014	99.5	579.12	183
2016	126.19	533	101
2016	4,396.72	28,798.54	92
2017	-	-	-
Total	**8,567.45**	**55,414.64**	

Annex 5.4: NSE companies' financial facilities use, 2010-2017

Sector/Facility	Agricultural	Commercial and Services	Industrial and Allied	Alternative Investment Market Segment
Commercial Paper	X	X	√	X
Asset finance	X	X	√	√
Finance lease	X	√	√	√
Trade finance	X	√	√	√

Annex 7.1: Lists of companies prospecting for oil and the blocks allocated/results

Operator	Year	Well	Block	Basin	Encountered/Status
BP/Shell	1960	Pandangua-1	L-4 (former L-14)	Lamu	Gas shows
BP/Shell	1960	Walu-1	L-4	Lamu	Dry hole
BP/Shell	1961	Meri-1	3B	Anza	Dry hole
BP/Shell	1962	Mararani-1	L-3	Lamu	Fluorescence (dry well)
Mehta & Co.	1962	Ria Kalui	L-19	Lamu	Oil stains
BP/Shell	1963	Walu-2	L-5	Lamu	Fluorescence
BP/Shell	1964	Dodori-1	L-13	Lamu	Gas shows
BP/Shell	1967	WalMerer	L-1A	Lamu	Gas shows
BP/Shell	1968	Garissa 1	L-1A	Lamu	Dry hole
BP/Shell	1971	Kipini-1	L-6	Lamu	Fluorescence and Gas shows
BP/Shell	1971	Pate-1	L-4	Lamu	Gas shows
Texas Pacific Kenya	1975	Hargaso-1	L-1B	Lamu	Gas shows
Chevron	1976	Anza-1	3A	Anza	Oil stains
Chevron	1976	Bahati-1	3B	Anza	Oil stains
Total Kenya	1978	Simba-1	L-9	Lamu	Gas shows
Kenya Cities Service Inc.	1981	Maridadi-1	L-6	Lamu	Dry hole
Kenya Cities Service Inc.	1981	Maridadi-1A	L-6	Lamu	Dry hole
Kenya Cities Services INC.	1982	Maridadi-1B	L-6	Lamu	Gas shows
Kenya Cities Service Inc.	1982	Maridadi-1B	L-6	Lamu	Dry hole
Union Oil of Kenya	1985	Kofia 1	L-15	Lamu	Fluorescence and Gas shows
Petro-Canada	1986	Kencan-1	L-1A	Lamu	Gas shows
AMOCO	1987	Elgal-1	2A	Mandera	Dry hole
AMOCO	1987	Elgal-2	2A	Mandera	Dry hole
AMOCO	1988	Bellatrix-1	10A	Anza	Dry hole
Total Kenya	1988	Ndovu-1	9	Anza	Gas shows
AMOCO	1988	Sirius-1	10A	Anza	Dry hole
AMOCO	1989	Chalbi-3	10A	Anza	Dry hole
Total Kenya	1989	Duma	9	Anza	Gas shows
AMOCO	1989	Endela-1	3A	Anza	Gas shows
AMOCO	1989	Hothori-1	2B	Mandera	Fluorescence and Gas shows
WALTER	1989				

Operator	Year	Well	Block	Basin	Encountered/Status
Total Kenya	1990	Kaisut	9	Anza	Dry hole
Shell	1992	Eliye Spring	10BA (former 10B)	Tert. Rift	Dry hole
Shell	1992/3	Loperot-1	10BB	Tert. Rift	Gas and Oil shows
Woodside Energy	2007	Pomboo-1	L-5	Lamu	Dry hole
CNOOC	2010	Bogal-1	9	Anza	Minor Gas shows
Apache	2012	Mbawa-1	L-8	Lamu	Gas shows
Tullow Kenya	2012	Ngamia 1/1A	10BB	Tert. Rift	Oil discovery
Tullow & Africa Oil	2012	Twiga South-1	13T	Tert. Rift	30m of net oil pay
Anadarko Kenya Co.	2013	Kiboko-1	L-11B	Lamu	Dry hole
Anadarko Kenya Co.	2013	Kubwa-1	L-7	Lamu	Non-commercial oil shows
Tullow Kenya	2013	Agete-1	13T	Tert. Rift	100m of net oil pay
Africa Oil	2013	Bahasi	9	Anza	Minor Gas shows
Tullow Kenya	2013	Ekales-1	13T	Tert. Rift	Oil discovery
Tullow & Africa Oil	2013	Ekales-2	13T	Tert. Rift	60-100m of net oil pay
Tullow & Africa Oil	2013	Etuko-1	10BB	Tert. Rift	Oil discovery
Tullow Kenya	2013	Paipai-1	10A	Anza	Oil shows
Tullow Kenya	2013	Amosing 1	10BB	Tert. Rift	160-200m of net oil pay
Africa Oil	2014	Sala-1	9	Anza	Gas discovery and oil shows
Africa Oil	2014	Sala-2	9	Anza	Dry hole
Tullow Kenya	2014	Amosing 3	10BB	Tert. Rift	107m of net oil pay
Africa Oil (BG Group)	2014	Sunbird-1	L-10A	Lamu	Oil and Gas shows
Tullow Kenya	2014	Agete-2	13T	Tert. Rift	Dry hole
Tullow Kenya	2014	Amosing-2	10BB	Tert. Rift	Oil
Tullow Kenya	2014	Amosing-2A	10BB	Tert. Rift	Oil
Tullow Kenya	2014	Ekosowan-1	10BB	Tert. Rift	Oil shows
Tullow Kenya	2014	Ekunyuk-1	10BB	Tert. Rift	5m of net oil pay
Tullow Kenya	2014	Emong-1	10BB	Tert. Rift	Dry hole
Tullow Kenya	2014	Etom-1	13T	Tert. Rift	Oil discovery
Tullow Kenya	2014	Etuko-2/2A	10BB	Tert. Rift	10m of net oil pay
Tullow Kenya	2014	Ewoi-1	10BB	Tert. Rift	20-80m of net oil pay
Tullow Kenya	2014	Kodos-1	10BB	Tert. Rift	Minor oil shows
Tullow Kenya	2014	Ngamia 2	10BB	Tert. Rift	Oil and Gas shows
Tullow Kenya	2014	Ngamia 4	10BB	Tert. Rift	Oil
Tullow Kenya	2014	Ngamia 5	10BB	Tert. Rift	160-200m of net oil pay
Tullow Kenya	2014	Ngamia 6	10BB	Tert. Rift	135m of net oil pay

Tullow Kenya	2014	Twiga-2	13T	Tert. Rift	18m of net oil pay
Tullow Kenya	2014	Twiga-2A	13T	Tert. Rift	62m of vertical net oil pay
Tullow Kenya	2014	Ngamia 3	10BB	Tert. Rift	150m of net oil pay
Lion Petroleum Corporation	2015	Badada-1	2B	Mandera	Dry hole
Tullow Kenya	2015	Amosing 4	10BB	Tert. Rift	27m of net oil pay
Tullow Kenya	2015	Amosing 5	10BB	Tert. Rift	Oil shows
Tullow Kenya	2015	Amosing 5A	10BB	Tert. Rift	Oil
Tullow Kenya	2015	Emesek-1	13T	Tert. Rift	No commercial h/cs
Tullow Kenya	2015	Engomo-1/1A	10BA	Tert. Rift	Dry hole
Tullow Kenya	2015	Epir-1	10BB	Tert. Rift	Shows of oil & wet gas
Tullow Kenya	2015	Etom-2	13T	Tert. Rift	102m of net oil pay
Tullow Kenya	2015	Ngamia 7	10BB	Tert. Rift	130m of net oil pay
Tullow Kenya	2015	Ngamia 8	10BB	Tert. Rift	200m of net oil pay
Tullow Kenya	2015	Twiga-3	13T	Tert. Rift	Oil shows
Tullow Kenya	2016	Cheptuket-1	12A	Tert. Rift	Good oil shows
CEPSA & ERHC	2016	Tarach-1	11A	Tert. Rift	Dry hole
Tullow Kenya	2016	Ngamia 9	10BB	Tert. Rift	Oil
Tullow Kenya	2017	Erut-1	13T	Tert. Rift	Oil discovery
Tullow Kenya	2017	Ngamia 10	10BB	Tert. Rift	Oil
Tullow Kenya	2017	Emekuya-1	13T	Tert. Rift	75m of net oil pay
Tullow Kenya	2017	Amosing-6	10BB	Tert. Rift	Oil
Tullow Kenya	2017	Etete	13T	Tert. Rift	

Source: Ministry of Energy website

Annex 7.2: Summary of oil wells drilled, 1960-2017

	Company	Period	Number of wells
1	BP/Shell	1960-1992/3	12
2	Amoco	1987-1989	7
3	Total	1978-1990	4
4	Petrocanada	1986	1
5	Walter	1989	1
6	Union Oil of Kenya	1985	1
7	Kenya Cities Service Inc.	1981-82	4
8	Mehta & Co	1962	1
9	Chevron	1976	2
10	Texas Pacific Kenya	1975	1

	Company	Period	Number of wells
11	Woodside Energy	2007	1
12	CNOOC	2010	1
13	Apache Corp.	2012	1
14	Anadarko Kenya Co.	2013	2
15	Africa Oil (Bg Group	2012-2014	7*
16	Lion Petroleum Corporation	2015	1
17	Cepsa & Erhc	2016	1
18	Tullow	2011-2017	43
		Total	**91**

Author's Compilation from - http://www.nationaloil.co.ke

** 3 wells drilled in collaboration with Tullow Kenya*

Annex 7.3: Quantity of mineral production, 2014-2018

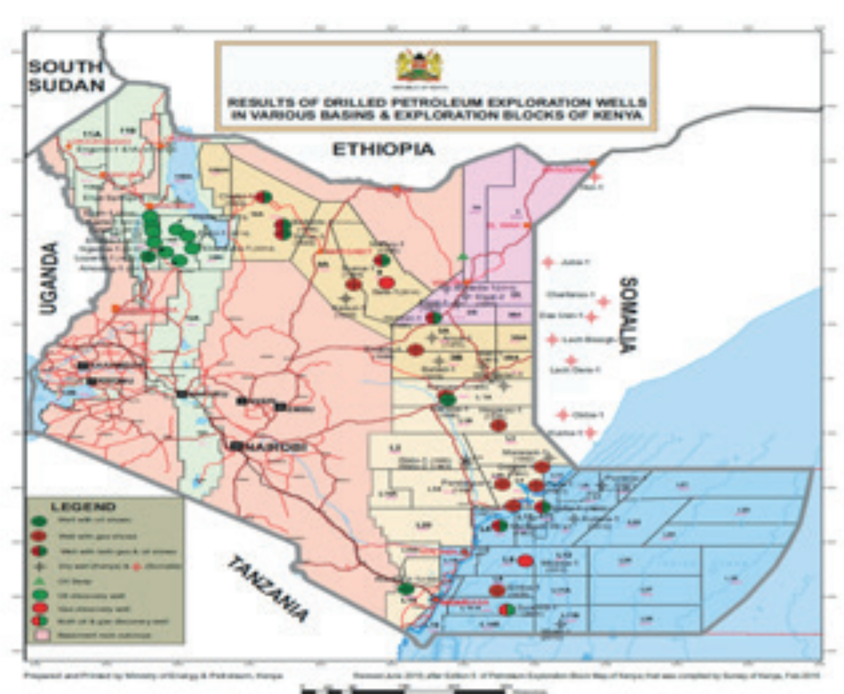
	2014	2015	2016	2017	2018*
Soda Ash (MT)	409,845.00	319,761.00	301,719.00	311,000.0	339,025.0
Fluorspar (MT)	97,156.00	70,096.00	42,656.00	6,945.00	-
Salt (MT)	18,936.00	21,201.00	23,425.00	43,245.10	12,419.0
Refined Soda (MT)	851,906.00	614,055.00	741,000.00	538,952.20	511,976.7
Carbon Dioxide (MT)	19,450.00	19,750.00	15,493.0	11,855.0	11,000.0
Diatomite (MT)	1,195.00	1,090.00	1,237.60	1,406.0	1,548.3
Gold (KG)	237.10	336.90	196.90	502.60	472.0
Gemstones (Cut)1 in '000 carats	17,161.0	470.9	5,466.0	22,955.0	14,500.4
Gemstones (rough)2 (KG)	430.6	442.00	518.20	1,247.7	508.8
Titanium Ore Minerals (MT)	**374,131.20**	**549,897.00**	**457,531.0**	**643,494.0**	**597,736.0**
Ilmenite	281,543.00	444,999.00	359,885.0	491,003.0	463,000.0
Rutile	52,465.00	78,947.00	69,975.0	87,167.0	98,132.0
Zircon	40,123.20	25,951.00	27,671.0	65,324.0	36,604.0

Annex 7.4: Value of mineral production (Ksh millions), 2014-2018

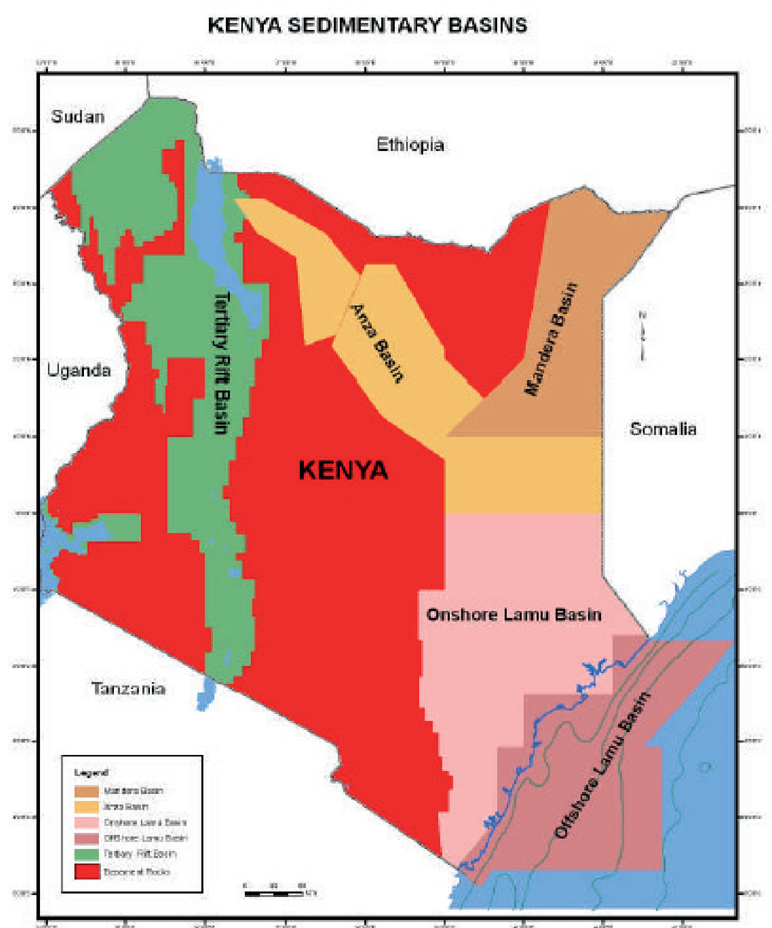
	2014	2015	2016	2017	2018*
Soda Ash	7,840.8	6,599.6	6,227.2	6,259.7	6,837.7
Fluorspar1	1,901.0	1,427.7	868.8	129.7	-
Salt	173.5	197.8	218.5	98.9	19.4
Crushed Refined Soda	568.4	409.7	494.4	1,108.9	579.9
Carbon Dioxide	503.9	525.6	831.8	589.4	225.8
Diatomite	70.6	70.6	75.2	79.4	87.6
Gold (KG)	790.1	978.1	970.3	1,510.8	2,021.1
Gemstones (Cut)2	46.0	36.9	77.5	128.6	106.2
Gemstones (rough)2 (KG)	263.60	798.40	936.0	238.3	412.1
Titanium Ore Minerals	**9,063.40**	**12,819.00**	**10,087.1**	**18,526.8**	**20,094.7**
Ilmenite	3,697.00	3,763.00	2,439	7,719.0	6,552.0
Rutile	4,085.0	6,329.00	5,372	6,646.1	8,385.2
Zircon	1,281.0	2,727.0	2,276	4,161.7	5,157.5
Total	**21,221.3**	**23,863.4**	**20,786.8**	**28,670.5**	**30,384.5**

**Provisional*
[1]Flourspar mining company ceased operations
[2]Gemstones include corondum, garnets and vermiculite

Annex 7.5: Results of drilled petroleum exploration wells in various basis and exploration blocks of Kenya



Annex 7.6: Kenya's sedimentary basins



Source:http://www.nationaloil.co.ke

Annex 7.7: Legislations for the extractives sector

Statute	Application	Enforcement
Mining Related		
The Mining Act No. 12 of 2016	It is an Act of Parliament that gives effect to Articles 60, 62 (1) (f), 66 (2), 69 and 71 of the Constitution in so far as they apply to minerals	The Act requires a multi-agency approach. However, key organs charged with enforcing the law are: The Cabinet Secretary, National Mining Corporation, the Mineral Rights Board, Artisanal Mining Committee and NEMA

Gold Mines Development Loans Act, Cap 311	An Act of Parliament to provide for the granting of financial assistance for the underground development of gold mines in Kenya	Gold Mines Development Loans Board is charged with the mandate of granting of loans for purposes of development in the gold mining sector
Oil and gas related		
Petroleum Act, 2019	An Act of Parliament whose purpose is to regulate the petroleum sector by ensuring negotiation and conclusion by the government of petroleum agreements relating to the exploration for, development, production and transportation of and petroleum	It requires a multi-agency approach, including Parliament in its ratification of agreements, and the Cabinet Secretary who negotiates petroleum agreements with potential contractors
Petroleum Development Fund Act CAP 426 C	An Act of Parliament whose purpose is to provide for the establishment of a Petroleum Development Fund and the imposition of a petroleum development levy	The enforcing agency is the Kenya Revenue Authority
Crosscutting Related		
Constitution 2010	Is the overarching policy framework for the extractives sector, especially regarding Articles 60, 62 (1) (f), 66 (2), 69 and 71	The Constitution requires individualistic and multi-agency approach. It creates arms of government and gives them distinct mandates and requires citizens' participation in enforcing its guiding principles
Environmental Management and Coordination (Amendment) Act, 2015	An Act of Parliament that establishes NEMA and provides for the establishment of appropriate legal and institutional framework for the management of the environment	The Act establishes the National Environment Management Authority and the National Environment Council
National Land Commission Act 2012	An Act of Parliament that establishes the National Land Commission and confers the powers to give effect to the objects and principles of devolved government in land management and administration	National Land Commission
Water Act 2012	An Act of Parliament to provide for the management, conservation, use and control of water resources. Section 177 of the Mining Act specifically states that provisions of the Act and rights or entitlement conferred under a mineral right shall not exempt a person from compliance with the provisions of the Water Act	The enforcing agency is the State (relevant Cabinet Secretary), and the Water Resources Management Authority whose functions, among others are to develop principles, guidelines and procedures for the allocation of water resources

Foreign Investments Protection Act CAP 518	An Act of Parliament to give protection to approved foreign investments. Kenya has entered several bilateral investment treaties that entitle investors to full protection and security of investment. The law domesticates these treaties and offers security to investors who may choose to invest in the extractives industry	This law is enforced by the Cabinet Secretary for Finance, who also ensures that Certificates to the foreign investors are granted and are in order
Income Tax Act CAP 470	An Act of Parliament to make provision for the charge, assessment and collection of income tax, corporate tax and other taxes. It details the determination of taxable income and rates of taxation for resident and non-resident companies	The Commissioner-General of the Kenya Revenue Authority is invested with the jurisdiction to enforce the tax code
Companies Act No. 17 of 2015	An Act of Parliament to regulate the incorporation, registration, operation, management and regulation of companies. The law is important as it guides on the creation of business entities which include operators in the extractives industry	The law prescribes multi-agency approach in its enforcement. However, the key enforcement body is the Attorney General's office
The Community Land (No. 27 of 2016)	An Act of Parliament to give effect to Article 63 (5) of the Constitution in so far as it pertains to the recognition, protection and registration of community land rights; management and administration of community land; to provide for the role of county governments in relation to unregistered community land and for connected purposes	The Act creates the Community Land Management Committee
The Energy Act No 12 of 2006	An Act of Parliament whose purpose is to regulate the upstream petroleum activities (oil, gas and coal), including licensing of petroleum business, among others. It also covers other sources of energy, including renewable energy	The Act establishes key agencies such as the Energy Regulatory Commission and Rural Electrification Authority whose mandate is to ensure enforcement and compliance with the law

Annex 7.8: Institutions for the extractives sector

No.	institution	Role/ Functions
1.	National Land Commission	The body in charge of administration and management of public land in Kenya and mandated to effect a compulsory acquisition of private and community land for public purposes. The National Land Commission's mandate extends to the extractives sector within the context of natural resources
2.	The Legislature	The legislature (which includes the National Assembly and the Senate) is tasked with playing an oversight role in the management of natural resources by Article 71 of the Constitution 2010. The National Assembly ratifies transactions involving the grant of a right or concession for the exploitation of any natural resource. The Senate protects the interests of counties on matters of sharing of revenues derived from natural resources
3.	County Governments	These are the decentralized executive entities at the devolved level for each county within Kenya. They directly control the regions where extractives sector activities are being undertaken. They also manage the funds from extractives activities shared from the national government for both the county and community allocation. County assemblies play a role in passing legislation, and oversight on the use of funds
4.	The Attorney General	The Attorney General (AG) is the chief legal advisor of the government and plays a major role in the extractives sector. All laws and regulations developed for the sector must pass through the AG's office. Further, agreements on extractives resources also go through this office before they are ratified by the National Assembly
5.	The Judiciary	The Judiciary is tasked with handling any disputes that may emanate from the extractives sector, whether they relate to land rights, mineral rights or any other issues from the sector. This role is only limited where agreements expressly limit dispute resolution to arbitration as is common in many mineral agreements. The structure includes Supreme Court, Court of Appeal, High Court, Employment and Labour Relations Court and a court to hear matters concerning the Environment
6.	Environment and Land Court	By virtue of Article 162 (2) (b) of the Constitution, 2010, the Environment and Land court was established to deal with matters concerning the environment and the use of occupation of, and title to, land

7.	National Environment Management Authority (NEMA)	This is the main body tasked with implementation of the Environmental Management and Coordination Act. It regulates environmental matters including those affecting the extractives sector. The Authority works closely with lead agencies and development partners
8.	The Kenya Revenue Authority	The Kenya Revenue Authority (KRA) is charged with the responsibility of collecting revenue on behalf of the Government. It implements the Income Tax Act which relates to, among other things, the taxation of operations relating to oil, gas and mining activities

Appendix Table 11.1: Distribution of outturns by programmes, level and gender in universities, 2016

Programme	Level																	
	PhD		Masters		Bachelors		PGD		Higher Dip.		Diploma		Certificate		Sub-total		Grand total	%
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
Agriculture	3	6	33	16	411	358	0	0	0	0	62	86	46	53	555	519	1074	1.6
Architecture and Building	14	2	16	13	452	59	0	0	2	3	112	6	27	1	623	84	707	1
Arts	1	0	6	8	226	125	0	0	0	0	133	55	27	6	393	194	587	0.9
Business and Administration	61	18	1821	1216	7453	6450	3	2	11	9	2309	2223	547	638	12205	10556	22761	33.1
Computing	3	0	149	65	2234	996	22	7	7	3	611	357	180	120	3206	1548	4754	6.9
Education	33	28	186	205	5301	5276	90	53	0	0	403	455	6	17	6019	6034	12053	17.5
Engineering and Engineering trades	1	2	45	24	1335	429	0	0	8	0	269	59	43	21	1701	535	2236	3.3
Environmental Protection	10	7	52	36	515	347	0	0	0	0	54	32	0	0	631	422	1053	1.5
Health	7	20	177	232	1278	1656	0	2	0	0	284	336	44	56	1790	2322	4112	6
Humanities	93	2	786	304	1111	901	8	5	18	10	686	411	154	82	2856	1715	4571	6.7
Journalism and Information	0	11	13	0	639	605	0	0	0	0	388	505	156	198	1196	1319	2515	3.7
Law	3	4	39	40	672	916	0	0	0	0	60	47	0	0	774	1007	1781	2.6
Life Sciences	14	8	58	31	1369	697	0	0	0	0	2	0	0	0	1443	736	2179	3.2
Manufacturing and Processing	0	0	0	0	0	0	0	0	0	0	0	0	1	7	1	7	8	0.01
Mathematics and Statistics	5	2	40	14	1189	691	0	0	0	0	0	0	17	4	1251	711	1962	2.9
Personal Services	2	1	1	2	249	391	5	2			105	170	112	93	474	659	1133	1.6
Physical Sciences	1	2	3	1	573	286	0	0	20	8	2	4	0	0	599	301	900	1.3
Security Services	0	0	8	1	382	129	0	0	0	0	192	29	86	68	668	227	895	1.3
Social and Behavioral Sciences	10	8	363	178	1024	845	0	1	0	0	61	61	0	0	1458	1093	2551	3.7
Social Services	1	1	22	39	44	56	0	0	0	0	128	207	41	83	236	386	622	0.9
Transport Services	0	0	0	0	0	0	0	0	0	0	40	17	0	0	40	17	57	0.1
Veterinary Services	0	0	3	2	45	18	0	0	0	0	39	22	55	13	142	55	197	0.3

Programme	Level																	
	PhD		Masters		Bachelors		PGD		Higher Dip.		Diploma		Certificate		Sub-total		Grand total	%
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
Total	262	122	3821	2427	26502	21251	128	72	66	33	5940	5082	1542	1460	38261	30447	68708	100
%	0.4	0.2	5.6	3.5	38.6	30.9	0.2	0.1	0.1	0.1	8.6	7.4	2.2	2.1	55.7	44.3	100	
Total Percentage		**0.6**		**9.1**		**69.5**		**0.3**		**0.2**		**16**		**4.3**		**100**		

Source of Data: Ministry of Labour and Social Protection (2018)

Appendix Table 11.2: Distribution of outturns by programmes, level and gender in national polytechnics, 2016

Programme	Level													
	Higher Diploma		Diploma		Certificate		Artisan		Craft		sub total		grand total	%
	M	F	M	F	M	F	M	F	M	F	M	F		
Agriculture, Forestry and Fish-ery	0	0	313	184	90	66	0	0	0	0	403	250	653	4.5
Architecture and Building	0	0	1417	223	208	12	8	0	3	1	1643	236	1879	13.1
Business and Administration	7	16	1064	1338	376	537	3	14	59	125	1509	2030	3539	24.6
Computing	0	243	550	208	146	0	0	0	2	0	709	453	1162	8.1
Engineering and Engineering Trades	6	1	1610	185	967	94	484	42	77	2	3170	324	3494	24.3
Health	0	0	283	235	23	35	0	0	0	0	306	270	576	4
Humanities	0	0	56	71	0	0	0	0	12	49	68	120	188	1.3

Programme	Level													
Journalism and Information	0	0	38	67	15	51	0	0	14	8	67	126	193	1.3
	Higher Diploma		Diploma		Certificate		Artisan		Craft		sub total		grand total	%
	M	F	M	F	M	F	M	F	M	F	M	F		
Life Sciences	0	0	161	156	7	25	0	0	0	0	168	181	349	2.4
Manufacturing and Processing	0	0	30	119	24	144	11	28	17	36	82	327	409	2.8
Personal Services	0	0	40	122	37	173	16	158	2	6	95	459	554	3.9
Physical Sciences	0	0	0	0	69	82	0	0	8	4	77	86	163	1.1
Social Services	0	0	307	567	86	257	0	0	0	0	393	824	1217	8.5
Total	**13**	**260**	**5869**	**3475**	**2048**	**1476**	**194**	**231**	**522**	**242**	**8690**	**5686**	**14376**	**100**
%	0.1	1.8	40.8	24.2	14.2	10.3	1.3	1.6	3.6	1.7	60.4	39.6		
Total Percentage		**1.8**		**65**		**24.5**		**2.9**		**5.3**		**100**		

Appendix Table 11.3: Distribution of outturns by programmes, level and gender in institutes of technology, 2016

Programme	Level													
	Higher Diploma		Diploma		Certificate		Artisan		Craft		sub total		grand total	%
	M	F	M	F	M	F	M	F	M	F	M	F		
Education	0	0	2	1	2	0	0	0	0	0	4	1	5	0.1
Humanities	0	0	0	0	10	50	0	0	0	0	10	50	60	1.3
Journalism and Information	16	20	33	9	0	3	0	0	0	0	49	32	81	1.7
Business and Administration	68	72	397	556	59	68	0	0	45	52	569	748	1317	28

Programme	Level													
	Higher Diploma		Diploma		Certificate		Artisan		Craft		sub total		grand total	%
	M	F	M	F	M	F	M	F	M	F	M	F		
Life Sciences	21	28	11	10	0	2	0	0	0	0	32	40	72	1.5
Physical Sciences	0	0	0	0	2	13	0	0	1	0	3	13	16	0.3
Computing	0	0	96	70	89	115	0	0	0	0	185	185	370	7.9
Engineering and Engineering Trades	3	0	378	32	1183	34	32	2	83	5	1679	73	1752	37.2
Manufacturing and Processing	0	0	19	29	48	114	1	8	0	0	68	151	219	4.6
Architecture and Building	0	0	263	64	36	5	0	0	20	0	319	69	388	8.2
Agriculture, Forestry and Fisheries	0	0	30	17	19	5	0	0	0	0	49	22	71	1.5
Health	0	0	9	5	0	0	0	0	0	0	9	5	14	0.3
Social Services	0	0	34	63	7	18	0	0	0	0	41	81	122	2.6
Personal Services	0	0	69	123	8	15	1	3	0	0	78	141	219	4.6
Total	108	120	1341	979	1463	442	34	13	149	57	3095	1611	4706	100
%	2.3	2.5	28.5	20.8	31.1	9.4	0.7	0.3	3.2	1.2	65.8	34.2		
Total Percentage		**4.8**		**49.3**		**40.5**		**1**		**4.4**		**100**		

Source of Data: Ministry of Labour and Social Protection (2018)

Appendix Table 11.4: Distribution of outturns by programmes, level and gender in technical training institutes, 2016

Programme	Level															
	Higher Diploma		Diploma		Certificate		Artisan		Craft		Proficiency		Sub Total		Grand total	%
	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
Agriculture	0	0	164	103	78	35	0	0	46	29	0	0	288	167	455	4.5
Architecture and Building	0	0	431	65	33	0	1	102	10	0	0	0	475	167	642	6.4
Business and Administration	1	2	709	795	241	351	2	9	98	174	0	0	1051	1331	2382	23.7
Computing	0	0	210	152	82	140	0	0	53	40	35	20	380	352	732	7.3
Education	0	0	0	8	49	59	0	0	0	0	0	0	49	67	116	1.2
Engineering and Engineering Trades	0	0	835	182	133	14	507	151	604	99	31	11	2110	457	2567	25.6
Environmental Protection	0	0	21	14	0	0	0	0	0	0	0	0	21	14	35	0.3
Health	0	0	172	393	53	108	0	0	0	0	0	0	225	501	726	7.2
Humanities	0	0	81	137	124	203	0	0	0	0	0	0	205	340	545	5.4
Journalism and Information	0	0	33	53	31	7	0	0	8	11	0	0	72	161	233	2.3
Life Sciences	5	8	38	38	0	0	0	0	0	0	0	0	43	46	89	0.9
Manufacturing and Processing	0	0	23	99	3	4	3	12	56	124	0	0	85	239	324	3.2
Personal Services	163	236	0	0	39	164	0	10	5	31	0	0	207	441	643	6.5
Physical Sciences	2	3	0	0	12	36	0	0	1	0	0	0	15	39	54	0.5
Security Services	0	0	0	0	20	13	0	0	0	0	0	0	20	13	33	0.3

Social and Behavioural Sciences	12	21	0	0	0	4	0	0	0	0	0	0	12	25	37	0.4
Social Services	82	209	0	0	30	71	0	0	12	22	0	0	124	302	426	4.2
Total	265	479	2717	2039	928	1299	513	284	893	530	66	31	5382	4662	10044	
%	2.6	4.4	27.1	20.3	9.2	12.9	5.1	2.8	8.9	5.3	0.7	0.3	53.6	46.4		100

Programme	Level															
	Higher Diploma		Diploma		Certificate		Artisan		Craft		Proficiency		Sub Total		Grand total	%
	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
Social Services	1	1	22	39	0	0	0	0	128	207	41	83	236	386	622	0.9
Transport Services	0	0	0	0	0	0	0	0	40	17	0	0	40	17	57	0.1
Veterinary Services	0	0	3	2	0	0	0	0	39	22	55	13	142	55	197	0.3
Total Percentage		**7.4**		**47.4**		**22.1**		**7.9**		**14.2**		**1**		**100**		

Source of Data: Ministry of Labour and Social Protection (2018)

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